

Target Capabilities List

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**Homeland
Security**

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Target Capabilities

Summary

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TARGET CAPABILITIES SUMMARY

Introduction

The Target Capabilities List (TCL) is a companion to the National Preparedness Goal. The Target Capabilities List (TCL) defines the capabilities, outcomes, measures, and risk-based target levels of capability for the Nation to achieve the Goal. The TCL also defines the role of Federal, State, local and tribal governments, non-governmental organizations, the private sector, and citizens in building and maintaining capabilities. It provides a basis to assess preparedness and for policymakers at all levels to set priorities for the most effective use of limited resources.

Capabilities provide the means to achieve measurable outcomes through the performance of critical tasks, under specified conditions to target levels of performance. A capability may be delivered with any combination of properly planned, organized, equipped, trained and exercised personnel that achieve the desired outcome. Capabilities address operational requirements established in the National Incident Management System (NIMS), the National Response Plan (NRP), and the National Infrastructure Protection Plan (NIPP), and incorporate existing performance standards and metrics wherever possible. They provide the means to achieve the National Preparedness Goal.

The TCL, which currently identifies 37 capabilities, was developed with the active participation by and in consultation with key stakeholders at all levels.

The TCL is a tool that can be used to guide preparedness planning, establish training requirements, and evaluate performance through exercises and operations. It also will provide a basis for preparedness assessments and reports. Although the TCL should inform the establishment of priorities for limited resources, it is not a formula or a commitment of federal funding.

Shared Responsibility for Major Events

The TCL establishes national target levels of capabilities that will be required for major events. As was demonstrated with the events of 9/11 and more recently Hurricane Katrina, major events, whether man-made or naturally occurring, quickly exceed the capacity of local jurisdictions.

Because major events, are incidents that will exceed the capacity of any single jurisdiction, it is important to take a national view in defining the type, amount, and placement of capabilities across the country. All levels of government, non-governmental organizations, the private sector, and citizens have a role in national preparedness, which are defined in the TCL.

The planning assumptions for major events which were used to develop the TCL are found in the National Response Plan and recognized that these events will typically be managed at the lowest possible geographic, organizational, and jurisdictional level. Such events will be managed using the principles in the National Incident Management System (NIMS) and the combined expertise and capabilities of government at all levels, the private sector, and nongovernmental organizations will be required to prevent, prepare for, respond to, and recover from the event.

Major Events

- Occur at any time with little or no warning
- Require significant information-sharing at the unclassified and classified levels across multiple jurisdictions and between the public and private sectors
- Involve single or multiple geographic areas
- Have significant international impact and/or require significant international information sharing, resource coordination, and/or assistance
- Span the spectrum of incident management to include prevention, preparedness, response, and recovery
- Involve multiple, highly varied hazards or threats
- Result in numerous casualties; fatalities; displaced people; property loss; disruption of normal life support systems, essential public services, and basic infrastructure; and significant damage to the environment
- Impact critical infrastructures across sectors
- Overwhelm capabilities of State, local, and Tribal governments, and private-sector infrastructure owners and operators
- Attract an influx of spontaneous volunteers and supplies
- Require short-notice asset coordination and response
- Require prolonged, sustained incident management activities

Note: The assumptions for major events mirror those for Incidents of National Significance found in the National Response Plan

Stakeholder Involvement in Development of the TCL

The National Preparedness Goal and companion tools, to include the TCL, have been developed with an unprecedented level of stakeholder involvement. The Department of Homeland Security adopted a “consensus of the community” approach to develop these documents with the assistance of approximately 100 national associations, agencies across the Federal Government, and thousands of participants from all levels of government and the private sector.

Involvement of stakeholders has been accomplished through national stakeholder workshops, working groups, and broad national reviews.

National Planning Scenarios

The first step toward achieving the goal of national preparedness is to answer the question “How prepared do we need to be?” To answer that question, a set of National Planning Scenarios were developed by a Federal interagency working group led by the Homeland Security Council and the Department of Homeland Security to illustrate the range, scope, magnitude, and complexity of major events for which the Nation should prepare.

15 National Planning Scenarios

1. Improvised Nuclear Device
2. Aerosol Anthrax
3. Pandemic Influenza
4. Plague
5. Blister Agent
6. Toxic Industrial Chemical
7. Nerve Agent
8. Chlorine Tank Explosion
9. Major Earthquake
10. Major Hurricane
11. Radiological Dispersal Device
12. Improvised Explosive Device
13. Food Contamination
14. Foreign Animal Disease
15. Cyber

37 Capabilities Have Been Identified

Common Capabilities

- Planning
- Communications
- Community Preparedness and Participation
- Risk Management

Prevent Mission Capabilities

- Information Gathering and Recognition of Indicators and Warning
- Intelligence Analysis and Production
- Information Sharing and Dissemination
- Law Enforcement Investigation and Operations
- CBRNE Detection

Protect Mission Capabilities

- Critical Infrastructure Protection
- Food and Agriculture Safety and Defense
- Epidemiological Surveillance and Investigation
- Public Health Laboratory Testing

Response Mission Capabilities

- Onsite Incident Management
- Emergency Operations Center Management
- Critical Resource Logistics and Distribution
- Volunteer Management and Donations
- Responder Safety and Health
- Public Safety and Security
- Animal Health Emergency Support
- Environmental Health
- Explosive Device Response Operations
- Firefighting Operations/Support
- WMD/ Hazardous Materials Response and Decontamination
- Citizen Protection: Evacuation and/or In-Place Protection
- Isolation and Quarantine
- Urban Search and Rescue
- Emergency Public Information and Warning
- Triage and Pre-Hospital Treatment
- Medical Surge
- Medical Supplies Management and Distribution
- Mass Prophylaxis
- Mass Care (Sheltering, Feeding and Related Services)
- Fatality Management

Recover Mission Capabilities

- Structural Damage and Mitigation Assessment
- Restoration of Lifelines
- Economic and Community Recovery

The 15 National Planning Scenarios address all-hazard incidents, which include terrorism, natural disasters, and health emergencies. They represent a minimum number of scenarios that are needed to define the range of potential incidents, rather than every possible threat or hazard. Terrorism scenarios dominate because the U.S. has little experience with terrorist events unlike natural disasters. The National Planning Scenarios served as the basis for defining tasks that must be performed to prevent, protect against, respond to, and recover from these incidents, as well as the capabilities required to perform the tasks.

Developing the national capacity to prevent, protect against, respond to, or recover from these challenges will create the agility and flexibility required to meet a wide range of threats and hazards.

Target Capabilities List

The Target Capabilities List (TCL) will help guide efforts to develop a national network of capabilities that will be available when and where they are need to prevent, protect against, respond to, and recover from major events.

The TCL assumes that local jurisdictions have an operational level of required capabilities to address most emergencies and disasters. For example, the TCL does not address capabilities for routine firefighting or law enforcement services, or seasonal flooding. The TCL addresses unique capabilities and incremental resources related to terrorism, very large-scale disasters, or pandemic health emergencies. Establishing plans, procedures, systems, interagency relationships, training and exercise programs, and mutual aid agreements required for major events will enhance performance for all hazard response, regardless of incident size.

Each capability summary includes an outcome which is a statement of the

expected results or effect to be achieved with the capability.

The summary identifies the target levels of the capability required to perform the critical tasks and the performance measures required to achieve the outcome. The summary also assigns responsibility for building and maintaining the capability. A brief description of the major components of the summary is provided below, followed by a Capability Assignment Chart.

Capability Summaries Include

- Definition
- Outcome
- Relationship to NRP Emergency Support Function (ESF)/Annex
- Description
- Critical Tasks
- Preparedness Measures and Objectives
- Performance Measures and Objectives
- Capability Elements (Resources)
- Planning Assumptions
- Planning Factors
- National Target Levels
- Assignment of Responsibility
- Linked Capabilities
- References

Critical Tasks

Critical tasks are those prevention, protection, response, and recovery tasks that require coordination among Federal, State, local, tribal, private sector, and non-governmental entities during a major event in order to minimize the impact on lives, property, and the economy. They are tasks that are essential to achieving the desired outcome and to the success of a homeland security mission.

The critical tasks are a subset of the tasks found in the Universal Task List. The UTL does not identify who will perform the task or how it should be performed. That is left to the implementing agencies. **No single jurisdiction or agency is expected to perform every task.** Rather, subsets of tasks will be selected based on specific roles, missions, and functions. The current version of the TCL contains approximately 750 tasks spread across the 37 capabilities that were identified as critical by the capability work groups. The UTL currently identifies approximately 2,000 tasks.

Preparedness and Performance Measures and Metrics

The TCL contains both preparedness and performance measures and metrics. Preparedness measures assess preparedness actions taken before an incident to build the capacity to achieve the capability outcome. These measure relate to the development of plans, procedures, protocols, authorities, training, specialized equipment and systems, and how often they are updated and exercised.

Performance measures are quantitative or qualitative levels against which achievement of a task or capability outcome can be assessed. Performance measures describe how much, how well and/or how quickly an action should be performed. Performance measures should be expressed in ways that can be observed during an exercise or real event. They are not standards, but should be used to guide planning, training, and exercise activities.

The performance metrics quantify the performance measures. Existing standards of performance, benchmarks, and guidelines are reflected, if applicable, in the performance metrics. The performance measures and metrics serve as the basis for determining what capability elements or resources are needed and how they should be distributed to ensure that the capability is available when and where it is needed.

| Sample Performance Measures and Metrics | |
|---|-------------------------------------|
| <i>Example from Citizen Protection: Evacuation and/or In-Place Protection Capability</i> | |
| Preparedness Measure | Metric |
| Pre-event education and training of the potentially at-risk population was conducted successfully | Yes/No |
| Pre-event exercising of the notification and activation of evacuation and shelter-in-place plans were conducted with the public | Yes/No |
| Performance Measure | Metrics |
| Time to evacuate the affected general population | 24-72 hours (dependent on severity) |
| Time to shelter-in-place the affected population | <30 minutes |
| Time to evacuate special needs populations | 24-72 hours |
| Number of self-evacuees who made entry into shelters without being decontaminated or checked for contamination | 0 |

Capability Elements

The capability elements define, generally, the resources required to perform the critical tasks to the performance standards to achieve the desired outcome. The capability elements should be viewed as a general guide to the resources that comprise a capability, with the recognition that there are often numerous combinations of capability elements that can be used to achieve a capability. Many of the capability elements may already exist, requiring only specific elements, such as plan updates or training to complete the capability.

Where they exist, NIMS *Resource Typing Definitions* were used to define resource organizations or packages. Resource typing is the categorization and description of response resources that are commonly exchanged in disasters through mutual aid agreements. It is designed to enable emergency management personnel to identify, locate, request, order, and track outside resources quickly and effectively and facilitate the response of these resources to the requesting jurisdiction. The FEMA/NIMS Integration Center encourages Federal, State, territory and local officials use the 120 Resource Typing Definitions as they develop or update response assets inventories. Resources that have not been typed will be referred to the NIMS Integration Center for possible typing.

| Capability Elements | |
|---|---|
| Personnel | Paid and volunteer staff who meet relevant qualification and certification standards necessary to perform assigned missions and tasks. |
| Planning | Collection and analysis of intelligence and information, and development of policies, plans, procedures, mutual aid agreements, strategies, and other publications that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks. |
| Organization and Leadership | Individual teams, an overall organizational structure, and leadership at each level in the structure that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks. |
| Equipment and Systems | Major items of equipment, supplies, facilities, and systems that comply with relevant standards necessary to perform assigned missions and tasks. |
| Training | Content and methods of delivery that comply with relevant training standards necessary to perform assigned missions and tasks. |
| Exercises, Evaluations, and Corrective Actions | Exercises, self-assessments, peer-assessments, outside review, compliance monitoring, and actual major events that provide opportunities to demonstrate, evaluate, and improve the combined capability and interoperability of the other elements to perform assigned missions and tasks to standards necessary to achieve successful outcomes. |
| NOTE: Elements of capability are consistent with NIMS | |

National Target Level

The national targets define the level of the capabilities required throughout the country to prevent, protect against, respond to, and recover from major events. Because major events will quickly exceed the capacity of any single jurisdiction, including traditional mutual aid partners, a national approach, implemented by stakeholders at all levels, is required to plan and prepare to prevent, protect against, respond to, and recover from very large-scale incidents. These incidents will require a multi-level, multi-jurisdictional, multi-disciplinary response.

The national target levels, developed by stakeholder working groups, are based on an analysis of the circumstances and consequences described in the national planning scenarios. The working groups completed an in-depth analysis of one or several scenarios to develop planning factors that could be applied to a range of threats. The planning factors are descriptions or formulas that define how much can be accomplished with a specified amount of resources within a set period of time. The planning factors can serve as a general guide to scale the requirements for an event of any size or scope.

The target levels also take into account adjustments to normal operating procedures that may need to be made during major events to ensure the best possible response given the circumstances. Adjustments may include: altering performance standards, drawing resources from many sources, making creative use of existing resources or relying on non-traditional resources (e.g., volunteers).

Assignment of Risk-Based Target Levels of Capabilities

After determining the national target levels, the next step is to define the role of local, State and Federal governments, non-governmental organizations, the private sector, and citizens in achieving those target levels to ensure required capabilities are available when and where they are needed. The assignment of capabilities is based on the assumption that no single jurisdiction is expected to have all capabilities at sufficient levels to fully address its needs if faced with a major event. Some jurisdictions need to possess the capability, others will access it if needed through mutual aid, and during a major event, all jurisdictions regardless of size will call on support from other jurisdictions, the States, Federal agencies, and private resources. Stakeholder working groups analyzed the requirements for the capability by criticality, risk, and demand to make recommendations on the assignment of roles and responsibilities for each capability and on the distribution of the capability across the country.

States are encouraged, under the National Preparedness Goal priority of Expanded Regional Collaboration to define geographic areas or regions, in consultation with affected local and tribal governments that share risk and responsibility for a joint response related to a major event. Participants in the expanded region would be responsible for implementing the capabilities-based approach to strengthen relationships and engage in regional preparedness planning and operations support. States retain flexibility to adjust geographic areas as necessary to best support the intent of the capabilities-based approach. Regions may be intra- or inter-state geographic areas, as appropriate based on shared risk and the need for joint planning and operations.

Interjurisdictional and interdisciplinary area working groups, consisting of representatives from the entities located within the region should be established. Planning groups will determine target levels of capabilities for the region as a whole based on the cumulative requirements for the jurisdictions and population contained within the region. Risk-based target levels are defined for each capability based on differences in risk factors that drive the demand for the capability: population, population density, critical infrastructure, and threat. Participants will use this information to customize their preparedness requirements and approach. Through joint planning, the region will determine how best to achieve the capabilities, decide where they should be built and maintained to enable all jurisdictions within the region to meet the performance requirements, and establish priorities for the use of limited resources.

The factors used to assign the capabilities and levels of capabilities to units of government, non-governmental organizations, the private sector and citizens are described below.

National Target Levels for Capabilities

- The national targets define what is needed for major events, not what currently exists.
- The targets define the requirements for very large events that exceed the capacity of any single jurisdiction.
- The target capability requirements will be shared across all levels of government and non-government entities.
- Many of the resource requirements defined by the targets are not standing requirements – they would be assembled when and where they are needed. For example, many of personnel resources would be needed for days or weeks during a response and would then return to their regular activities.
- An assessment of current capabilities against the targets is a follow on effort that will be implemented after the TCL has been published.

Risk

All jurisdictions face some level of risk from natural disasters, terrorist attacks, infectious disease, or industrial accidents. Risk is the combination of threat, vulnerability, consequence, and likelihood of occurrence. Risk factors that affect capability need and placement include: population and population density, the presence of critical infrastructure and key resources, and location in high terrorist threat or high risk natural disaster areas. The relative importance of these risk factors in determining where or how much of a capability is needed varies by capability.

Population and Population Density

Population and/or population density are determining factors for the assignment of many of the capabilities. Population and density are directly correlated to risk for terrorist attacks, from natural disasters, and disease outbreaks.

For example, the target levels and distribution of capabilities such as WMD Response and Decontamination, Medical Surge, Mass Prophylaxis, and Citizen Protection: Evacuation and In-Place Protection capabilities are directly related to population. Population density is a key factor in determining the location of some capability resources, such as those for the Firefighting Operations/Support and Explosive Device Response Operations capabilities.

The type and amount of resources needed are generally greater in high population, high-density areas. For example, Type I Urban Search and Rescue (US&R) Task Forces that can extricate victims from heavy construction collapses are needed in urban areas with high-rise buildings. The TCL assigns Collapse Search and Rescue Teams and Heavy Rescue Strike Teams and Squads for less urban areas. However, the Type I US&R Task Forces, while located in large metropolitan areas, are available for deployment to jurisdictions in other geographic areas. For some capability resources, such as Animal Health and Safety, the highest risk is generally not in high population, high-density areas, but in areas where livestock is concentrated.

Factors Used to Assign Capabilities

Risk

- Risk is a combination of threat, vulnerability, and consequence
- Population is the determining factor for the distribution of many of the capabilities
- Population density and critical infrastructure are important factors for some capabilities
- High threat areas may require additional capabilities or higher target levels

Performance

- Performance measures and objectives define how tasks associated with the capability will be performed
- They address capability capacity and proficiency
- They are assigned, as appropriate, to each entity (e.g., local, State, Federal, private) that contributes to achieving the capability
- They provide flexibility to address differences among States and local jurisdictions

Resources

- The resources required to perform critical tasks to achieve the performance are defined by the measures and objectives
- Different resource classes or packages may be assigned to different levels of government and local jurisdictions

Critical Infrastructure

Most jurisdictions or geographic areas across the country have critical infrastructure or key resources (CI/KR). Because these assets are widely dispersed, this is generally not a factor that can be used to define capability needs. However, there are a limited number of national-level critical infrastructure assets or concentrations of assets that may warrant increased capability levels. For capabilities such as Critical Infrastructure Protection and Food and Agricultural Safety and Defense, critical infrastructure will be a factor in determining target levels and location of the capabilities.

Threat

Threat is generally associated with population, population density, and critical infrastructure. Capability-based planning allows the flexibility to adjust capability requirements or target levels on a “by exception” basis. For example, a jurisdiction may have capability requirements based on its terrorist threat level or its location in an area particularly vulnerable to earthquakes or hurricanes that are disproportionate to its population and critical infrastructure.

Performance Requirements

The performance measures and metrics for each capability define how quickly and how effectively critical tasks need to be performed. The performance measures and metrics are a major factor in establishing national capability targets and determining where capabilities should be built and maintained. Criticality (i.e., how quickly a specific capability is needed to prevent an incident, save lives, prevent suffering or reduce major damage) is an important consideration in determining where a capability is needed.

For example, decontamination of victims of a chemical attack must typically take place within a certain period of time in order to save lives. This does not vary by location. Time expectations are defined by the performance measures and metrics. In the case of decontamination, because the effect on the victims does not vary, the expectations are the same in a large metropolitan city as in a rural area. Since the time to act is very short, every jurisdiction that could have an attack or an accidental release of toxic chemicals should have a decontamination capability or have timely access to it. The difference between jurisdictions rests in the target level of the capability – the numbers of victims requiring decontamination is likely to be significantly lower in a rural setting.

Performance requirements do vary across jurisdictions for other capabilities. For example, the time for a bomb squad to arrive on-scene may be much shorter in a densely populated urban area than in a less populated area, where evacuation of the area may be the initial response. Densely populated urban areas would likely have a higher demand for the capability while other jurisdictions would access the capability through mutual aid.

Resource Requirements

Resources (capability elements) required to perform critical tasks are associated with the performance requirements. In the process of defining capabilities, Stakeholder working groups identified both the types of capability elements required to perform critical tasks and established national target levels required to prepare for major events.

Some capabilities (and their resources) are required universally, such as Planning or Communications. For other capabilities, the resource target levels are directly related to size of the population. Teams with different levels of capability (e.g., Level I, II, and III Bomb Squad) are assigned to appropriate levels of government or local jurisdictions based on demand for the capability.

Where available, NIMS resource typing was used. Specialized teams or resources are generally assigned to larger jurisdictions where there is a greater demand for the resource and where a team with sufficient trained personnel and equipment has the opportunity to maintain proficiency through calls-for-service. Teams with more limited capabilities that require fewer personnel and equipment are assigned to smaller jurisdictions where they provide an immediate response and can request assistance from specialized teams if needed. For example, the US&R capability defines four types of teams that are assigned to different sized jurisdictions.

Using the Target Capabilities List

The TCL is a tool that can be used in preparedness planning, to assess preparedness, develop strategies to enhance preparedness and establish priorities for the effective use of limited resources, enhance training programs, identify technology development priorities, and evaluate performance during exercises and real events. Some of the potential uses are briefly described below:

Update Preparedness Plans

Entities at all levels of government, nongovernmental organizations, and the private sector should review and enhance their plans, procedures, and protocols, as needed, to ensure that they have identified the resources and built the capabilities necessary to accomplish critical tasks identified in the plan.

Local jurisdictions should also participate in joint planning within their region, as defined by the state under the National Preparedness Goal priority to Expand Regional Collaboration. This effort will contribute to review and modification, if needed, of mutual aid agreements to facilitate the sharing of capabilities across the region to provide all jurisdictions with access to needed capabilities.

Determine Regional Capability Requirements

Major events have regional impact requiring regional collaboration to achieve the prevent, protect, response and recover missions. States and regions can determine regional capability requirements based on the TCL by implementing the following seven step process:

- Step 1 Determine regional structure for the State in accordance with National Preparedness Goal priority to “Expand Regional Collaboration” – some regions may cross State lines
- Step 2 Identify jurisdictions (counties, cities, towns, tribes) in region and other partners (e.g., non-governmental organizations, private sector, etc.)
- Step 3 Define the total population in the region
- Step 4 Identify capabilities applicable to jurisdictions in the region from recommended targets in the TCL. See Appendix A for a sample distribution of capability requirements for 3 jurisdictions of varying size.
- Step 5 Determine if there is critical infrastructure or threat information that would require additional capabilities within the region. Because critical infrastructure and key resources are so widely spread throughout the country, this is generally not a discriminating factor for capability requirements.

-
- Step 6 Through regional planning, determine how to build and share capabilities to ensure that jurisdictions within the region have or have access through mutual aid to the required capabilities when needed
- Step 7 Develop mutual aid agreements with surrounding regions or States to provide assistance if requirements for a major event exceed the region's capabilities

Assessment of Preparedness

The TCL provides a basis for assessing preparedness at the state and local levels, as well as of the Nation. The preparedness and performance measures and target levels provide uniform criteria that will be used to develop assessment and analysis tools.

Strategy Development

The National Preparedness Goal and the TCL contribute to development of State and local homeland security strategies. The Goal defines a preparedness end state and establishes priorities. State and local strategies should define an integrated regional approach to building and maintaining required capabilities, with initial emphasis on the eight Goal priorities.

Enhancement of Training Programs

Training programs at all levels should be reviewed and modified as appropriate to ensure that they provide participants with the knowledge, skills, and abilities to perform the critical tasks defined by the TCL to the proficiency level required to achieve the capability outcomes.

Agencies with homeland security responsibilities should use the TCL to develop training plans that focus limited resources on ensuring that agency personnel can safely and effectively perform the critical tasks.

Technology and Standards Development

The TCL also provides a roadmap for future technology and for standards development efforts. Although many existing standards have been referenced in the TCL, there are areas where standards are needed but do not exist (e.g., risk assessment standardization).

Exercise Evaluation

Exercises provide a means to test and validate preparedness. Homeland security exercises should be designed and evaluated to demonstrate capability levels through the assessment of performance of critical tasks and achievement of outcomes. The TCL defines critical tasks that need to be performed and related performance measures and metrics.

The Homeland Security Exercise and Evaluation Program (HSEEP) Exercise Evaluation Guides (EEGs) will be updated through an interagency working group to reflect the performance requirements in the TCL.

Refining the Target Capabilities List

Enhancements

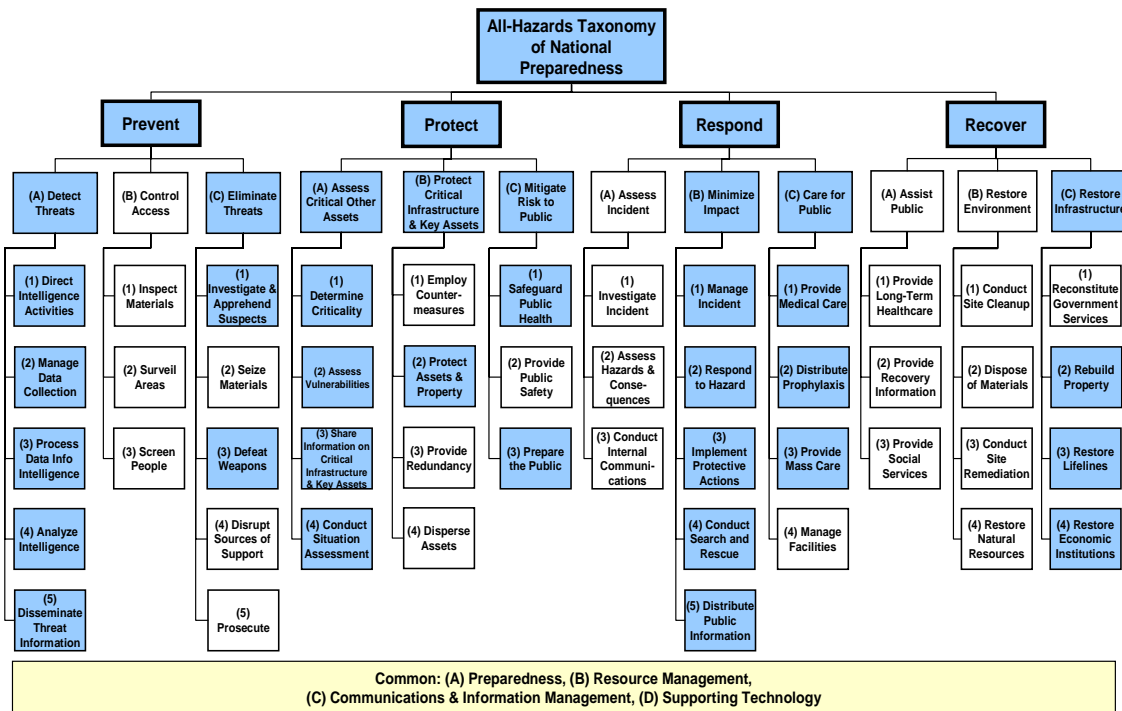
The TCL is a living document that will continue to be enhanced and refined over time. Enhancements will be made to develop capabilities for functions not addressed in the current version of the TCL. The All-Hazards Taxonomy for National Preparedness, found on the next page, provides a map for all of the objectives and functions required to achieve the four homeland security missions: prevent,

protect, respond, and recover. The current version of the TCL identifies a set of 37 core capabilities, which address functional areas highlighted in blue on the taxonomy found on the next page. Functional areas not addressed during the initial development will be addressed in future phases of the TCL.

Refinement

The TCL is the product of an initial comprehensive national effort to define how prepared the Nation needs to be and where the capabilities need to be built and maintained so they are available when and where they are needed. It was developed with an unprecedented level of stakeholder involvement to define tasks, establish performance measures, define resource requirements, and set national targets. As it is used, practitioners may find a need to add a task, to modify a performance objective, specify different performance levels for different size jurisdictions, or make other recommendations. The TCL may also be refined or expanded as the National Planning Scenarios are modified over time. Recommendations for changes to the TCL are welcome and will be reviewed and integrated at regular intervals. A change request form is posted on www.LLIS.gov.

All-Hazards Taxonomy of National Preparedness Tasks



Tier Summary Chart

The Tier Summary Chart, found on the following pages, provides a summary of the capabilities, outcomes, resources, and roles assigned to level of government, non-governmental organizations, the private sector, and citizens. The user is referred to the full capability descriptions found in the TCL for information on the critical tasks that would be performed with the capability, the preparedness and performance measures and metrics required to achieve the outcome, and linked capabilities which identify points for coordination.

Although the TCL assigns capabilities to local jurisdictions, states are expected to establish planning regions and local jurisdictions are expected to plan and share resources on a regional basis. The TCL should be used as a guide to determine what capabilities are required within each region based on its jurisdictional makeup and population. The TCL's assignment of capabilities to jurisdictions assumes those that were not assigned a capability will have access to it through mutual aid. Capabilities should be built and maintained in locations within the region which ensure that the performance requirements can be met by all jurisdictions throughout the region.

Tier Summary Chart

The Chart provides a summary of the capabilities, outcomes, capability resources, and roles assigned to level of government, non-governmental organizations, the private sector, and citizens. The user is referred to the specific capability templates for information on the critical tasks that would be performed with the capability, the preparedness and performance measures and metrics to achieve the outcome, and linked capabilities which identify points for coordination.

| Common Capabilities | | | | | | |
|--|---|-------|---------|-----|----------------|----------|
| Planning | | | | | | |
| <p>Outcome: Plans incorporate an accurate hazard analysis and risk assessment and ensure capabilities required to prevent, protect and mitigate against, respond to, and recover from acts of terrorism, natural disasters, and other emergencies are available when and where they are needed.”</p> | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Planner | At least 1 dedicated planner per 250,000 people at the state and substate level plus at least 2 planners per Urban Area Security Initiative (UASI) city, U.S. Territory, and Washington, DC | X | | | | |
| Equipment/Computers | 1 set (computer and software tools) per planner | X | | | | |
| Training | As required for each planner | X | | | | |
| Communications | | | | | | |
| <p>Outcome: A continuous flow of critical information is maintained as needed among multi-jurisdictional and multi-disciplinary emergency responders, command posts, agencies, and the governmental officials for the duration of the emergency response operation in compliance with National Incident Management System (NIMS). To accomplish this, the jurisdiction has a continuity of operations plan for public safety communications to include the consideration of critical components, networks, support systems, personnel, and an appropriate level of redundant communications systems in the event of an emergency.</p> | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Interoperability Plan | 1 per UASI as designated by local responder requirements | X | X | | | |

| | | | | | | |
|---|---|---|---|--|--|--|
| Governance Agreements | 1 governance group per participant area | X | X | | | |
| Standard Operating Procedures | 1 set of Standard Operating Procedures (SOPs) per participating area | X | X | | | |
| Technology - System of Systems | A system of systems consisting of local, State and Federal components connected through common interface standards | X | X | | | |
| Interoperable Communications Technical Assistance Program Teams | Federal teams that provide assistance to States and urban areas | | X | | | |
| Continuity of Operations Plan | 1 plan per county Public Safety Answering Point (PSAP)/Public Safety Communications Center (PSCC) | X | X | | | |
| Training and Exercises | All personnel trained to operate communications system. Annual tabletop exercise. Multi-jurisdiction operational exercises every 3 years. | | | | | |

Risk Management

Outcome: Federal, State, local, tribal and private sector entities identify and assess risks, prioritize and select appropriate protection, prevention, and mitigation solutions based on reduction of risk, and monitor the outcomes of allocation decisions and undertake corrective actions.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|--|-------|---------|-----|----------------|----------|
| Owners and Operators of CI/KR | One per organization | X | X | | X | |
| Joint Terrorism Task Forces (JTTF) | As needed | X | X | | | |
| Representatives of Administrative Agencies | As needed, but at least one per entity | X | | | | |
| Urban Area Security Workgroup | Number prescribed by UASI | X | X | | | |
| Risk Communication Plan | 1 per entity | X | X | | X | |

| Risk Management Plan | 1 per entity | X | X | | X | |
|--|--|-------|---------|-----|----------------|----------|
| Community Preparedness and Participation | | | | | | |
| Outcome: The public is educated in the four mission areas of preparedness; citizens are trained in life saving first aid, response skills, and surge capacity roles; and citizens participate in exercises, volunteer programs, and surge capacity support. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| National Leadership for Community Preparedness and Participation | | | X | X | X | |
| National Citizens Corps Council | | X | X | X | X | |
| Citizens Corps Councils | 2500 in Tribes/Counties/Cities | X | | X | X | X |
| Public Education Specialists | Dedicated staff at local level for public education, alerts/warning, and crisis communications | X | X | X | X | |
| National Training Clearing House | | | X | | | |
| State Training Team | | X | | | | |
| Citizen Preparedness Team | Each person in high-threat areas participates on 2 teams (i.e. neighborhood and work/school/faith based) | | | X | X | X |
| Surge Volunteers | Sufficient to support up to 20% surge of current local/tribal capacity | | | X | X | X |
| Prevent Mission | | | | | | |
| Information Gathering and Recognition of Indicators and Warnings | | | | | | |
| Outcome: Locally generated threat and other criminal and/or terrorism-related information is identified, gathered, entered into an appropriate data/retrieval system, and provided to appropriate analysis centers. | | | | | | |

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|--|-------|---------|-----|----------------|----------|
| Information gathering personnel | All jurisdictions | X | X | | X | X |
| Personnel to recognize and report suspicious activity | All law enforcement and public safety agencies | X | X | | X | X |
| Information processing personnel | All law enforcement and public safety agencies | X | X | | | |
| Joint Terrorism Task Force (JTTF) | Larger jurisdictions designate liaison to the JTTF Smaller jurisdictions have procedures to communicate with the JTTF | X | X | | | |
| Plans and procedures for information gathering and recognition of indicators and warnings | All law enforcement and public safety agencies | X | X | | | |
| Plans and procedures for developing information needs | All law enforcement and public safety agencies | X | X | | | |
| System for public reporting of suspicious activity | All law enforcement and public safety agencies | X | X | | | |
| Intelligence Analysis and Production | | | | | | |
| Outcome: Timely, accurate, and actionable intelligence/information products are produced in support of prevention, awareness, deterrence, response, and continuity planning operations. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Hardware, software, and internet-based systems that allow for information exchange and dissemination | All appropriate law enforcement, public health, and other agencies | X | X | | | |
| Terminals with network access to relevant systems | Fusion center sites | X | X | | | |

| Joint Terrorism Task Force (JTTF) | Larger jurisdictions designate liaison to the JTTF Smaller jurisdictions have procedures to communicate with the JTTF | X | X | | | |
|---|--|-------|---------|-----|----------------|----------|
| Intelligence/Information Sharing and Dissemination | | | | | | |
| Outcome: Effective and timely sharing of information and intelligence occurs across Federal, State, local, tribal, regional, and private sector entities to achieve coordinated awareness of, prevention of, protection against, and response to a threatened or actual domestic terrorist attack, major disaster, or other emergency. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Personnel involved in the operational aspects of information sharing | All agencies, as appropriate | X | X | | | |
| Personnel involved in information sharing and collaboration | All agencies, as appropriate | X | X | | | |
| Joint Terrorism Task Force (JTTF) | Larger jurisdictions designate liaison to the JTTF Smaller jurisdictions have procedures to communicate with the JTTF | X | X | | | |
| Alternate, supplemental and back-up routing procedures | All agencies, as appropriate | X | X | | | |
| Law Enforcement Investigation and Operations | | | | | | |
| Outcome: Suspects involved in criminal activities related to homeland security are successfully deterred, detected, disrupted, investigated, and apprehended. All counterterrorism-related cases, including not only primary cases, but also secondary, tertiary, and obtusely-related cases are aggressively prosecuted. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Interagency and multi-jurisdictional training plan that ensures commonality in terrorism investigation subject | To cover all law enforcement agencies | X | X | | | |

| Joint Terrorism Task Force (JTTF) | Larger jurisdictions designate liaison to the JTTF Smaller jurisdictions have procedures to communicate with the JTTF | X | X | | | |
|---|--|-------|---------|-----|----------------|----------|
| Investigative personnel | As needed | X | X | | | |
| CBRNE Detection | | | | | | |
| Outcome: Chemical, biological, radiological, nuclear, and/or explosive (CBRNE) materials are rapidly detected, identified, and safely managed at borders, critical locations, events, and incidents. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| CBRNE detection technology Research and Development (R&D) | | | X | | | |
| Protocols to ensure coordination with intelligence community | All | X | X | | | |
| Protocols for resolving alarms at detection points | All | X | X | | | |
| Public Education program to help people recognize threats | All | X | X | | | |
| CBRNE detection operator personnel | All | X | X | | | |
| CBRNE detection and monitoring equipment | All | X | X | | | |
| Training for personnel at interdiction points | All | X | X | | | |
| Laboratory staff for agent identification | Regional | X | X | | | |
| Border control and other targeted “defense layers” personnel | | X | X | | X | |
| Critical infrastructure personnel | Regional | X | X | | X | |

| | | | | | | |
|---|----------|---|---|--|---|--|
| Mutual aid agreements and/or memoranda of understanding, including protocols for coordination with intelligence community | Regional | X | X | | X | |
| CBRNE detection standard operating procedures, including regional coordination plans and protocols for resolving alarms | Regional | X | X | | | |
| Facility response plans as required by law (SARA Title III) | All | X | X | | X | |

Protect Mission

Critical Infrastructure Protection (CIP)

Outcome: The risk to, vulnerability of, and consequence of attack to critical infrastructure are reduced through the identification of critical infrastructure; conduct, documentation, and standardization of risk assessments; prioritization of assets; decisions regarding protective and preventative programs; and implementation of protective and preventative plans.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|-----------------------------|-------|---------|-----|----------------|----------|
| Risk analysis personnel | | X | X | | | |
| Public and private sector coordinators | | X | X | | | |
| Personnel to complete vulnerability assessments | Number based on State need. | X | X | | X | |
| Infrastructure security specialists | Number based on State need. | X | X | | X | |
| Infrastructure intelligence analysts | Number based on State need. | X | X | | | |
| NIPP (w/ Sector-Specific annexes) | | | X | | | |
| CIP Research and Development Plan | | | X | | | |

| State and/or Regional CIP Plans | Regional | X | X | | | |
|---|---|-------|---------|-----|----------------|----------|
| Risk Assessment (including vulnerability, consequences, and threats) standards | | X | X | | X | |
| Memoranda of Understanding (MOUs) to ensure cooperation with respect to CIP | Signed by all relevant parties within 1 year of official TCL publication. | X | X | | X | |
| Equipment for detection | Based on outcomes of risk assessment. | X | X | | X | |
| Equipment for protection | Based on outcomes of risk assessment. | X | X | | X | |
| Equipment for mitigation | Based on outcomes of risk assessment. | X | X | | X | |
| Vulnerability assessment training | Participation in training program based on state needs. | X | X | | X | |
| Risk assessment training | Participation in training program based on state needs. | X | X | | | |
| System to Red Team critical infrastructure protective measures and technology | | | X | | | |
| Critical infrastructure prevention/protection attack exercises | Participate in Federal and State exercises, as appropriate. | X | X | | X | |
| Food and Agriculture Safety and Defense | | | | | | |
| Outcome: Threats to food and agriculture safety are prevented, mitigated, and eradicated; trade in agricultural products is restored; affected products are disposed of; affected facilities are decontaminated; public, animal, and plant health are protected, notification of the event and instructions of appropriate actions are effectively communicated with all stakeholders; and confidence in the U.S. food supply is maintained. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Incident Command | | X | | | | |

| | | | | | | |
|--|--|---|---|--|--|--|
| Food and Drug Administration (FDA) Emergency Operations Center (EOC) | | | X | | | |
| United States Department of Agriculture (USDA) EOC | | | X | | | |
| USDA/ Food Safety Inspection Service (FSIS) EOC | | | X | | | |
| State EOC | | X | | | | |
| Human Disease Surveillance Team | | X | X | | | |
| Food Investigation Team | | X | | | | |
| Decontamination Team | | X | | | | |
| Disposal Team | | X | | | | |
| Laboratory Personnel (Sample Analysis) | | X | X | | | |
| Laboratory Personnel (Confirmatory Testing)PulseNet | | X | X | | | |
| Risk Communication Team | | X | X | | | |
| Embargo/Recall Team | | X | X | | | |
| Public Information Staff | | X | X | | | |
| Law Enforcement securing of scene | | X | | | | |
| Law Enforcement investigation of Event | | X | X | | | |
| IT Support | | X | | | | |
| Additional Transportation Needs | | X | | | | |

Epidemiological Surveillance and Investigation

Outcome: Potential exposure and disease is identified rapidly (determine exposure, mode of transmission and agent, and interrupt transmission to contain the spread of the event and reduce number of cases). Confirmed cases are reported immediately to all relevant public health, food regulatory, environmental regulatory and law enforcement agencies. Suspected cases are investigated promptly, reported to relevant public health authorities, and accurately confirmed to ensure appropriate preventive or curative countermeasures are implemented. An outbreak is defined and characterized; new suspect cases are identified and characterized based on case definitions on an ongoing basis; relevant clinical specimens are obtained and transported for confirmatory laboratory testing; the source of exposure is tracked; methods of transmission identified; and effective mitigation measures are communicated to the public, providers and relevant agencies are recommended, as appropriate.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|---|-------|---------|-----|----------------|----------|
| Local health department-based surveillance team | 24-hour coverage per affected county. (Staff may be drawn from local, State and Federal resources). | | | | | |
| Investigation team | 24-hour coverage per affected county. | | | | | |
| Active case finding/surveillance | 24-hour coverage per affected county. | | | | | |
| Special studies team | As needed – staff may include Federal, State, and local personnel. | X | X | | | |
| CDC Department Emergency Operations Center (DEOC) | | | X | | | |
| State EOC | | X | | | | |

Public Health Laboratory Testing

Outcome: Chemical, radiochemical, and biological agents causing, or having the potential to cause, widespread illness or death are rapidly detected and accurately identified by the public health laboratory within the jurisdiction or through network collaboration with other appropriate local, State, and Federal laboratories. The public health laboratory, working in close partnership with public health epidemiology, environmental health, law enforcement, agriculture and veterinary officials, hospitals and other appropriate agencies, produces timely and accurate data to support ongoing public health investigations and the implementation of appropriate preventative or curative counter-measures.

Respond Mission

Onsite Incident Management

| Outcome: The incident is managed effectively and efficiently through the integration of facilities, resources (personnel, equipment, supplies, and communications) and procedures using a common organizational structure that is incident command system (ICS). | | | | | | |
|---|--|-------|---------|-----|----------------|----------|
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Type III Incident Management Team (IMT) | 1 each in or near large city or counties. | | | | | |
| Type II IMT | | X | | | | |
| Type I IMT | | | X | | | |
| Emergency Operations Center Management | | | | | | |
| Outcome: The event is effectively managed through multiagency coordination for a pre-planned or no-notice event. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| City EOC | Cities with population greater than 50,000 may identify a need for an EOC. Cities with less than 50,000 in population can coordinate efforts to create a combined EOC and backup EOC for the area, or may use county EOC. | | | | | |
| County EOC | One central and back-up Emergency Operations Center for each of county. (Neighboring counties may share alternate EOCs, depending on population density and local hazards. | | | | | |
| State EOC | | X | | | | |
| Federal EOC | | | X | | | |
| DHS EOC | | | X | | | |

| | | | | | | |
|----------------------------|---|---|---|--|--|--|
| EOC Personnel | EOC must be staffed to meet basic EOC functional requirements. Functions include: Incident Commander Public Information Officer (PIO) Safety Officer (SO) Liaison Officer (LO) Operations Section Logistics Section Planning Section Administration/Financial Section Needed ESF areas (up to 15) 1 per shift (at least) who, when appropriate, must have security clearance as required to operate during activations. | X | X | | | |
| Training for EOC Personnel | Independent Study (IS) 700—NIMS Independent Study (IS) 800—NRP Incident Command System (ICS) 100/200 Emergency Operations Center (EOC) Management and Operations IES/EOC Interface | X | X | | | |
| Training per EOC function | Specified/standardized training requirements for each EOC function assignment | X | X | | | |
| Security Policy | Federally developed policy to define and establish procedures for handling classified information | | X | | | |

Critical Resource Logistics and Distribution

Outcome: Critical resources are available to incident managers and emergency responders upon request for proper distribution and to aid disaster victims in a cost-effective and timely manner.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|---|-------|---------|-----|----------------|----------|
| Logistics Planning Manager | 1 Type IV logistics planning manager per jurisdiction | X | X | | | |
| National Tracking System | 1 within organizations that handles resources for emergency incidents | X | X | | | |
| Emergency Logistics Training | Training Federally developed | X | X | | | |
| Rapid Needs Assessment Team | Provided to local agencies, States, NGOs, and private sector | X | X | X | X | |
| Logistics Response System | 1 per jurisdiction | X | X | | | |
| Transportation Coordinator | 1 per EOC | X | X | | | |
| Cargo transportation Vehicles and personnel | Scaleable depending on incident need | X | X | | | |
| Federal Mobilization Base Camp | | | X | | | |
| State Staging Area | | X | | | | |
| Interagency warehouse | 1 per incident | | | | | |
| Warehouse system for stockpiled resources | 1 per organization | X | X | X | | |
| Evacuation Terminal | At least 1 per evacuation plan | | | | | |
| Evacuation Liaison Team (ELT) | 1 per EOC | | | | | |
| Evacuation Coordination Team | 1 per EOC | | | | | |
| Evacuation vehicles | Sufficient to evacuate 100% of those unable to self evacuate | | | | X | |
| Electrical Power restoration team | At least 1 per public works and engineering jurisdiction | | | | X | |
| Water supply management team | | | | | X | |

Volunteer Management and Donations

Outcome: The value of volunteers and charitable donations is maximized and does not hinder response and recovery activities.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|---|-------|---------|-----|----------------|----------|
| Donation and Volunteer Call Center (DVCC) | | X | | | | |
| Transportation | Vehicles in sufficient quantity, adjusted for incident, that would be acquired through private rentals, donations or national guard, etc. | X | | | X | |
| Warehousing | Public/Private partnership – 1-6 warehouses per incident depending on need | X | | | X | |
| Donations Coordinators | 4 per region, depending on need | X | | | | |

Responder Safety and Health

Outcome: No illnesses or injury to any first responder, first receiver, medical facility staff member, or other skilled support personnel result from a preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical and emotional stress after the initial incident or during decontamination and incident follow-up.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|---|-------|---------|-----|----------------|----------|
| Type 1 Safety Officer | 300 nationwide (local placed within 2 hour fly/drive of localities. May be Federal, State and local in employment | X | X | | | |
| Specialized Safety Officer | Specialization needs determined by each UASI region and county | | | | | |
| Specialized Subject Matter Expert (SME) | Available to State and local agencies, public and private agencies, and academia | X | | | X | |
| Analytical Laboratories | Ability to analyze 1,000 samples of any CBRNE agent per day | X | X | | X | |

| Training Centers | Train and maintain proficiency of all responders to minimum training requirements | | | | | |
|---|--|-------|---------|-----|----------------|----------|
| Equipment Caches (Personal Protective Equipment (PPE), monitoring/detection equipment, etc.) | Based on local quantities, regional quantities (through mutual aid - system to obtain/distribute equipment for first 72 hrs (after 72 hrs, equipment can be obtained through manufacturers). | X | X | X | | |
| Medical | 1 medical unit per 5 teams (minimum). | X | X | | | |
| Public Safety and Security Response | | | | | | |
| Outcome: The incident scene is assessed and secured, access is controlled, security support is provided to other response operations (and related critical locations, facilities, and resources), and emergency public information is provided, while protecting first responders and mitigating any further effect to the public at risk. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Law Enforcement (crowd control) | Sufficient personnel to cover 100% of the affected area (Estimate from 40% local law enforcement, 40% through mutual aid, 20% by State law enforcement) | X | | | | |
| Law Enforcement (traffic control) | Sufficient personnel to provide traffic control coverage | X | | | | |
| National Guard Civil Support Teams | | X | X | | | |
| Animal Health Emergency Support | | | | | | |
| Outcome: Foreign animal disease is prevented from entering the U.S. by protecting the related critical infrastructure and key assets. In the event of an incident, animal disease is detected as early as possible, exposure of livestock to foreign diseases is reduced, immediate and humane actions to eradicate the outbreak are implemented, continuity of agriculture and related business is maintained, economic damage is limited, and public and animal health and the environment are protected. Trade in agriculture products and domestic and international confidence in the U.S. food supply are maintained and/or restored. Agricultural industries are returned to their prior productivity, to include replenishment of the domestic livestock and other domesticated animals. | | | | | | |

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|--|-------|---------|-----|----------------|----------|
| Incident Command | Local/private help staff Incident Command Post (ICP) | X | X | | X | |
| USDA Emergency Operations Center Staff | | | X | | | |
| APHIS Emergency Operations Center Staff | | | X | | | |
| APHIS Regional Emergency Operations Center Staff | | | X | | | |
| Northern Regional Coordination Center (NRCC) support Staff | | | X | | | |
| National Response Coordination Center (RRCC) support Staff | | | X | | | |
| Multi-Agency Coordination (MAC) | | X | X | | | |
| Emergency Response Team-Advance (ERT-A) | | X | | | X | |
| Agriculture Emergency Operations Center (EOC) | X | | | | X | |
| State Emergency Operations Center (SEOC) | | X | X | | | |
| Technical Specialist Position | | X | X | | | |
| Veterinary Medical Assistance Team | | | | | X | |
| Veterinary Epidemiologist | | X | X | | | |
| Communications Technicians | Private: 30% of staff provided = 200 persons total nationally. | X | X | | X | |
| Trade Support Personnel | | | X | | | |
| Quarantine and restriction of movement of animals and related products personnel | Local/private: 12,720 persons needed in field nationally. | X | X | | | |

| | | | | | | |
|--|---|---|---|--|---|--|
| Biosecurity Personnel | Local/private: 30 persons per State (1,500 total) | X | X | | X | |
| Decontamination Personnel | Local/private: 7,200 personnel total nationally (through just-in-time training) | X | X | | X | |
| Euthanasia Personnel | Local/private: 1,800 animal handlers nationally (through just-in-time training) | X | | | X | |
| Animal Welfare Specialist | | X | X | | | |
| Disposal Personnel | Local/private: 90 persons per State (1,800 total) | X | X | | X | |
| Livestock Appraisal Personnel | | X | X | | | |
| Surveillance Personnel | | X | X | | | |
| Personnel to assess and address zoonotic and CBRNE issues | Local/private: 12 persons per State (600 Technicians total) | X | X | | X | |
| Personnel with the training to diagnose relevant foreign animal diseases | Local/Private: 60 Accredited veterinarians per State (3,000 total) | X | X | | | |
| Laboratory Personnel | | X | X | | | |
| Personnel trained in risk communication | Local/Private: 5 persons per State (250 total) | X | X | | X | |
| Data entry | Local/Private: 43 per State (2,600 total) | X | X | | X | |
| Equipment for trace-back and trace-forward investigations | Federal/State/Local: 30,000 Personal Digital Assistants (PDAs), computer and internet capability (nationally) | X | X | | | |
| Animal Identification Systems | Tags and/or microchips, paint sticks, brandings, and associated equipment | X | X | | X | |
| Identification Officer | Local/private: 47 per State | X | X | | X | |
| Support for local Incident Command Posts | Office space and administrative equipment | X | X | | X | |

| | | | | | | |
|--|--|---|---|--|---|--|
| Euthanasia Systems | Euthanasia solution base plus Tranquilizers | X | X | | X | |
| Therapeutics | Cache of Therapeutics | X | X | | | |
| Dispensing Personnel | | | X | | | |
| Vaccines | | | X | | | |
| Vaccinators | Local/private: 720 per State | X | X | | X | |
| Warehousing and Distribution systems | Sufficient space and distribution system to respond to outbreak. | X | X | | | |
| Transportation systems and methods | Sufficient vehicles based on incident | X | X | | X | |
| Law enforcement | 45 officers per State | X | X | | | |
| Wildlife Specialist | Local/private: 180 sample collectors per State | X | X | | X | |
| Veterinary Response Team – Livestock | 1 county team and 5 out-of-county team per county affected deployed up to 14 days at a time | X | | | X | |
| Veterinary Response Team – Companion Animals | Local/private: 1 county team and 5 out-of-county team per county affected deployed up to 14 days at a time | | | | X | |
| Information technology support | Local/private: 20 per State | X | X | | X | |
| Administrative Support Personnel (procurement, contracts, logistics) | Local/Private: 50 per State (2,500 total) | X | X | | | |
| Trainers | Local/Private: 20 per State (1,000 total) | X | X | | X | |

Environmental Health

Outcome: After the primary event, disease and injury are prevented through the quick identification of associated environmental hazards to include exposure to infectious diseases that are secondary to the primary event and secondary transmission modes. The at-risk population (e.g., exposed or potentially exposed) receives the appropriate treatment or protection (countermeasures) in a timely manner. The rebuilding of the public health infrastructure, removal of environmental hazards, and appropriate decontamination of the environment enable the safe re-entry and re-occupancy of the impacted area. Continued monitoring occurs throughout the re-building process to identify hazards and reduce exposure.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|------------------|-------|---------|-----|----------------|----------|
| Health Physicists | | | | | | |
| Nuclear Medicine Technicians | | | | | | |
| Nuclear Medicine Clinicians | | | | | | |
| Clinicians - Radiation Injury | | | | | | |
| Department of Energy (DOE) Radiation Emergency Assistance Center/Training Site (REAC/TS) | | | X | | | |
| Rapid Response Registry | | | | | | |
| Community Resilience Task Force | | | | | | |
| Commercial Clinical Laboratories (hematology) | | | | | X | |
| Public Health Planning and Forecasting Team | | | | | | |
| Environmental Epidemiologists | | | | | | |
| Environmental Health Scientists - Sampling Advisory Workgroup | | | | | | |
| Environmental Health Scientists - Sanitarians and Civil Engineers | | | | | | |
| Victim Exposure Monitoring Task Force | | | | | | |
| Advisory Team for Environment, Food, and Health | | | | | | |
| Sampling Teams | | | | | | |
| Decontamination Teams | | | | | | |
| Environmental Health Technicians | | | | | | |

Explosive Device Response Operations

Outcome: Threat assessments are conducted and the area is rendered safe. Measures are implemented in the following priority order to safeguard public safety; safeguard the officers on the scene (including the bomb technician), protect and preserve public and private property, collect and preserve evidence, and accommodate the public/restore services.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|---|-------|---------|-----|----------------|----------|
| Bomb Squads (Type I, Type II, Type III) | 450 accredited bomb squads in the U.S. have the responsibility, through mutual aid and task force agreements, of taking their training, equipment, and experience beyond the borders of their municipalities and jurisdictional lines to serve the entirety of the U.S. | | | | | |
| FBI Special Agent Bomb Technician Program | | | X | | | |
| ATF Explosive Enforcement Officers | | | X | | | |
| DHS WMD/Bombing Prevention Unit | | | X | | | |

Firefighting Operations/Support

Outcome: Dispatch of the initial alarm assignment occurs within jurisdictional response time objectives. The initial arriving unit initiates the incident command system (ICS), assesses the incident scene, communicates the situation, and requests appropriate resources. Firefighting activities are conducted safely and fires are contained, controlled, and managed in accordance with emergency response plans and procedures.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--------------------------------------|---|-------|---------|-----|----------------|----------|
| Firefighting personnel and equipment | Firefighting operations support for a major event would be addressed with an appropriate combination of existing resources from multiple jurisdictions and levels of government | | | | | |

| WMD/Hazardous Materials Response and Decontamination | | | | | | |
|---|--|-------|---------|-----|----------------|----------|
| Outcome: Hazardous materials release is rapidly identified, contained, and mitigated; victims exposed to the hazard are rescued, decontaminated, and treated; the impact of the release is limited; the affected area is restored; and responders and at-risk populations are effectively protected. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Type I Hazmat Entry Team (Extrication) | 20 teams per UASI area, multiple teams in or near UASI areas. One team fully equipped and trained in every county in the US | | | | | |
| Type I Hazmat Entry Team (Decon) | 20 teams per UASI area, multiple teams in or near UASI areas. One team fully equipped and trained in every county in the US | | | | | |
| Hazmat Information/ Research Group/Team | 2 teams per UAS//I area | | | | | |
| Hazmat Medical Group/Team | 2 teams per UASI area | | | | | |
| Hazmat Resources Group/Team | 2 teams per UASI area | | | | | |
| Hazmat Liaison Officer | 2 teams per UASI area | | | | | |
| Hazmat Specialist | 1 team for every county in the US and each UASI area | | | | | |
| Citizen Protection: Evacuation and/or In-place Protection | | | | | | |
| Outcome: Affected and at-risk populations are safely sheltered-in-place and/or relocated to safe refuge areas, provided shelter and essential services, and effectively and safely reentered into the affected area, if appropriate. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Public Warning System | 1 per jurisdiction | X | X | | | |

| | | | | | | |
|---------------------------------|---|---|---|--|--|--|
| Evacuation Plan | 1 per city/county | | | | | |
| Personnel | Public education program manager; staff to implement pre-event evacuation education and training | | | | | |
| Equipment | Multi-media materials production and dissemination equipment (e.g. audio, visual, written materials or equipment) | | | | | |
| Training | All staff is trained on policies, procedures and emergency operations plans of jurisdiction. | | | | | |
| Transportation resources | 17 public transportation vehicles (i.e. buses) per 100,000 to respond to the affected area in a timely manner | X | X | | | |
| Traffic control package | In accordance with evacuation plans (e.g. barriers, cones directional signs) | | | | | |
| Security and Law Enforcement | State-security and law enforcement officers to support traffic control efforts, evacuation and re-entry efforts, and law enforcement activities | X | | | | |
| Fire/Emergency Medical Services | Scaleable depending on incident | | | | | |
| Tow Trucks | Scaleable depending on incident | | | | | |
| Public Works | Scaleable depending on incident | | | | | |

Isolation and Quarantine

Outcome: Individuals who are ill, exposed, or likely to be exposed are separated, movement is restricted, basic necessities of life are available, and their health is monitored in order to limit the spread of a newly introduced contagious disease (pandemic influenza). Legal authority for these measures is clearly defined and communicated to the public. Logistical support is provided to maintain measures until danger of contagion has elapsed.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|--|-------|---------|-----|----------------|----------|
| Community isolation and quarantine team | 1 team in every district, county and municipal office. | | | | | |
| Federal Quarantine Station | | | X | | | |
| Community isolation and quarantine team. | Distributed per population distribution. | | | | | |

Urban Search & Rescue

Outcome: The greatest numbers of victims are rescued, in the shortest amount of time, while maintaining rescuer safety.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|---|-------|---------|-----|----------------|----------|
| Type I US&R Task Force | Current 28 locations- Federally supported | | X | | | |
| Type II Collapse Search and Rescue Team | Cities 100,000 plus population. | | | | | |
| Type II Heavy Rescue Squad Strike Team | Cities 50,000-100,000 population | | | | | |
| Type II Heavy Rescue Squad | Cities 25,000-50,000 population. | | | | | |

Emergency Public Information and Warning

Outcome: Members of the public receive prompt, accurate and useful information regarding threats to their health, safety and property, and receive clear, consistent information and periodic updates outlining protective measures that can be taken by individuals and their communities.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|--------------------------------|-------|---------|-----|----------------|----------|
| Public Information Officer (PIO) | Every jurisdiction with an EOC | X | X | | | |
| Joint Information Center (JIC) Support - Deputy PIO | Every jurisdiction with an EOC | X | X | | | |

| | | | | | | |
|-------------------------------------|--------------------------------|---|---|--|--|--|
| JIC Support - Asst. PIO | Every jurisdiction with an EOC | X | X | | | |
| JIC Support - Research Team | Every jurisdiction with an EOC | X | X | | | |
| JIC Support - Media Operations Team | Every jurisdiction with an EOC | X | X | | | |
| JIC Support - Logistics Team | Every jurisdiction with an EOC | X | X | | | |
| Alert and Notification System | Every jurisdiction with an EOC | X | X | | | |
| JIC Meeting Space | Every jurisdiction with an EOC | X | X | | | |
| JIC Media Briefing Room | Every jurisdiction with an EOC | X | X | | | |
| JIC Office Equipment | Every jurisdiction with an EOC | X | X | | | |

Triage and Pre-Hospital Treatment

Outcome: Emergency Medical Services (EMS) resources are effectively and appropriately dispatched and provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|----------------------|-------|---------|-----|----------------|----------|
| Personnel: Emergency Medical Technicians (EMTs), Registered Nurses (R.N.s), Doctors, and other health care professionals appropriately credentialed | Local/State/Regional | X | | | | |
| Vaccines/Prophylaxis | Local/State/Regional | X | | | | |
| Medical oversight | Local/State/Regional | X | | | | |
| Equipment | Local/State/Regional | X | | | | |
| Supplies-short and long term | Local/State/Regional | X | | | | |
| PPE for EMS | Local/State/Regional | X | | | | |
| Emergency Vehicles/ambulances | Local/State/Regional | X | | | | |

| Non-traditional transport vehicles, i.e., buses | Local/State/Regional | X | | | | |
|---|--|-------|---------|-----|----------------|----------|
| Training | Local/State/Regional | X | | | | |
| Exercises, evaluations and After Action Reports | Local/State/Regional | X | | | | |
| Planning | Local/State/Regional | X | | | | |
| Redundant Communications | Local/State/Regional | X | | | | |
| Medical Surge | | | | | | |
| <p>Outcome: Injured or ill from the initial event are cared for and new cases that arise from initial illness or injury and new illnesses or injuries or exacerbation of pre-existing illness or injury due to disease, contamination or injury including exposure from communicable diseases and/or injuries which are secondary to the primary event are minimized. The at-risk population receives the appropriate protection (countermeasures) and treatment in a timely manner.</p> | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Surge Capacity Beds (Triage, treatment and initial stabilization, above the current daily staffed bed capacity, for classes of adult and pediatric patients requiring hospitalization within three hours in the wake of a terrorism incident or other public health emergency) | <p>500 cases per million population for patients with symptoms of acute infectious disease – especially smallpox, anthrax, plague, tularemia and influenza;</p> <p>50 cases per million population for patients with symptoms of acute botulism intoxication or other acute chemical poisoning – especially that resulting from nerve agent exposure;</p> <p>50 cases per million population for patients suffering burn or trauma; and</p> <p>50 cases per million population for patients manifesting the symptoms of radiation-induced injury – especially bone marrow suppression.</p> | | | | | |

| | | | | | | |
|---|---|----------|--|--|--|--|
| <p>Personnel (Option 1) The Concept of Operations for the Acute Care Center</p> | <p>1 Physician 1 Physician’s assistant (PA) or nurse practitioner (NP) (physician extenders) 6 RNs or a mix of RNs and licensed practical nurses (LPN) 4 Nursing assistants/nursing support technicians 2 Medical clerks (unit secretaries) 1 Respiratory therapist (RT) 1 Case manager 1 Social worker 1 Housekeepers 1 Patient transporters</p> | | | | | |
| <p>Personnel (Option 2): ratio based on the number of surge beds needed and the pre-defined patient: staff ratios that exist (if any)</p> | | <p>X</p> | | | | |
| <p>Isolation Capacity</p> | <p>Ensure that all hospitals have the capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease (e.g., smallpox, pneumonic plague, SARS, influenza and hemorrhagic fevers) or febrile patient with a suspect rash or other symptoms of concern who might be developing a highly communicable disease. Identify at least one regional healthcare facility, in each defined region, that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation within 3 hours post-event.</p> | | | | | |

| | | | | | | |
|--|---|--|--|--|--|--|
| Pharmaceutical Caches | <p>Establish a regional system that insures a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days to hospital personnel (medical and ancillary staff) and their family members and hospital based emergency first responders and their families -- in the wake of a terrorist-induced outbreak of anthrax or other disease for which such countermeasures are appropriate.</p> | | | | | |
| Personal Protective Equipment | <p>Ensure adequate PPE, to protect current and additional health care personnel, during an incident.</p> <p>The quantity and type of PPE will be established based on the Hazardous Vulnerability Analysis (HVA), and the level of decontamination that is being designed.</p> | | | | | |
| Decontamination: (ASTM Standard E 2413) | <p>A community must be able to provide decontamination to 500 persons per million population in 3 hours. This should allow hospitals to plan for one set of equipment that would serve ambulatory patients (a showering setup), and one set of equipment that would decontaminate non-ambulatory patients (two at a time, washed about 5 minutes a piece) but could be adapted if all persons are ambulatory.</p> <p>Communities must make four (4) hospital employees available 24 hours a day to utilize Level C protection to decontaminate patients who are grossly contaminated.</p> | | | | | |

| | | | | | | |
|--|--|--------------|----------------|------------|-----------------------|-----------------|
| <p>Communications and Information Technology</p> | <p>Establish secure and redundant communications system that insures connectivity during a terrorist incident or other public health emergency between health care facilities and State and local health departments, emergency medical services, emergency management agencies, public safety agencies, neighboring jurisdictions and federal public health officials.</p> <p>Enhance the capability of rural and urban hospitals, clinics, emergency medical services systems and poison control centers to report syndromic and diagnostic data that is suggestive of terrorism or other highly infectious disease to their associated local and State health departments on a 24-hour-a-day, 7-day-a-week basis.</p> | <p>X</p> | | | | |
| <p>Training and Education</p> | <p>Use competency-based education and training programs for adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident or other public health emergency.</p> | | | | | |
| Medical Supplies Management and Distribution | | | | | | |
| <p>Outcome: Critical medical supplies and equipment are appropriately secured, managed, distributed and restocked in a timeframe appropriate to the incident.</p> | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| <p>National Medical Equipment and Supplies Stockpile</p> | | | <p>X</p> | | | |

| | | | | | | |
|--|---|---|---|---|---|--|
| State Medical Equipment and Supplies Stockpile | | X | | | | |
| Increase in Standing Stock at Local Medical Treatment Facilities | Medical treatment facilities should consider increasing supplies on hand gradually to a point approximately 20% over their usual supply in order to buffer the time until federal assets can be deployed. | | | X | X | |
| National Tracking System | 1 within organizations that handle resources for emergency incidents. | | X | | | |
| Transportation Coordinator | 1 per EOC (as designated within EOC Management capability for city, county, state, federal and Department of Homeland Security EOC). | X | X | X | X | |
| Transportation Vehicles and personnel | Scaleable depending on incident need. | X | X | X | X | |
| Federal Mobilization Base Camp | | | X | | | |
| State Staging Area | | X | | | | |
| Interagency warehouse | 1 per incident. | | | X | X | |

Mass Prophylaxis

Outcome: Appropriate drug prophylaxis and vaccination strategies are implemented in a timely manner upon the onset of an event to prevent the development of disease in exposed individuals. Public information strategies include recommendations on specific actions individuals can take to protect their family, friends, and themselves.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|--|-------|---------|-----|----------------|----------|
| Receiving, Shipping, and Storage (RSS) | State/local 2 Minimum. | X | | | | |
| Dispensing and Vaccination Center (DVC) Point of Distribution (PODs) | 47 PODs for 1 metropolitan area. | X | | | | |
| Prophylaxis material | Federal/State/Local/Private: Prophylaxis for 2 million | X | X | | X | |

| Technical Advisory and Response Unit (TARU) | | | X | | | |
|---|-------------------------------|-------|---------|-----|----------------|----------|
| Adverse Event Monitoring | | X | X | | | |
| Mass Care (Sheltering, Feeding, and Related Services) | | | | | | |
| Outcome: Mass care services for the affected general population, services for special needs populations, and services for animals within the affected area are rapidly provided. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| <i>The number represents the estimated amount of the resource required to serve the affected population for different size jurisdictions during a major event</i> | | | | | | |
| Volunteer Agency Shelter management team | <u>Population Local Teams</u> | | | | | |
| | <10K | 6 | | | | |
| | 10K-25K | 15 | | | | |
| | 25K-50K | 30 | | | X | |
| | 50K-100K | 60 | | | | |
| | 100K-250K | 150 | | | | |
| | 250K-500K+ | 300 | | | | |
| Type 1 Small Animal Sheltering Team | <u>Population Local Teams</u> | | | | | |
| | <10K | 3 | | | | |
| | 10K-25K | 6 | | | | |
| | 25K-50K | 12 | | | X | X |
| | 50K-100K | 23 | | | | |
| | 100K-250K | 56 | | | | |
| | 250K-500K+ | 111 | | | | |
| Small Animal Transportation Team | <u>Population Local Teams</u> | | | | | |
| | <10K | 5 | | | | |
| | 10K-25K | 12 | | | | |
| | 25K-50K | 23 | | | | |
| | 50K-100K | 45 | | | X | X |
| | 100K-250K | 111 | | | | |
| | 250K-500K+ | 222 | | | | |

| | | | | | | |
|---|-------------------------------|-----|--|--|---|--|
| Animal Incident Response Team | <u>Population Local Teams</u> | | | | | |
| | <10K | 9 | | | | |
| | 10K-25K | 23 | | | | |
| | 25K-50K | 45 | | | X | |
| | 50K-100K | 89 | | | | |
| | 100K-250K | 222 | | | | |
| Mobile Feeding Team | <u>Population Local Teams</u> | | | | | |
| | <10K | 2 | | | | |
| | 10K-25K | 5 | | | | |
| | 25K-50K | 10 | | | X | |
| | 50K-100K | 20 | | | | |
| | 100K-250K | 50 | | | | |
| Voluntary Agency Mobile Kitchen Class A | <u>Population Kitchens</u> | | | | | |
| | <10K | 1 | | | | |
| | 10K-25K | 2 | | | | |
| | 25K-50K | 3 | | | X | |
| | 50K-100K | 6 | | | | |
| | 100K-250K | 16 | | | | |
| Voluntary Agency Mobile Kitchen Class B | <u>Population Kitchens</u> | | | | | |
| | <10K | 0 | | | | |
| | 10K-25K | 1 | | | | |
| | 25K-50K | 2 | | | X | |
| | 50K-100K | 3 | | | | |
| | 100K-250K | 8 | | | | |
| Voluntary Agency Mobile Kitchen Class C | <u>Population Kitchens</u> | | | | | |
| | <10K | 0 | | | | |
| | 10K-25K | 0 | | | | |
| | 25K-50K | 1 | | | X | |
| | 50K-100K | 2 | | | | |
| | 100K-250K | 4 | | | | |
| 250K-500K+ | 8 | | | | | |

| | | | | | | |
|--|-------------------|--------------------|--|---|--|--|
| Voluntary Agency Mobile Kitchen/Canteen | <u>Population</u> | <u>Kitchens</u> | | | | |
| | <10K | 4 | | | | |
| | 10K-25K | 10 | | | | |
| | 25K-50K | 20 | | X | | |
| | 50K-100K | 38 | | | | |
| | 100K-250K | 100 | | | | |
| Voluntary Agency Warehouse Team | <u>Population</u> | <u>Local Teams</u> | | | | |
| | <10K | 10 | | | | |
| | K-25K | 1 | | | | |
| | 25K-50K | 1 | | X | | |
| | 50K-100K | 2 | | | | |
| | 100K-250K | 2 | | | | |
| Voluntary Agency Drop Trailer Team | <u>Population</u> | <u>Local Teams</u> | | | | |
| | <10K | 2 | | | | |
| | 10K-25K | 4 | | | | |
| | 25K-50K | 8 | | X | | |
| | 50K-100K | 15 | | | | |
| | 100K-250K | 38 | | | | |
| Voluntary Agency Shelter Child Care teams | <u>Population</u> | <u>Teams</u> | | | | |
| | <10K | 2 | | | | |
| | 10K-25K | 4 | | | | |
| | 25K-50K | 8 | | X | | |
| | 50K-100K | 15 | | | | |
| | 100K-250K | 38 | | | | |
| Pre-packaged meals | <u>Population</u> | <u>Meals</u> | | | | |
| | <10K | 3,000 | | | | |
| | 10K-25K | 7,500 | | | | |
| | 25K-50K | 15,000 | | X | | |
| | 50K-100K | 30,000 | | | | |
| | 100K-250K | 75,000 | | | | |
| | 250K-500K+ | 150,000 | | | | |

| | | | | | | |
|---|-------------------|--------------|--|---|---|--|
| Meals from contractors (vendors, caterers, etc.) | <u>Population</u> | <u>Meals</u> | | | | |
| | <10K | 3,000 | | | | |
| | 10K-25K | 7,500 | | | | |
| | 25K-50K | 15,000 | | X | X | |
| | 50K-100K | 30,000 | | | | |
| | 100K-250K | 75,000 | | | | |
| | 250K-500K+150,000 | | | | | |

Fatality Management

Outcome: Complete documentation and recovery of human remains, personal effects, and items of evidence is done (except in cases where the health risk posed to personnel outweigh the benefits of recovery of remains and personal effects). Remains receive surface decontamination (if indicated) and, unless catastrophic circumstances dictate otherwise, are examined and identified, and released to the next-of-kin's funeral home with a complete certified death certificate. Reports of missing persons and antemortem data are efficiently collected. Victims' family members receive updated information prior to the media release. All hazardous material regulations are reviewed and any restriction on the transportation and disposition of remains are made clear by those with the authority and responsibility to establish the standards. All personal effects are made safe to return to next-of-kin unless contraindicated by catastrophic circumstances. Law Enforcement agencies are given all the information needed to investigate and prosecute the case successfully. Families are provided incident specific support services.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|---|----------------------------------|-------|---------|-----|----------------|----------|
| Department of Defense (DOD) Mortuary - Dover | | | X | | | |
| Disaster Mortuary Operational Response Team (DMORT) | | | X | | | |
| DMORT - WMD | | | X | | | |
| DMORT-Family Assistance Center (FAC) | | | X | | | |
| Portable Morgue | | X | X | | | |
| Morgue Operations Team | | X | X | | | |
| Morgue Security Team | State/local-1 per morgue | X | | | | |
| Body Recovery Unit | State/local-1 per morgue | X | | | | |
| Medical Support Team | Federal/State/local-1 per morgue | X | | | | |
| Field Investigative Unit | State/local-1 per morgue | X | | | | |
| Scene Logistics Unit | State/local-1 per morgue | X | | | | |

| | | | | | | |
|---|---|---|---|--|---|--|
| Escort Security Team | State/local 30 per morgue | X | | | | |
| Fatality Management Staging Security Team | State/local-1 per morgue | X | | | | |
| Incident Historian Team | | | | | | |
| Remains Decontamination Team | State/local-1 per morgue | X | X | | | |
| Dive (Underwater) Recovery Team | | | X | | | |
| Medical Examiner/Coroner | One per jurisdiction | X | X | | | |
| Refrigerated Storage | To accommodate 10% of jurisdiction's population | X | X | | | |
| Mortuary Officers (Funeral Directors) | As needed | X | | | X | |
| Antemortem Data Collection/Family Assistance Center | One per UASI area | X | X | | | |
| Transportation | As needed | X | X | | X | |

Recover Mission

Structural Damage and Mitigation Assessment

Outcome: Accurate situation needs and damage assessments occur. Mitigation projects to lessen the impact of similar future events are identified and prioritized. The full range of engineering, building inspection, and enforcement services are implemented, managed, and coordinated in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-event conditions.

| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
|--|--|-------|---------|-----|----------------|----------|
| <i>The numbers below are National Targets but are based only on the Earthquake scenario, and assume placement of resources in the 64 Metropolitan Statistical Areas (MSAs) in the 16 states where earthquakes are probable; additional resources may be needed in other parts of the country to address the other scenarios.</i> | | | | | | |
| Public Assistance Team (Buildings) | 110 Teams comprised of 80% Federal and 20% State/Local | X | X | | | |
| Public Assistance Team (Debris, Emergency Measures) | 310 Teams comprised of 80% Federal and 20% State/Local | X | X | | | |

| Public Assistance Team (other permanent work) | 102 Teams comprised of 80% Federal and 20% State/Local | X | X | | | |
|--|--|-------|---------|-----|----------------|----------|
| Rapid Needs Assessment Team | 210 teams comprised of one third of each Federal, State, and local representatives | X | X | | | |
| Disaster Assessment Team | 1,000 Teams comprised of 78% State/Local and 22%Private | X | | | X | |
| Engineering Services | | | X | | | |
| Home and Business Assessment | | | X | | X | |
| Restoration of Lifelines | | | | | | |
| Outcome: Lifelines to facilitate emergency response and recovery activities are restored and essential lifeline services for the affected population are reestablished. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| Note: the teams identified on the following page respond to a specific incident by assembling staff from various locations; they are not dedicated, standing organizations. | | | | | | |
| Debris Management Team | Federal/State/Local: 80 teams distributed regionally | X | X | | | |
| Damage Assessment Team - gas distribution system | Local/private sector: 25 teams distributed regionally | X | | | X | |
| Damage Assessment Team - water and sewer | Local/private sector: 40 teams distributed regionally | X | | | X | |
| Damage Assessment Crew - electric power | Local/private sector: 2 teams distributed regionally | X | | | X | |
| Damage Assessment Crew – communications system | Local/private sector: 400 teams distributed regionally | X | | | X | |
| Water and sewer restoration crew | Local/private sector: 100 teams distributed regionally | X | | | X | |
| Gas Distribution System Restoration Crew | Local/private sector: 143 teams distributed regionally | X | | | X | |
| Communications System restoration crew | Local/private sector: 300 teams distributed regionally | X | | | X | |

| Electric Power restoration crew | Local/private sector: 1,200 teams distributed regionally | X | | | X | |
|---|---|-------|---------|-----|----------------|----------|
| Transportation Assessment Team | Local/private sector: 1 team distributed locally | | | | X | |
| Economic & Community Recovery | | | | | | |
| Outcome: Economic impact is estimated, priorities are set for recovery activities, business disruption is minimized and returned to operation, and individuals and families are provided with appropriate levels and types of relief with minimal delay. | | | | | | |
| Resource | Local and tribal | State | Federal | NGO | Private Sector | Citizens |
| <i>Note: Many of the staff “pools” identified below will be generated in response to a specific incident by assembling governmental and contract staff from various locations; they are not dedicated, standing organizations.</i> | | | | | | |
| Damage Assessment Officer | National & Regional Pools (supplemented by national hiring efforts) – 5,000 inspectors to process work over a period of 6 months | X | X | | X | |
| Finance Officer | | | X | | | |
| Technical support and computer infrastructure | | | X | | | |
| Loan officers to process Small Business Association (SBA) applications in 60 days | | | X | | | |
| A program/protocol to assemble regional/local business representatives to examine economic impact and recovery alternatives | Federal program implemented locally | X | X | | X | |
| Economic Impact Community Representatives | An average of 10 per coordination team (comprising business leaders, chambers of commerce and business associations, and local trade organizations and professional association membership) | | | | X | |

| | | | | | | |
|---|--|---|---|---|---|--|
| A program/protocol to assemble essential service representatives to assess infrastructure damage and recovery alternatives | Federal program implemented locally | | X | | | |
| Essential Services Representatives: (water & wastewater, public health & sanitation, utilities, transportation, hospital, police, fire and EMS, communications, debris removal and disposal). | 20 members per coordination team; 1 team per jurisdiction | | | | | |
| Insurance community | National/State/local – 260 inspectors over 6 months | X | | | X | |
| Voluntary Organizations Active in Disasters (VOADs) and Non-governmental Organizations (NGOs) | National/State/local – 10 members per team; 1 team per region affected | X | | X | | |
| Private sector, including construction, building supplies, transportation assets | National/State/local | X | | | X | |
| Personnel to implement disaster assistance programs | National and regional | | X | | | |

CAPABILITY SUMMARY TEMPLATE

Capability Definition

The capability definition is a statement of the principal action or activity that must be performed. Capabilities are combinations of resources that provide the means to achieve a measurable outcome resulting from performance of one or more tasks, under specified conditions and to national standards.

Outcome

This is a statement of the expected outcome resulting from the performance of one or more critical tasks, under specified conditions and to national standards.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This section maps the capability to the National Response Plan (NRP) Emergency Support Functions (ESFs) and Annexes that are most closely associated with the capability description and outcome statement.

Capability Description

This section is presented in a table format. It identifies key activities that would be conducted with the capability. Additional information is provided to support the capability definition and ensure that the list of critical tasks address all appropriate activities under this capability.

Critical Tasks

This section also is presented in a table format. It lists the tasks that need to be performed to achieve the desired outcome. Critical tasks are defined as those tasks that must be performed to prevent occurrence of an incident, successfully protect a community from hazards, or (in the event of an incident) reduce serious injuries and loss of life, and mitigate significant property damage, or that are otherwise essential to the success of a homeland security mission. The first column of the table includes the task number found in the Universal Task List (UTL). The number incorporates a reference to the mission and function in the taxonomy and a sequence number. The second column identifies the task.

Preparedness Measures and Metrics

Preparedness measures assess preparedness actions taken before an incident to build the capacity to achieve the capability outcome. These measure relate to the development of plans, procedures, protocols, authorities, training, specialized equipment and systems, and how often they are updated and exercised.

Performance Measures and Metrics

Performance measures define how the demonstration of the capability through the performance of critical tasks would be measured. Performance measures and metrics define how well and how quickly the task should be performed. Some measures may be outcomes while others may be outputs that serve as surrogates or indicators for outcomes.

Capability Elements

Capability elements are the resources required to perform critical tasks, under the conditions defined by the National Planning Scenarios, to the performance standards. They include personnel; planning; organization and leadership; equipment and systems; training; and exercises, evaluation, and corrective actions. Any combination of properly planned, organized, equipped, trained, and exercised personnel resources can be utilized to achieve the outcome. Although the capability elements are not an exhaustive list of requirements, they provide a guide to the types of resources that are generally required to perform critical tasks.

Planning Assumptions

Planning assumptions are the suppositions developed by the Working Group to fill in data and/or details not provided by the National Planning Scenarios, in order to determine how much of the capability would be required to meet the scenario(s) parameters. Assumptions are reasonable estimates of actual data that was not provided in the scenario. Planning factors are aids to determining how much of a capability resource would be needed to accomplish the tasks.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

Planning factors present the quantity of capability elements (e.g., equipment, personnel, training) that are needed to meet the performance measures and carry out the tasks for a single incident. These numbers were used as a basis for determining how many elements are needed across the nation. The table consists of:

Resource organization – the smallest resource organization(s) (i.e. capability element “package”) used to carry out the tasks. Where such resource organizations have already been typed under the National Incident Management System (NIMS), the typed resource name is provided.

Estimated capacity – the performance capacity (i.e., throughput) of those elements.

Scenario Requirement Values – the scenario parameters that need to be addressed by the capability.

Quantity of Resources Needed – the total amount of resources needed to completely mitigate the scenario conditions. This number is derived from the performance capacity of a resource and the scenario parameters to be addressed using that capacity.

Approaches for Large-Scale Events

Recognizing that we do not live in an unconstrained resource environment, innovative strategies may be required to address the unprecedented capability requirement for a major event. This may include sharing resources, altering standards of care or performance, greater use of volunteers, use of alternative equipment sources, etc.

National Targets and Assigned Levels

National targets present the quantities of capability elements needed across the Nation to ensure an effective response to the scenarios, regardless of where they might plausibly occur. For each resource organization listed, this table identifies which entity should be responsible for building and maintaining the capability resource (e.g., Federal, State, jurisdiction, private sector) and the quantity for which that entity should be responsible.

Linked Capabilities

Linked capabilities are directly related to the subject capability and must be in place to perform tasks that feed into the capability or directly follow the capability or that must be performed concurrently with the capability to achieve the desired outcome.

References

This section lists key documents and other resources used to develop the target capability.

Example Application
of Target Capabilities
List Using Three
Jurisdictions
(1,000,000 People –
500,000 People –
50,000 People)

| Common Capabilities | | | |
|--|---|---|---|
| Planning | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| | (E.g., San Diego, San Antonio, Dallas, San Jose, Detroit - (900,00–1.2 million)) | (E.g., Las Vegas, Portland, Oklahoma City, Tucson, Albuquerque - 484,246--534,847) | |
| Planner At least 1 dedicated planner per 250,000 people at the state and substate level plus at least 2 planners per Urban Area Security Initiative (UASI) city, U.S. Territory, and Washington, DC | At least 2-4 dedicated planners | At least 2 dedicated planners | Shared planner at State or regional level |
| Equipment/Computers (computer and software tools) per planner | 2-4 sets | 2 sets | |
| Training | As required for each planner | As required for each planner | |
| Communications | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Interoperability Plan (1 per UASI as defined by local responder requirements) | Covered by UASI Plan | Covered by UASI Plan | |
| Governance Agreements (1 governance group per participant area) | Party to governance agreements | Party to governance agreements | |
| Standard Operating Procedures | Have Standard Operating Procedures | Have Standard Operating Procedures | Have Standard Operating Procedures or use regional SOPs |

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| Technology - System of Systems – A system of systems consisting of local, State and Federal components connected through common interface standards | Participate in system | Participate in system | Participate in system |
| Interoperable Communications Technical Assistance Program Teams | Federal teams provide assistance to urban area | Federal teams provide assistance to urban area | |
| Continuity of Operations Plan -Public Safety Answering Point (PSAP)/Public Safety Communications Center (PSCC) | 1 plan per county | 1 plan per county | 1 plan per county |
| Training and Exercises All personnel trained to operate communications system. Annual tabletop exercise. Multi-jurisdiction operational exercises every 3 years. | Provide training to personnel and participate in exercises | Provide training to personnel and participate in exercises | Provide training to personnel and participate in exercises |
| Risk Management | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Joint Terrorism Task Forces (JTTF) | Designate liaison to the JTTF | Designate liaison to the JTTF | Have procedures to communicate with the JTTF |
| Urban Area Security Workgroup | Participate in workgroup | Participate in workgroup | |
| Risk Communication Plan | Jurisdiction has plan | Jurisdiction has plan | Jurisdiction has or is covered by state, county or regional plan |
| Risk Management Plan | Jurisdiction has plan | Jurisdiction has plan | Jurisdiction has or is covered by state, county or regional plan |
| Community Preparedness and Participation | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |

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| Citizens Corps Councils - 2,500 in cities, counties, tribes throughout the country | Establish Citizen Corps Council | Establish Citizen Corps Council | Participate in regional council |
| Prevent Mission | | | |
| Information Gathering and Recognition of Indicators and Warnings | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Information gathering personnel | Identify and instruct personnel for information gathering | Identify and instruct personnel for information gathering | Identify and instruct personnel for information gathering |
| Personnel to recognize and report suspicious activity | All law enforcement (LE) and public safety (PS) agencies | All LE and PS agencies | All LE and PS agencies |
| Information processing personnel | All LE and PS agencies have sufficient personnel to process information | All LE and PS agencies have sufficient personnel to process information | All LE and PS agencies have sufficient personnel to process information |
| Joint Terrorism Task Force (JTTF) | Designate liaison to the JTTF | Designate liaison to the JTTF | Have procedures to communicate with JTTF |
| Plans and procedures for information gathering, recognition of indicators and warnings, and developing information needs | All LE and PS agencies have plans and procedures | All LE and PS agencies have plans and procedures | All LE and PS agencies have plans and procedures |
| System for public reporting of suspicious activity | Has a public reporting system | Has a public reporting system | Has a public reporting system or participates in State or regional system |
| Intelligence Analysis and Production | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Fusion Centers/Processes | Have or participate in state/regional fusion center | Have or participate in state/regional fusion center | Contribute to and access information from State/regional fusion center |

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| Personnel to support intelligence analyses | Contribute law enforcement, public health, and other appropriate agencies personnel to fusion center on a permanent or liaison basis | Contribute law enforcement, public health, and other appropriate agencies personnel to fusion center on a permanent or liaison basis | |
| Hardware, software, and internet-based systems that allow for information exchange and dissemination | All appropriate law enforcement, public health, and other agencies have system access | All appropriate law enforcement, public health, and other agencies have system access | All appropriate law enforcement, public health, and other agencies have system access |
| Terminals with network access to relevant systems | Fusion center sites | Fusion center sites | |
| Joint Terrorism Task Force (JTTF) | Designate liaison to the JTTF | Designate liaison to the JTTF | Have procedures to communicate with JTTF |
| Intelligence/Information Sharing and Dissemination | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Personnel involved in the operational aspects of information sharing | All agencies, as appropriate | All agencies, as appropriate | All agencies, as appropriate |
| Personnel involved in information sharing and collaboration | All agencies, as appropriate | All agencies, as appropriate | All agencies, as appropriate |
| Joint Terrorism Task Force (JTTF) | Designate liaison to the JTTF | Designate liaison to the JTTF | Have procedures to communicate with JTTF |
| Alternate, supplemental and back-up routing procedures | All agencies, as appropriate | All agencies, as appropriate | All agencies, as appropriate |
| Law Enforcement Investigation and Operations | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Interagency and multi-jurisdictional training plan that ensures commonality in terrorism investigation subject | Has training plan that covers law enforcement agencies | Has training plan that covers law enforcement agencies | Has training plan that covers law enforcement agencies |

| Joint Terrorism Task Force (JTTF) | Designate liaison to the JTTF | Designate liaison to the JTTF | Have procedures to communicate with JTTF |
|---|--|--|---|
| Investigative personnel | As needed | As needed | As needed |
| CBRNE Detection | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Protocols to ensure coordination with intelligence community | Protocols exist | Protocols exist | Protocols exist |
| Protocols for resolving alarms at detection points | Protocols exist | Protocols exist | Protocols exist |
| Public Education program to help people recognize threats | Establish public education program | Establish public education program | Establish public education program |
| CBRNE detection operator personnel | Designate personnel to operate CBRNE detection equipment | Designate personnel to operate CBRNE detection equipment | Designate personnel to operate CBRNE detection equipment or obtain through mutual aid agreement |
| CBRNE detection and monitoring equipment | Purchase and maintain appropriate equipment | Purchase and maintain appropriate equipment | Purchase and maintain appropriate equipment or obtain through mutual aid agreement |
| Training for personnel at interdiction points | Provide training | Provide training | Provide training |
| Laboratory staff for agent identification | Established regionally | Established regionally | Established regionally |
| Critical infrastructure personnel | Established regionally | Established regionally | Established regionally |
| Mutual aid agreements and/or memoranda of understanding, including protocols for coordination with intelligence community | Participate in regional MAAs and MOUs | Participate in regional MAAs and MOUs | Participate in regional MAAs and MOUs |
| CBRNE detection standard operating procedures, including regional coordination plans and protocols for resolving alarms | Follow regional procedures | Follow regional procedures | Follow regional procedures |

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| Facility response plans as required by law (SARA Title III) | Develop facility response plans | Develop facility response plans | Develop facility response plans |
| Protect Mission | | | |
| Critical Infrastructure Protection (CIP) | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Personnel to complete vulnerability assessments | Assign sufficient personnel to complete vulnerability assessments | Assign sufficient personnel to complete vulnerability assessments | Assign sufficient personnel to complete vulnerability assessments or participate in regional assessment |
| Infrastructure security specialists | Provide sufficient infrastructure security specialists | Provide sufficient infrastructure security specialists | Access State or regional specialists |
| Infrastructure intelligence analysts | Provide sufficient infrastructure intelligence analysts | Provide sufficient infrastructure intelligence analysts | Access State or regional analysts |
| State and/or regional CIP plans | Contribute to and implement State or regional plans | Contribute to and implement State or regional plans | Contribute to and implement State or regional plans |
| Memoranda of Understanding (MOUs) to ensure cooperation with respect to CIP | Develop MOUs | Develop MOUs | Participate in MOUs |
| Equipment for detection, protection, and mitigation | Purchase and maintain equipment, as define by need | Purchase and maintain equipment, as define by need | Access equipment through mutual aid |
| Risk and/or vulnerability assessment training | Provide training to appropriate personnel | Provide training to appropriate personnel | Provide training to personnel, if appropriate |
| Critical infrastructure prevention/protection attack exercises | Participate in State, regional, and/or Federal exercises | Participate in State, regional, and/or Federal exercises | Participate in State, regional, and/or Federal exercises, as appropriate |
| Food and Agriculture Safety and Defense | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |

Food and Agriculture Safety and Defense activities are generally the responsibility of State and Federal agencies

Epidemiological Surveillance and Investigation

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
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| Local health department-based surveillance team 24-hour coverage per affected county. (Staff may be drawn from local, State and Federal resources). | Participate in county team, as appropriate | Participate in county team, as appropriate | Participate in county team, as appropriate |
| Investigation team 24-hour coverage per affected county | Participate in county team, as appropriate | Participate in county team, as appropriate | Participate in county team, as appropriate |
| Active case finding/surveillance 24-hour coverage per affected county | Participate in county team, as appropriate | Participate in county team, as appropriate | Participate in county team, as appropriate |
| Special studies team As needed – staff may include Federal, State, and local personnel. | Participate in team, as appropriate | Participate in team, as appropriate | Participate in team, as appropriate |

Public Health Laboratory Testing

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
|---|---|--|---|
| Laboratory Response Network (LRN) Sentinel Laboratories Local/Private: 4,500 laboratories primarily in hospitals | Maintain LRN Sentinel Laboratories in city hospitals | Maintain LRN Sentinel Laboratories in city hospitals | Maintain LRN Sentinel Laboratories in city hospitals, if applicable |
| LRN Training | Provide training to appropriate personnel | Provide training to appropriate personnel | Provide training to appropriate personnel |

| Respond Mission | | | |
|---|---|---|---|
| Onsite Incident Management | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Type III Incident Management Team (IMT) | Have team or access through mutual aid | Have team or access through mutual aid | Access through mutual aid |
| Emergency Operations Center Management | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| City EOC | Maintain city EOC or support joint county or regional EOC | Maintain city EOC or support joint county or regional EOC | Would participate in a coordinated regional EOC or use county EOC |
| EOC Personnel To meet basic EOC functional requirements including: <ul style="list-style-type: none"> ▪ Incident Commander ▪ Public Information Officer ▪ Safety Officer ▪ Liaison Officer ▪ Operations Section ▪ Logistics Section ▪ Planning Section ▪ Administration/Financial ▪ ESF areas (up to 15) 1 per shift (at least) with security clearance as required to operate during activations | Designate adequate staff and backups for EOC | Designate adequate staff and backups for EOC | Contribute personnel, as requested |

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| <p>Training for EOC Personnel</p> <ul style="list-style-type: none"> • Independent Study (IS) 700—NIMS • Independent Study (IS) 800—NRP • Incident Command System (ICS) 100/200 • Emergency Operations Center (EOC) Management and Operations • Specified/standardized training for each EOC function assignment | <p>Ensure that EOC personnel and back-ups are adequately trained and that training is periodically refreshed</p> | <p>Ensure that EOC personnel and back-ups are adequately trained and that training is periodically refreshed</p> | |
| <p>Security Policy</p> | <p>Adhere to Federally developed policy for handling classified information</p> | <p>Adhere to Federally developed policy for handling classified information</p> | |
| Critical Resource Logistics and Distribution | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Logistics Planning Manager | Designate a Type IV logistics planning manager | Designate a Type IV logistics planning manager | Designate a Type IV logistics planning manager |
| National Tracking System | Establish local tracking system that feeds into national system | Establish local tracking system that feeds into national system | Establish system or use regional system |
| Logistics Response System | Maintain logistics branch in NIMS-compliant incident command system | Maintain logistics branch in NIMS-compliant incident command system | |
| Transportation Coordinator | 1 per EOC | 1 per EOC | |
| Cargo transportation Vehicles and personnel | Scalable to incident | Scalable to incident | |
| Interagency warehouse | Scalable to incident | Scalable to incident | |
| Warehouse system for stockpiled resources | Develop and maintain system | Develop and maintain system | |

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| Evacuation Terminal | At least 1 per evacuation plan | At least 1 per evacuation plan | At least 1 per evacuation plan |
| Evacuation Liaison Team | 1 per EOC | 1 per EOC | |
| Evacuation Coordination Team sufficient to evacuate 100% of those unable to self evacuate | 1 per EOC | 1 per EOC | |
| Electrical Power restoration team | At least 1 per public works and engineering jurisdiction | At least 1 per public works and engineering jurisdiction | |
| Volunteer Management and Donations | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Transportation | Provide a sufficient quantity of vehicles (acquired through private rentals, donations or national guard, etc.) to transport volunteers and donations | Provide a sufficient quantity of vehicles (acquired through private rentals, donations or national guard, etc.) to transport volunteers and donations | Jurisdiction would generally participate in State or regional volunteer management and donations efforts |
| Warehousing | Through public/private partnership, provide 1-6 warehouses per incident depending on need | Through public/private partnership, provide 1-6 warehouses per incident depending on need | |
| Donations Coordinators | Contribute personnel and support to regional effort | Contribute personnel and support to regional effort | |
| Responder Safety and Health | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Type 1 Safety Officer | Designate a safety officer | Designate a safety officer | Designate a safety officer |
| Specialized Safety Officer Specialization needs determined by each Urban Area Security Initiative (UASI) region and county | Designate a specialized safety officer | Designate a specialized safety officer | Access through mutual aid |

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| Specialized Subject Matter Expert (SME) (e.g. certified industrial hygienist, public health service, radiological, biological, engineer) | Identify pool of SMEs and contracting mechanism and/or mutual aid agreements or obtain from State, Federal or academia | Identify pool of SMEs and contracting mechanism and/or mutual aid agreements or obtain from State, Federal or academia | Obtain through State or regional resources |
| Training | Provide training to and maintain proficiency of all responders to minimum training requirements | Provide training to and maintain proficiency of all responders to minimum training requirements | Provide training to and maintain proficiency of all responders to minimum training requirements |
| Equipment Caches (Personal Protective Equipment (PPE), monitoring/detection equipment, etc.) | Purchase and maintain sufficient equipment for response personnel | Purchase and maintain sufficient equipment for response personnel | Purchase and maintain sufficient equipment for response personnel |
| Medical unit to provide monitoring and surveillance | Provide 1 medical unit per 5 specialized teams | Provide 1 medical unit per 5 specialized teams | Provide or access through mutual aid |
| Public Safety and Security Response | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Law Enforcement (crowd control) Sufficient personnel to cover 100% of the affected area (Estimate from 40% local law enforcement, 40% through mutual aid, 20% by State law enforcement) | Identify sufficient law enforcement personnel for crowd control Establish mutual aid agreements Determine what support is available from the State | Identify sufficient law enforcement personnel for crowd control Establish mutual aid agreements Determine what support is available from the State | Identify sufficient law enforcement personnel for crowd control Establish mutual aid agreements Determine what support is available from the State |
| Law Enforcement (traffic control) | Identify traffic control points and identify sufficient personnel to provide traffic control coverage | Identify traffic control points and identify sufficient personnel to provide traffic control coverage | Identify traffic control points and identify sufficient personnel to provide traffic control coverage |
| Animal Health Emergency Support | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |

This capability is generally not required for municipal areas. For exceptions, see the full capability.

Environmental Health

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
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Targets have not been provided – Working with HHS to obtain

Explosive Device Response Operations

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
|---|---|---|--|
| Bomb Squads (Type I, Type II, Type III) | Maintain bomb squad | Maintain bomb squad | Access through mutual aid |

Firefighting Operations Support

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
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| Firefighting personnel and equipment Firefighting operations support for a major event would be addressed with an appropriate combination of existing resources from multiple jurisdictions and levels of government | Have sufficient mutual aid agreements to address major event | Have sufficient mutual aid agreements to address major event | Have sufficient mutual aid agreements to address major event |

WMD/Hazardous Materials Response and Decontamination

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
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| Type I Hazmat Entry Team (Extrication) | 20 teams in or near the jurisdiction | 20 teams in are near the jurisdiction | Support from county team |
| Type I Hazmat Entry Team (Decon) | 20 teams in or near the jurisdiction | 20 teams in or near the jurisdiction | Support from county team |
| Hazmat Information/ Research Group/Team | 2 teams | 2 teams | |
| Hazmat Medical Group/Team | 2 teams | 2 teams | |
| Hazmat Resources Group/Team | 2 teams | 2 teams | |
| Hazmat Liaison Officer | 2 officers | 2 officers | |
| Hazmat Specialist Team | 1 team | 1 team | Support from county team |
| Citizen Protection: Evacuation and/or In-place Protection | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Public Shelter-in-Place packets for self-preparedness | Provide on per person at home and work site | Provide on per person at home and work site | Provide on per person at home and work site |
| Public Warning System | Maintain a public warning system | Maintain a public warning system | Maintain a public warning system |
| Evacuation Plan | Have an evacuation plan that has been updated and exercised | Have an evacuation plan that has been updated and exercised | 1 Evacuation Plan or participate in county planning |
| Personnel Public education program manager; staff to implement pre-event evacuation education and training | Designate and train sufficient personnel to prepare the public, including special needs and non-English speaking populations for evacuation or to shelter-in-place | Designate and train sufficient personnel to prepare the public, including special needs and non-English speaking populations for evacuation or to shelter-in-place | Designate and train sufficient personnel to prepare the public, including special needs and non-English speaking populations for evacuation or to shelter-in-place |

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| Multi-media materials production and dissemination equipment (e.g. audio, visual, written materials or equipment) | Provide sufficient resources to reach population | Provide sufficient resources to reach population | Provide sufficient resources to reach population |
| Training on policies, procedures and emergency operations plans of jurisdiction | Provide training for all elected officials and for city personnel responsible for evacuation or related functions | Provide training for all elected officials and for city personnel responsible for evacuation or related functions | Provide training for all elected officials and for city personnel responsible for evacuation or related functions |
| Transportation resources Average of 17 public transportation vehicles (i.e. buses) per 100,000 to respond to the affected area in a timely manner | Define population that will need transportation and ensure adequate transportation | Define population that will need transportation and ensure adequate transportation | Define population that will need transportation and ensure adequate transportation |
| Traffic control package In accordance with evacuation plans (e.g. barriers, cones directional signs) | As needed to implement evacuation plan | As needed to implement evacuation plan | As needed to implement evacuation plan |
| Security and Law Enforcement State-security and law enforcement officers to support traffic control efforts, evacuation and re-entry efforts, and law enforcement activities | Maintain sufficient security and law enforcement personnel to implement evacuation plan and provide safeguard the public | Maintain sufficient security and law enforcement personnel to implement evacuation plan and provide safeguard the public | Maintain sufficient security and law enforcement personnel to implement evacuation plan and provide safeguard the public |
| Fire/Emergency Medical Services | Scaleable to incident | Scaleable to incident | Scaleable to incident |
| Tow Trucks | Scaleable to incident | Scaleable to incident | Scaleable to incident Scaleable to incident |
| Public Works | Scaleable to incident | Scaleable to incident | |
| Isolation and Quarantine | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Isolation and Quarantine Plan | Has plan and had defined authority to issue order | Has plan and had defined authority to issue order | Covered by county or regional plan |

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| Community isolation and quarantine team | 1 team in every district, county and municipal office. | 1 team in every district, county and municipal office. | |
| Urban Search & Rescue | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Search and Rescue Team | Type I Urban Search and Rescue Team or Type II Collapse Search and Rescue Team | Type I Urban Search and Rescue Team or Type II Collapse Search and Rescue Team | Type II Heavy Rescue Squad Strike Team or Type II Heavy Rescue Squad |
| Emergency Public Information and Warning | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Public Information Officer | Jurisdiction with an EOC | Every jurisdiction with an EOC | Provided by county EOC |
| Joint Information Center (JIC) Support: <ul style="list-style-type: none"> • Deputy PIO • Asst. PIO • Research Team • Media Operations Team • Logistics Team | Every jurisdiction with an EOC | Every jurisdiction with an EOC | |
| Alert and Notification System | Every jurisdiction with an EOC | Every jurisdiction with an EOC | |
| JIC Meeting Space, Media Briefing Room and Office Equipment | Every jurisdiction with an EOC | Every jurisdiction with an EOC | |
| Triage and Pre-Hospital Treatment | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| <i>National resources have not been identified – Working with HHS to define</i> | | | |

| Medical Surge | | | |
|---|--|--|--|
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| <p>Surge Capacity Beds</p> <p>Triage, treatment and initial stabilization, above the current daily staffed bed capacity, for classes of adult and pediatric patients requiring hospitalization within 3 hours in the wake of a terrorism incident or other public health emergency</p> | <p>500 beds for acute infectious disease</p> <p>50 beds for acute botulism intoxication or other acute chemical poisoning</p> <p>50 beds burn or trauma</p> <p>50 beds for of radiation-induced injury</p> | <p>250 beds for acute infectious disease</p> <p>25 beds for acute botulism intoxication or other acute chemical poisoning</p> <p>25 beds burn or trauma</p> <p>25 beds for of radiation-induced injury</p> | <p>25 beds for acute infectious disease</p> <p>2-3 beds for acute botulism intoxication or other acute chemical poisoning</p> <p>2-3 beds burn or trauma</p> <p>2-3 beds for of radiation-induced injury</p> |
| <p>Personnel (Option 1) the Concept of Operations for the Acute Care Center</p> <ul style="list-style-type: none"> ▪ 1 physician ▪ 1 PA or NP ▪ 6 RNs or a mix of RNs and LPNs ▪ 4 nursing assistants/nursing support technicians ▪ 2 medical clerks (unit secretaries) ▪ 1 RT ▪ 1 case manager ▪ 1 social worker ▪ 1 housekeeper ▪ 1 patient transporter | Adequately staff surge resources | Adequately staff surge resources | Adequately staff surge resources |

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| <p>Isolation Capacity</p> <p>Ensure that all hospitals have the capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease (e.g., smallpox, pneumonic plague, SARS, influenza and hemorrhagic fevers) or febrile patient with a suspect rash or other symptoms of concern who might be developing a highly communicable disease.</p> <p>Identify at least one regional healthcare facility, in each defined region, that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation within 3 hours post-event.</p> | <p>All hospitals have the capacity to maintain, in negative pressure isolation</p> <p>Provide or contribute to one regional healthcare facility</p> | <p>All hospitals have the capacity to maintain, in negative pressure isolation</p> <p>Provide or contribute to one regional healthcare facility</p> | <p>All hospitals have the capacity to maintain, in negative pressure isolation</p> |
| <p>Pharmaceutical Caches</p> <p>Establish a regional system that insures a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days to hospital personnel and hospital based emergency first responders and their family members</p> | <p>Contribute to regional system</p> | <p>Contribute to regional system</p> | <p>Contribute to regional system</p> |
| <p>Personal Protective Equipment</p> | <p>Ensure adequate PPE, to protect current and additional health care personnel, during an incident</p> | <p>Ensure adequate PPE, to protect current and additional health care personnel, during an incident</p> | <p>Ensure adequate PPE, to protect current and additional health care personnel, during an incident</p> |

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| <p>Decontamination: (ASTM Standard E 2413)</p> <p>A community must be able to provide decontamination to 500 persons per million population in 3 hours to include one set of equipment for ambulatory patients (a showering setup), and one set for non-ambulatory patients (two at a time, washed about 5 minutes a piece), which could be adapted if all are ambulatory.</p> <p>There must be the capability to have four (4) hospital employees available 24 hours a day to utilize Level C protection to decontaminate patients who are grossly contaminated.</p> | <p>Build capacity to decontaminate 500 persons in 3 hours</p> <p>4 hospital employees available 24 hours per day to utilize Level C protection to decontaminate patients who are grossly contaminated.</p> | <p>Build capacity to decontaminate 250 persons in 3 hours</p> <p>4 hospital employees available 24 hours per day to utilize Level C protection to decontaminate patients who are grossly contaminated.</p> | <p>Build capacity to decontaminate 25 persons in 3 hours</p> <p>4 hospital employees available 24 hours per day to utilize Level C protection to decontaminate patients who are grossly contaminated.</p> |
| <p>Communications and Information Technology</p> | <p>Establish secure and redundant communications system</p> <p>Report syndromic and diagnostic data to local and State health departments 24/7</p> | <p>Establish secure and redundant communications system</p> <p>Report syndromic and diagnostic data to local and State health departments 24/7</p> | <p>Establish secure and redundant communications system</p> <p>Report syndromic and diagnostic data to local and State health departments 24/7</p> |
| <p>Training and Education</p> | <p>Provide adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident or other public health emergency with competency-based education and training</p> | <p>Provide adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident or other public health emergency with competency-based education and training</p> | <p>Provide adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident or other public health emergency with competency-based education and training</p> |
| Medical Supplies Management and Distribution | | | |
| <p>Resource</p> | <p>Cities with Approximately 1 Million Population</p> | <p>Cities with Approximately 500,000 Population</p> | <p>Cities with Approximately 50,000 Population</p> |

| | | | |
|--|--|--|--|
| Increase in Standing Stock at Local Medical Treatment Facilities | Medical treatment facilities should consider increasing supplies on hand gradually to about 20% over their usual supply in order to buffer the time until federal assets can be deployed | Medical treatment facilities should consider increasing supplies on hand gradually to about 20% over their usual supply in order to buffer the time until federal assets can be deployed | Medical treatment facilities should consider increasing supplies on hand gradually to about 20% over their usual supply in order to buffer the time until federal assets can be deployed |
| National Tracking System | 1 within organizations that handle resources for emergency incidents | 1 within organizations that handle resources for emergency incidents | 1 within organizations that handle resources for emergency incidents |
| Transportation Coordinator | 1 per EOC | 1 per EOC | |
| Transportation Vehicles and Personnel | Scaleable for incident | Scaleable for incident | Scaleable for incident |
| Interagency warehouse | 1 per incident | 1 per incident | Address through mutual aid |

Mass Prophylaxis

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
|--|---|---|---|
| Receiving, Shipping, and Storage (RSS) | Has identified site for receiving, staging, and storing Federal assets | Has identified site for receiving, staging, and storing Federal assets | Use county or regional site |
| Dispensing and Vaccination Center (DVC) Point of Distribution (PODs) | Has sufficient personnel to fully staff a mass prophylaxis dispensing operation | Has sufficient personnel to fully staff a mass prophylaxis dispensing operation | Has sufficient personnel to fully staff a mass prophylaxis dispensing operation |
| Prophylaxis supplies and material | Has sufficient supplies and materials for population | Has sufficient supplies and materials for population | Has sufficient supplies and materials for population |

Mass Care (Sheltering, Feeding, and Related Services)

| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
|----------|--|--|---|
| | | | |

The number represents the estimated amount of the resource required to serve the affected population for different size jurisdictions during a major event.

| | | | |
|---|---|---|--|
| Volunteer Agency Shelter management team | 600 teams | 300 teams | 30 teams |
| Type 1 Small Animal Sheltering Team | 222 teams | 111 teams | 12 teams |
| Small Animal Transportation Team | 444 teams | 222 teams | 23 teams |
| Animal Incident Response Team | 888 teams | 444 teams | 45 teams |
| Mobile Feeding Team | 200 teams | 100 teams | 10 teams |
| Voluntary Agency Mobile Kitchen Class A | 60 kitchens | 30 kitchens | 3 kitchens |
| Voluntary Agency Mobile Kitchen Class B | 30 kitchens | 15 kitchens | 2 kitchens |
| Voluntary Agency Mobile Kitchen Class C | 16 kitchens | 8 kitchens | 1 kitchen |
| Voluntary Agency Mobile Kitchen/Canteen | 376 mobile kitchen/canteen | 188 mobile kitchen/canteen | 20mobile kitchen/canteen |
| Voluntary Agency Warehouse Team | 6 teams | 3 teams | 1 team |
| Voluntary Agency Drop Trailer Team | 150 teams | 75 teams | 8 teams |
| Pre-packaged meals | 300,000 meals | 150,000 meals | 15,000 meals |
| Meals from contractors (e.g., vendors, caterers) | 300,000 meals | 150,000 meals | 15,000 meals |
| Voluntary Agency Shelter Child Care teams | 150 teams | 75 teams | 8 teams |
| Fatality Management | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Medical Examiner/Coroner | One per jurisdiction | One per jurisdiction | One per jurisdiction or county |
| Antemortem Data Collection/Family Assistance Center | One per jurisdiction | One per jurisdiction | |
| Recover Mission | | | |

| Structural Damage and Mitigation Assessment | | | |
|---|---|--|--|
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Public Assistance Team (Buildings) 110 Teams comprised of 80% Federal and 20% State/Local | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Public Assistance Team (Debris, Emergency Measures) 310 Teams comprised of 80% Federal and 20% State/Local | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Public Assistance Team (other permanent work) 102 Teams comprised of 80% Federal and 20% State/Local | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Rapid Needs Assessment Team 210 teams comprised of one Federal, one state, and one local representative | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Disaster Assessment Team 1000 Teams comprised of 78% State/Local and 22% Private | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Restoration of Lifelines | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |
| Debris Management Team Federal/State/Local: 80 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Damage Assessment Team - Gas Distribution System Local/private sector: 25 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |

| | | | |
|--|---|--|--|
| Damage Assessment Team - Water and Sewer Local/private sector: 40 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Damage Assessment Crew - Electric Power Local/private sector: 2 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Damage Assessment Crew – Communications System Local/private sector: 400 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Water and Sewer Restoration Crew Local/private sector: 100 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Gas Distribution System Restoration Crew Local/private sector: 143 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Communications System Restoration Crew Local/private sector: 300 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Electric Power Restoration Crew Local/private sector: 1,200 teams distributed regionally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Transportation Assessment Team Local/private sector: 1 team distributed locally | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed | Contribute local representatives to teams, as needed |
| Economic & Community Recovery | | | |
| Resource | Cities with Approximately 1 Million Population | Cities with Approximately 500,000 Population | Cities with Approximately 50,000 Population |

| | | | |
|---|---|---|---|
| Damage Assessment Officer National & Regional Pools (supplemented by national hiring efforts) – 5,000 inspectors to process work over a period of 6 months | Provide personnel, as appropriate | Provide personnel, as appropriate | Provide personnel, as appropriate |
| A program/protocol to assemble regional/local business representatives to examine economic impact and recovery alternatives | Federal program implemented locally | Federal program implemented locally | Federal program implemented locally |
| Economic Impact Community Representatives An average of 10 per coordination team - business leaders, chambers of commerce, local trade organizations, and business and professional associations | Provide representatives, as appropriate | Provide representatives, as appropriate | Provide representatives, as appropriate |
| A program/protocol to assemble essential service representatives to assess infrastructure damage and recovery alternatives | Federal program implemented locally | Federal program implemented locally | Federal program implemented locally |
| Essential Services Reps: (water & wastewater, public health & sanitation, utilities, transportation, hospital, police, fire and EMS, communications, debris removal and disposal). | 20 members per coordination team; 1 team per jurisdiction | 20 members per coordination team; 1 team per jurisdiction | 20 members per coordination team; 1 team per jurisdiction or county |
| Insurance community Federal/State/local - 260 inspectors over 6 months | Provide personnel, as appropriate | Provide personnel, as appropriate | Provide personnel, as appropriate |
| Voluntary Organizations Active in Disasters (VOADs) and Non-governmental Organizations (NGOs) Federal/State/local – 10 members per team; 1 team per region affected | Provide personnel and coordination, as appropriate | Provide personnel and coordination, as appropriate | Provide personnel and coordination, as appropriate |
| Private sector, including construction, building supplies, transportation assets Federal/State/local | Provide support and oversight, as appropriate | Provide support and oversight, as appropriate | Provide support and oversight, as appropriate |

| | | | |
|--|-----------------------------------|-----------------------------------|-----------------------------------|
| Personnel to implement disaster assistance programs Federal & Regional Pools (supplemented by national hiring efforts) – | Provide personnel, as appropriate | Provide personnel, as appropriate | Provide personnel, as appropriate |
|--|-----------------------------------|-----------------------------------|-----------------------------------|

Common Target Capabilities

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PLANNING

Capability Definition

Planning is the foundation on which all other capabilities are developed and enhanced, and is essential to their successful achievement. All-hazards planning is the mechanism through which Federal, State, local and tribal governments develop, validate, and maintain plans, policies, and procedures describing how they will prioritize, coordinate, manage, and support personnel, information, equipment, and resources to prevent, protect and mitigate against, respond to, and recover from Incidents of National Significance.

Unlike the other target capabilities, the attributes of planning are difficult to quantify, as individual planners may have considerably varied education and experience, and still produce plans that lead to the successful implementation of a target capability. The focus of the Planning Capability should be on successful achievement of a plan's concept of operations using target capabilities and not the ability to plan as an end unto itself.

Outcome

Plans incorporate an accurate hazard analysis and risk assessment and ensure capabilities required to prevent, protect and mitigate against, respond to, and recover from acts of terrorism, natural disasters, and other emergencies are available when and where they are needed.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

Planning supports all Emergency Support Functions (ESFs) and Annexes at the Federal, State, local, and tribal levels.

Capability Description

| Activity | Description |
|----------------------|--|
| Develop plans. | <ul style="list-style-type: none"> ▪ Develop and maintain plans for homeland security preparedness and emergency management including strategic plans, emergency operations plans, preparedness, response and recovery plans, mitigation plans, and continuity plans. ▪ Coordinate agreements in support of plans, emphasizing multi-jurisdictional and multi-agency collaboration to the greatest extent possible. ▪ Exercises should test overall preparedness, and include prevention, response and recovery elements. |
| Develop exercises. | <ul style="list-style-type: none"> ▪ Plan, coordinate, schedule/deconflict training events and exercises that replicate natural and man-made disasters in the organization's family of plans. |
| Conduct assessments. | <ul style="list-style-type: none"> ▪ Coordinate assessments of preparedness in support of the National |

| Activity | Description |
|----------|--|
| | <p>Preparedness Goal.</p> <ul style="list-style-type: none"> ▪ Coordinate evaluation of exercises and incident operations, including preparation of after-action reports and lessons-learned. ▪ Manage a lessons-learned system in support of a cycle of continuous preparedness improvement. ▪ Incorporate risk assessments that address threat, vulnerability, criticality and hazards. |

Critical Tasks

| UTL# | Task |
|--------------|--|
| Com.A 1 | Develop strategic plans that include, but are not limited to, preventing, protecting against, responding to, and recovering from man-made and natural disasters and acts of terrorism. The strategic plan shall define the vision, mission, goals, and objectives of the jurisdiction. |
| Com.A 2 | Develop emergency operations/response plans that describe how personnel, equipment, and other governmental, nongovernmental, and private resources will support and sustain incident management requirements. |
| Com.A 3.1.8 | Develop continuity plans describing how personnel, equipment, and other governmental, nongovernmental, and private resources will support the sustainment and/or reestablishment of essential functions. |
| Com.A 5.1 | Develop recovery plans describing how personnel, equipment, and other governmental, nongovernmental, and private resources will support and sustain incident recovery requirements. |
| Com.A 8.3.6 | Ensure that trained and equipped personnel are available to execute the planning requirements. |
| Com.A 11 | Develop exercises/drills of sufficient intensity to challenge management and operations and to test the knowledge, skills, and abilities of individuals and organizations. |
| Com.A 11.3 | Develop a process to review and analyze lessons learned from real-world incidents and exercises/evaluations for best practices to implement corrections and update plans. |
| Com.A 12 | Develop and execute mutual aid assistance agreements. |
| Res.B 15.6.1 | Develop the incident action plan (IAP) to establish priorities, procedures, and actions to be accomplished to meet the incident objectives. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Plans are reviewed annually and updated as necessary in accordance with Federal, State and local regulations and policies | Yes/No |
| Plans are consistent with designated local, regional, State, and | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| national standards | |
| Emergency response plans are consistent with the National Response Plan (NRP) and National Incident Management System (NIMS) | Yes/No |
| Plans are exercised and/or evaluated according to applicable standards | Yes/No |
| Improvement actions from after action reports and lessons learned are resolved within 90 days or incorporated into a schedule for completion | Yes/No |
| A strategic plan for protecting against, responding to, and recovering from a natural disaster or terrorist attack has been developed | Yes/No |
| Continuity of operation plans (COOP) that describe how personnel, equipment, and other resources will support private recovery are developed | Yes/No |
| Mutual aid assistance agreements are in place | Yes/No |
| Planners are trained and equipped | Yes/No |
| Emergency response plans address a substantial loss of local public safety response capabilities during catastrophic events | Yes/No |
| A record of deficiencies from plan review is generated within 30 days of review | Yes/No |

Performance Measures and Metrics

Not applicable for this capability

Capability Elements

Personnel

- Planners dedicated to developing and maintaining homeland security, emergency management, and/or all-hazards plans
- Representatives from all appropriate departments and agencies to assist in the plan development process
- Planners skilled with incident action planning.

Equipment and Systems

- Equipment, including computers and software tools

Training

- Training (e.g., Federal Emergency Management Agency (FEMA), Emergency Management Institute (EMI), State training academies, the U.S. Department of Homeland Security (DHS), Office for Domestic Preparedness (ODP) Training Consortium, colleges and universities)

Planning Assumptions

- This capability applies to a wide range of incidents and emergencies including terrorist attacks, other manmade disasters, and natural disasters. It is intended to address deliberate planning coordination.
- A “dedicated planner” is one full-time equivalent (FTE) person whose work is focused exclusively (“dedicated”) on the development and maintenance of homeland security, emergency management, and/or all-hazards plans.
- Planning occurs with respect to the incident (strategic, operational, and tactical/incident) and according to the appropriate jurisdictional level (Federal, State, local, tribal).
- All operational personnel are trained on all appropriate plans and their role within those plans.
- Plans are validated through implementation, review and/or exercise.
- Plans are written in accordance with NIMS.
- Planners have knowledge, experience, and/or training in subject areas.
- The planning process includes hazard analysis and risk assessment.
- The Universal Task List (UTL) identifies a large number of planning requirements; the need for each of these plans has been evaluated for applicability to the respective jurisdiction.

Target Capabilities for Planning

| Resource Organization | Estimated Capacity | Quantity of Resources Needed |
|-----------------------|---|---|
| Planner | At least 1 dedicated planner per every 100,000 people at each level of government. In addition, at least two per Urban Area Security Initiative (UASI). At least two per Washington, DC and each U.S. Territory. | At least one dedicated planner per every 250,000 people at the State and/or sub-state level. In addition, at least two per UASI. At least two per Washington, DC and each U.S. Territory. |
| Equipment | Equipment includes computers with sufficient software tools to accomplish the specified tasks. These tools include but are not limited to geographic information system tools, decision modeling programs, relational databases, hazard modeling programs (i.e., computer-aided management of emergency operations [CAMEO], multihazard loss estimation methodology [HAZUS]) and consequence modeling tools. | One set per planner. |
| Training | Training may include but is not limited to courses offered through Federal, State, local and private organizations, such as: <ul style="list-style-type: none"> ▪ Federal Emergency Management Agency (FEMA) | As required for each planner. |

| Resource Organization | Estimated Capacity | Quantity of Resources Needed |
|-----------------------|--|------------------------------|
| | <ul style="list-style-type: none"> ▪ Emergency Management Institute (EMI) ▪ Office of Domestic Preparedness (ODP) Training Consortium ▪ State training academies ▪ Colleges and universities | |

Approaches for Large-Scale Events

Not applicable for this capability.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|-----------|--|
| Planner | <p>At least one dedicated planner per every 250,000 people at the State and/or sub-state level. In addition, at least two per UASI. At least two per Washington, DC and each U.S. Territory.</p> <p>Minimum of 1160 dedicated planners distributed through the States as determined by the individual state administrative agency. Minimum of 116 dedicated planners distributed among UASIs. Minimum of 12 dedicated planners distributed among each US Territory and Washington, DC.</p> |
| Training | Federal/State/local – As required by each planner or jurisdiction. |
| Equipment | One set per planner (computer and software tools) |

Linked Capabilities

All 36 target capabilities

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5. *Guide for All-Hazard Emergency Operations Planning: State and Local Guide 101*. Federal Emergency Management Agency. April 2001. <http://www.fema.gov/pdf/rrr/slg101.pdf>.
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 9. *Hazardous Material Emergency Planning Guide*. National Response Team. NRT-1. Updated 2001. [http://www.nrt.org/Production/NRT/NRTWeb.nsf/AllAttachmentsByTitle/SA-27NRT1Update/\\$File/NRT-1update.pdf?OpenElement](http://www.nrt.org/Production/NRT/NRTWeb.nsf/AllAttachmentsByTitle/SA-27NRT1Update/$File/NRT-1update.pdf?OpenElement).
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 11. 11. Enduring Constitutional Government and Continuity of Government Operations (PDD-67). October 1998. http://www.emergency-management.net/laws_pdd67.htm.

COMMUNICATIONS

Capability Definition

Communications is the fundamental capability within disciplines and jurisdictions that practitioners need to perform the most routine and basic elements of their job functions. Agencies must be operable, meaning they must have sufficient wireless communications to meet their everyday internal and emergency communication requirements before they place value on being interoperable, meaning being able to work with other agencies.

Communications interoperability is the ability of public safety agencies (police, fire, EMS) and service agencies (public works, transportation, hospitals, etc.) to talk within and across agencies and jurisdictions via radio and associated communications systems, exchanging voice, data and/or video with one another on demand, in real time, when needed, and when authorized. It is essential that public safety has the intra-agency operability it needs, and that it builds its systems toward interoperability.

Outcome

A continuous flow of critical information is maintained as needed among multi-jurisdictional and multi-disciplinary emergency responders, command posts, agencies, and the governmental officials for the duration of the emergency response operation in compliance with National Incident Management System (NIMS). To accomplish this, the jurisdiction has a continuity of operations plan for public safety communications to include the consideration of critical components, networks, support systems, personnel, and an appropriate level of redundant communications systems in the event of an emergency.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

Primary: ESF#2: Communications

Communications support all ESFs at the Federal, State, local and tribal levels.

Capability Description

| Activity | Description |
|------------|--|
| Governance | <ul style="list-style-type: none"> ▪ Governance consists of local, tribal, State, and Federal entities as well as representatives from all pertinent public safety disciplines within the identified region. The governance group is critical to the success of interoperability planning. ▪ Establish a common governing structure for solving interoperability issues that improves the policies, processes, and procedures of any major project by enhancing communication, coordination, and cooperation; establishing guidelines and principles; and reducing any internal jurisdictional conflicts. ▪ Develop an interoperability communications plan for participating entities. |

| Activity | Description |
|-------------------------------|---|
| | <ul style="list-style-type: none"> ▪ Establish agreements such as memorandums of agreement (MOAs) and memorandums of understanding (MOUs). ▪ Develop a long-term funding plan for sustaining and maintaining communications interoperability. |
| Standard operating procedures | <ul style="list-style-type: none"> ▪ Standard operating procedures (SOPs) are formal written guidelines or instructions for incident response. SOPs typically have both operational and technical components. ▪ SOPs provide agencies and jurisdictions with agreed-upon protocols and procedures that will be used during an incident. |
| Technology | <ul style="list-style-type: none"> ▪ Technology refers to the equipment/infrastructure, network, support systems, and software applications that public safety agencies and service agencies use to exchange critical information when responding to incidents. ▪ Technology provides the platform to ensure agencies are technically able to communicate with each other. |
| Training exercises | <ul style="list-style-type: none"> ▪ Provide required training and exercises to ensure staff are adequately familiar with unique communication system requirements within a region. |
| Usage | <ul style="list-style-type: none"> ▪ Usage refers to how often interoperable communications technologies are used during planned events, day-to-day operations and large-scale incidents. ▪ Real-time, on-demand communications during emergency incidents, as well as planned events and routine daily operations as needed. ▪ Continuous flow of critical information between multi-jurisdictional and multi-disciplinary agencies at the command level. |

Critical Tasks

| UTL# | Task |
|-------------|--|
| Com.C 1 | Develop communication plans, policies, and procedures that support required communications with all Federal, regional, State, local and tribal governments and agencies as well as voluntary agencies. |
| Com.C 1.1 | Develop procedures for the exchange of voice and data with Federal, regional, State, local and tribal agencies, as well as voluntary agencies. |
| Com.C 1.4 | Develop supplemental and backup communications and information technology plans and procedures. |
| Com.C 1.4.2 | Identify emergency communications and data requirements for each stakeholder. |
| Com.C 1.5 | Develop a continuous improvement plan that enriches interoperable communications to provide advanced customer service, reliability, and operational effectiveness. |
| Com.C 1.6 | Complete an assessment of standard communication capabilities for the Public Safety Answering Points (PSAPs) and Public Safety Communication Centers to ensure an |

| UTL# | Task |
|--------------------|--|
| | appropriate continuity of operations plan (COOP) is in place for public safety and service agencies' communications. |
| Com.C 2 | Coordinate and provide telecommunication and information technology support to Federal, regional, State, tribal, and local officials and the private sector. |
| Com.C 2.2 | Implement plans and measures necessary to identify damaged critical infrastructure assets; repair, reconstitute, and secure radio and associated communications networks; and take action to protect these assets from secondary damage. |
| Com.C 4.1.3 | Design reliable, redundant, and robust communications systems for daily operations capable of quickly reconstituting normal operations in the event of disruption or destruction. |
| Com.C 5 | Establish and maintain response communications systems. |
| Com.C 5.1 | Implement response communications interoperability plans and protocols. |
| Com.C 5.2 | Coordinate communications policy and procedures across response entities. |
| Com.C 5.4 | Coordinate procurement and placement of technology communication systems based on a gap analysis of requirements versus existing capabilities. |
| Res.A.3 2 | Coordinate incident site communications within a National Incident Management System (NIMS) compliant framework. |
| Res.A.3 3 | Communicate internal incident response information. |
| Res.B.1 6.1.1.5 | Provide direction, information, and/or support as appropriate to incident command (IC) or unified command (UC) and/or joint field office(s). |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Plans are in place, including a multi-agency and multi-jurisdictional governance structure to improve communications interoperability planning and coordination: | Yes/No |
| <ul style="list-style-type: none"> ▪ Participating entities in the governance structure have developed an interoperability communications plans as needed | Yes/No |
| <ul style="list-style-type: none"> ▪ Formal interoperable communications agreements exist among jurisdictions and disciplines | Yes/No |
| <ul style="list-style-type: none"> ▪ Governance committees have developed a plan to acquire and influence sustained interoperability and systems maintenance funding | Yes/No |
| <ul style="list-style-type: none"> ▪ A statewide set of communications Standard Operating Procedures (SOPs) that conform to NIMS are in place and implemented to include operational and technical elements | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| <ul style="list-style-type: none"> ▪ Command and control policies are in place to achieve interoperability as necessary | Yes/No |
| <ul style="list-style-type: none"> ▪ Interoperability policies and procedures are in place to allow information sharing between levels of government and Federal installations involved in the incident as necessary | Yes/No |
| <ul style="list-style-type: none"> ▪ Communications continuity of operations plan is in place that outlines the back-up systems available at a state and local level as well as the protocol for use of those systems | Yes/No |
| <ul style="list-style-type: none"> ▪ An assessment of standard communication capabilities for the PSAPs/Public Safety Communication Centers, and Emergency Operations Centers (EOC), has been completed to ensure an appropriate continuity of operations plan (COOP) is in place for public safety and service agencies' communications | Yes/No |
| Individual agencies across the jurisdictions have operable communications systems in place to meet their everyday internal agency requirements | Yes/No |
| Redundant interoperable communication systems are available | Yes/No |
| All personnel are trained to operate communications systems according to their role at an incident | Yes/No |
| Plans, procedures, and use of interoperable communications equipment are regularly tested and/or exercised | Yes/No |
| Interoperability systems are used in pertinent everyday activities as well as emergency incidents to ensure users are familiar with the system and routinely work in concert with one another | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Communication and/or dispatch centers have sufficient technical surge and back-up capabilities to process incoming calls effectively with the loss of any one communication or dispatch centers (Assumptions: surge staffing will be available in 30 minutes) | Up to 200% above normal peak traffic. Continuous |
| Provide communications back-up during emergencies when the conventional mode of communications fail or become overloaded | Continuous |
| Staff alternate communications and/or dispatch center in the event of a catastrophic loss of the primary site | Within 30 minutes |
| Provide local first responders with tactical communications | Continuous |
| Provide tactical communications between local disciplines (i.e., enforcement, fire, and EMS) and among local field units operating in the disaster site | Continuous |
| Summon specialized first responders (e.g., hazardous material, urban search and rescue) | Within 3 minutes |
| Provide tactical communications for regional first responders | Within 1 hour upon arrival on- |

| Performance Measure | Performance Metric |
|---|-------------------------------------|
| responding to the disaster site | site |
| Provide tactical communications for large regional “task forces” providing recovery assistance to disasters and other emergencies | Within 2 hours upon arrival on-site |
| Provide street-level hand-held communications coverage in urban/suburban areas affected by disaster | Coverage of 95% |
| Provide in-building hand-held communications coverage in central areas affected by disaster | Coverage of 95% |
| Provide mobile communications coverage in rural areas affected by disaster | Coverage of 95% |

Capability Elements

Personnel

- Trained National Incident Medical System (NIMS) Incident Commanders
- Trained NIMS Communication Unit Leaders
- Trained communication technicians
- Trained Dispatch Personnel
- Public safety agency personnel oriented to equipment available to their agency
- Service Agency Personnel oriented to equipment available to their agency

Planning

- Interoperability communications plans that provide governance, standard operating procedures (SOPs), technology, training and exercises, and usage for each participant area
- SOPs that clearly articulate the processes and protocols that personnel must follow to achieve interoperability during an incident
- Public Safety Answering Point (PSAP) and Public Safety Communications Center continuity of operations plan that ensures responders understand backup capacity protocol

Organization and Leadership

- Formalized structured planning and governing bodies are in place with their authorities, missions, and responsibilities defined
- Agreements exist between agencies (MOUs/MOAs) regarding how to coordinate decision-making across agencies to ensure effective response

Training

- General orientation and education on interoperability equipment for all personnel who will respond to an event
- Routine use of interoperable equipment so participating area is accustomed to the equipment before an incident

Equipment and Systems

-
- A system-of-systems consisting of local, State, and Federal components is in place that can be connected through common interface standards
 - Operable communication systems are in place for the disciplines and jurisdictions as defined by local requirements
 - The Interoperable Communications Technical Assistance Program (ICTAP), from the Office of State and Local Government Coordination and Preparedness (SLGCP) at DHS, to assist localities

Exercises, Evaluations, and Corrective Actions

- Communication tabletop exercise
- Operational exercise

Planning Assumptions

- This capability reaches across all 15 National Planning Scenarios and within each capability. All major incidents require communication and interoperability to facilitate management of an incident. Therefore, the target level of interoperability is independent of a specific scenario. Interoperability is a support function for all other responder capabilities, so this mission-critical capability must be in place to ensure the personnel who are providing the other capabilities have access to the information they need to respond appropriately
- Interoperability is the communication between disciplines and jurisdictions that permit real time exchanges of information on demand, with whomever needs it, when properly authorized, in conformance with an Incident Command System.
- One of the major issues facing public safety and service agencies is the inability to communicate with one another when the need arises. Effective and efficient emergency response requires coordination, communication, and sharing of vital information among numerous public safety agencies. As the *National Strategy for the Physical Protection of Critical Infrastructures and Key Assets* observes, “most systems supporting emergency response personnel have been specifically developed and implemented with respect to the unique needs of each agency.”
- Public Safety Answering Point (PSAP), Public Safety Communication Centers, and Emergency Operation Centers (EOCs) must be in place and competently operational with the resources, and operational integrity to perform during an incident.
- Agencies must be “operable,” meaning they must have sufficient public safety and service agency communications capabilities to meet their everyday internal requirements before they place value on being “interoperable,” meaning being able to work with other disciplines and agencies. They need to improve those systems first but this improvement planning needs to include a vision for improved interoperability with other disciplines and agencies. At a time when more attention is being paid to interoperability among different disciplines and jurisdictions within the community, there still exists fundamental communication deficiencies within disciplines and jurisdictions as practitioners strive to perform the most routine and basic elements of their job functions.
- These deficiencies result in daily communication challenges for those working on the front lines in public safety and service agencies. The Interoperability Continuum (see reference link below) outlines critical elements for the planning and implementation of successful public safety and service agencies’ communications and interoperability solutions. These elements include governance, standard operating procedures, technology, training and

exercises, and usage of interoperable communications. To drive progress along the five elements of the continuum and improve interoperability, public safety and service agency practitioners should observe the following principles:

- Gain leadership commitment from all public safety and services agencies.
- Foster collaboration across all public safety and services agencies for planning and implementation.
- Work with policy makers to gain leadership commitment and resource support for interoperability.
- Plan and budget for ongoing updates to systems, procedures, and documentation.
- Use interoperability solutions on a regular basis.
- Interoperability is a support function for all other responder capabilities, so this mission critical capability must be in place to ensure the other capabilities have access to the information they need to respond.
- Existing continuity of operations plan (COOPs) for public safety and service agency communications systems are in place.
- Individual agencies and jurisdictional systems must be operable and functioning before mutual aid can come in and connect to interoperate.
- Spectrum management should be coordinated to allow adequate allocation across all disciplines and jurisdictions
- Critical infrastructure protective actions have been implemented to ensure communications systems remain operable.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|--------------------------------------|
| Interoperability Communications Plan per designated participant area is created prior to an incident to include governance, standard operating procedures, technology, training & exercises, and usage. | Effective plan with all necessary components outlined. | All appropriate planning has been done prior to an incident. | One per designated participant area. |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|---|--|
| <p>Governance</p> <p>Agreements between agencies and jurisdictions (i.e., Memorandum of Understanding / Memorandum of Agreement ([MOU/MOA])</p> <p>Coordinated decision making across agencies & jurisdictions</p> | <p>Effective multi-jurisdictional, multi agency governance group is in place for each region as defined by local requirements.</p> | <p>All appropriate interactions, decisions and agreements have been made prior to incident to ensure effective response at the incident.</p> | <p>One governance group per participating area as designated by local responder requirements.</p> |
| <p>Standard Operating Procedures (SOPs)</p> | <p>SOP that clearly articulates necessary processes and protocols to follow to achieve interoperability during an incident.</p> | <p>All appropriate SOPs are in place prior to an incident and are executed as part of the response.</p> | <p>one set of SOPs per participating area as designated by local responder requirements.</p> |
| <p>Technology:</p> <ul style="list-style-type: none"> ▪ Needs assessment. ▪ Evaluate current capability. ▪ Develop requirements. ▪ Perform gap analysis. ▪ System alternatives (with costs and types) ▪ Phase-in implementation ▪ Define spectrum needs ▪ Define security/encryption needs ▪ Develop future upgrade plan and budget process | <p>Operable communication systems for the disciplines and jurisdiction as defined by the local requirements that allows for mutual aid components to connect in when authorized and as necessary.</p> | <p><i>Appropriate levels of the following have been done prior to an incident:</i></p> <p><i>Planning</i> for public safety communication systems.</p> <p><i>Building</i> public safety communication systems.</p> <p><i>Upgrading/enhancing</i> public safety communication systems and equipment.</p> <p><i>Replacing</i> public safety communication systems and equipment.</p> <p><i>Maintaining</i> public safety communication systems and equipment.</p> <p><i>Managing</i> public safety communications projects.</p> | <p>Operable communication system for individual agencies that is appropriately connected to achieve interoperability when authorized and as necessary.</p> |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|--|---|
| <p>Training/Exercises:</p> <ul style="list-style-type: none"> ▪ General orientation on equipment. ▪ Communication tabletop exercise. ▪ Operational exercise with all necessary communication components included during the event. Provide an observer specifically to monitor the communications piece to ensure there is adequate information to provide in the After Action Report (AAR) to correct any communication problems that occurred for the future. | <p>Trained personnel on the equipment, the policies and procedures, as well as the execution of interoperability to ensure they have the tools they need to respond during an incident.</p> | <p>Appropriate levels of training have been conducted prior to an incident to ensure responders are equipped during the incident.</p> <p><i>Training</i> public safety staff on issues related to emergency response communications.</p> | <p>General Orientation on Equipment for all appropriate personnel.</p> <p>One tabletop exercise each year per participating area to include at least operations, technical, and dispatch participants.</p> <p>One full-scale operational exercise each year per participating area.</p> |
| <p>Usage of interoperable equipment:</p> <ul style="list-style-type: none"> ▪ Maintenance ▪ Routine use for planned, special, and routine events when appropriate | <p>Participating areas are familiar with the use of interoperable equipment.</p> | <p>Habitual use of interoperable equipment so participating area is accustomed with the equipment before an incident.</p> | <p>Routine use of interoperable communications for any appropriate event.</p> |
| <p>DHS/SLGCP/ODP Interoperable Communications Technical Assistance Program (ICTAP)</p> <p>Provides technical assistance in four phases:</p> <ul style="list-style-type: none"> ▪ Phase 1: Define Technical Assistance Requirements ▪ Phase 2: Define Enhancements Needed ▪ Phase 3: Implementation ▪ Phase 4: Continued services as needed until local support is in place | <p>Ability to assist localities by providing technical assistance.</p> | <p>Needed prior to incident to ensure appropriate planning and engineering support is in place during an incident.</p> | <p>20 ICTAP teams for technical engineering and planning as requested by the participating area.</p> |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|--|---|
| Public Safety Answering Point (PSAP) and Public Safety Communications Center Continuity of Operations Plan. | Ability to have redundant and back-up systems in place during an emergency. | Needed prior to incident to ensure responders understand back-up capacity protocol and procedure for relocation. | One Plan per each PSAP/PCC across the country-- approximately 6500. |

Approaches for Large-Scale Events

Because interoperability refers to the coordination and communication of command level or other authorized staff at the operational level, all large-scale events and the 15 Scenarios require plans that provide for established interoperability infrastructure before the incident occurs. Planning should include the ability to reconstitute normal communications systems that have been saturated, disrupted, or destroyed during an event.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|-------------------------------------|--|
| Interoperability Plan | <ul style="list-style-type: none"> ▪ Interoperability (I/O) Plan is in place and accepted by all stakeholders. ▪ I/O Plan State/Territory (one for each state/territory). ▪ I/O Plan per Region (one per Groups of Tasks as defined by participating agencies). ▪ Local-58 (one for each Urban Area Security Initiative [UASI]). |
| Governance | <ul style="list-style-type: none"> ▪ Formalized structured planning and governing bodies with defined authorities, missions, and responsibilities are in place (one per state and 1 per region as defined by the participating agencies). |
| Standard Operating Procedures (SOP) | <ul style="list-style-type: none"> ▪ All organizations follow SOPs that are consistent with the NIMS command and control guidance. ▪ One set of SOPs per region as defined by the participating agencies. ▪ One set of SOPs per State to include entities responding to an incident. |
| Technology—System of Systems | <ul style="list-style-type: none"> ▪ Infrastructure based solutions are in place using national voluntary consensus standards. ▪ A system-of-systems consisting of local, State, and Federal components are in place that can be connected through common interface standards. ▪ Interoperable capability and solution is available 24/7 without intervention. ▪ I/O Plans allow for dynamic system and equipment scalability and expandability to meet the needs of large scale incidents (e.g. radio |

| Resource | Assigned Level and Quantity |
|---|---|
| | caches, over-the-air-rekeying and eventually over-the-air-reconfiguration, etc.). |
| Training and Exercises | <ul style="list-style-type: none"> ▪ All personnel are trained to operate communications systems to take full advantage of all the basic and advanced capabilities of the system according to their role at an incident in line with the National Incident Management System (NIMS) requirements. ▪ General orientation and education on interoperability equipment for all personnel who will respond to an event.. ▪ Communications Specific Tabletop Exercises are conducted annually with multi-jurisdictional and multi-agency participants from across the Groups of Tasks (1 per Groups of Tasks as defined by the participating agencies). ▪ Full-functional Operational Exercises are conducted once every 3 years with multi-jurisdictional and multi-agency participants from across the Groups of Tasks (1 per Groups of Tasks as defined by the participating agencies). |
| Usage | <ul style="list-style-type: none"> ▪ Responders use interoperability solutions daily for all routine, special, and emergency events. |
| Interoperable Communications Technical Assistance Program (ICTAP) Teams | <ul style="list-style-type: none"> ▪ 20 teams to provide assistance to 56 states, territories, and designated urban areas. |
| Continuity of Operations Plan | <ul style="list-style-type: none"> ▪ One plan per county - Public Safety Answering Point and Public Safety Communications Center. |

Linked Capabilities

Communications is linked to all 36 target capabilities.

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RISK MANAGEMENT

Capability Definition

Risk Management is the capability to identify and measure risk prior to an event, based on threats/hazards, vulnerabilities, and consequences, and to manage the exposure to that risk through the prioritization of risk-reduction strategies.

Outcome

Federal, State, local, tribal and private sector entities identify and assess risks, prioritize and select appropriate protection, prevention, and mitigation solutions based on reduction of risk, and monitor the outcomes of allocation decisions and undertake corrective actions.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

ESF #1:Transportation

ESF #3:Public works and Engineering

ESF #4:Firefighting

ESF #5:Emergency Management

ESF #6:Mass Care, Housing, and Human Services

ESF #8:Public Health and Medical Services

ESF #9:Urban Search and Rescue

ESF #10: Oil and Hazardous Materials Response

ESF # 12: Energy

ESF #13: Public Safety and Security

ESF # 14: Long-Term Community Recovery and Mitigation

Capability Description

| Activity | Description |
|--------------------------|---|
| Risk Communication | <ul style="list-style-type: none"> ▪ Develop an understanding and appreciation of the principles of risk assessment, risk analysis, and risk management. ▪ Develop avenues for receiving information on threat, vulnerability, and consequence. |
| Localized Risk Framework | <ul style="list-style-type: none"> ▪ Develop a framework for how risk assessments and risk analysis will serve the business process of managing “risks”. ▪ Develop a process for stakeholder buy-in. |
| Risk Assessment | Assess Critical Infrastructure/Key Resources (CI/KR) within the given system of governance as well as in relation to other systems |

| Activity | Description |
|---------------------|--|
| | based upon the opportunity for peripheral cost of incident. |
| Risk Prioritization | Determine ability to rate and/or rank criticality of assets for the process of mitigating or transferring associated risk (if possible) as related to a given asset within the system of assets. |
| Business Case | Develop a cost-benefit/cost-effectiveness analysis for consideration of the applicable prescribed measure which would be required to mitigate associated risks to an asset or system of assets. Opportunity costs associated to one measure versus another may be considered in this activity. |
| Management | Manage risk through continued assessment and analysis combined with monitoring. Continuous consideration should be given to refresh the given threat, emerging vulnerabilities, and changing consequences to the system or assets under consideration. |

Critical Tasks

| UTL# | Task |
|---------------|---|
| Pre.A.4 3.1 | Conduct threat/hazard analysis to identify threats to critical assets. |
| Pro.A.1 1.5.1 | Conduct criticality analysis to identify critical assets. |
| Pro.A.2 1 | Conduct vulnerability assessments to assess vulnerability of critical assets to identified threats. |
| Pro.A.2 2 | Conduct consequence analysis to assess potential consequence of identified threats against critical assets. |
| Pro.A.2 3 | Determine risk profiles of critical assets based on threat, vulnerability, and consequence. |
| Pro.A.2 3.2 | Conduct response and recovery capabilities analysis to determine capability to respond to and recover from identified threats. |
| Pro.A.2 4.3 | Identify high-risk assets in need of risk management. |
| Pro.A.2 4.4 | Identify potential protection, prevention, and mitigation strategies for high-risk assets. |
| Pro.A.2 4.5 | Prioritize identified strategies by threat, vulnerabilities, and consequences. |
| Pro.A.2 4.6 | Select risk reduction solutions for implementation based on threat, vulnerabilities, and consequences as well as risk reduction potential and cost. |
| Pro.A.2 4.7 | Monitor the progress of solution implementation and undertake corrective actions. |
| Pro.A.2 5 | Share the assessment of sector-specific infrastructure risk with interdependent entities within appropriate sectors. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|----------------------|---------------------|
|----------------------|---------------------|

| | |
|---|---------|
| State, local, and private entities are trained to conduct risk analysis | Percent |
| Risk analysis and risk management plans are in place | Yes/No |
| Schedule and capability exists for updating risk analysis and risk management plans | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Criticality results were used to identify critical assets | Yes/No |
| Threat, vulnerability, and consequence results were used to assess risk for critical assets | Yes/No |
| Risk and risk reduction results were used to prioritize risk-reduction strategies | Yes/No |
| Funding priorities reflect risk assessment and prioritization of risk-reduction strategies | Yes/No |
| Percent of identified critical assets for which a comprehensive risk assessment has been completed | Percent |
| Risk assessment plans and procedures were implemented | Yes/No |
| Time to complete risk profile and prioritize risk-reduction solutions | Hours |
| Solutions were selected and resources were allocated | Yes/No |
| Percent of selected solutions that have been successfully implemented | Percent |

Capability Elements

Personnel

- Owners and operators of Critical Infrastructure/Key Resources (CI/KR)
- Joint Terrorism Task Forces (JTTFs)
- Representatives of State Administrative Agencies (SAAs)
- Urban area working groups
- Local law enforcement personnel
- Regional transit security working groups
- Area maritime security committee

Planning

-
- All applicable legislation, regulations, related plans, directives, policies, and industry codes of practice required to conduct emergency response
 - Emergency Operations Plan (EOP) consistent with National Response Plan (NRP)/National Incident Management System (NIMS) and applicable laws and regulations
 - Risk assessment standards and guidelines
 - Prior risk assessments and risk management strategies (see Planning Capability)

Equipment and Systems

- Risk analysis / Risk management tools
- Cost estimating tools
- Geographical Information System (GIS) data collection tools

Training

- Technical (e.g. modeling and analysis tool training)
- Risk management training for security, response, and recovery managers

Exercises, Evaluations, and Corrective Actions

- On-going evaluation of changing threat and updates to risk management results
- Update to risk management results based on changes in security, response, and recovery capabilities
- System for collecting and sharing lessons learned

Planning Assumptions

- Risk assessments can be conducted in a relative manner. Calculated threat and risk ratings will not represent absolute probabilities, unless accurate probability data is readily available, but rather will be measured relative to other threats.
- Scenario-based risk assessment will be used to evaluate threat, vulnerability, and consequence.
- Input will be sought from the national intelligence community, including JTTFs to establish viable threats and the relative likelihood of those threats.
- Scenario-specific threat assessments will include evaluation of target value, level of deterrence, weapon availability, attack simplicity, as well as past history and specific intelligence information.
- Vulnerability analysis will measure the likelihood that specific scenarios could be executed successfully based on an evaluation of physical features, security capabilities, and response capabilities that serve to prevent an attack from being successful.
- Consequence analysis will measure the expected outcome of specific scenarios based on analysis of the vulnerability of an asset to failure, the functional characteristics of the assets, and the availability of response and recovery capabilities.
- Response and recovery assessments will also be based on the same set of scenarios.
- Total systemic risk will be calculated as an integration of risk across all assets and scenarios within a jurisdiction.
- All scales used in the risk analysis will be ratio scales that allow for multiplication of threat, vulnerability, and consequence to produce a risk rating.

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- Appropriate protection, prevention, and mitigation solutions will be evaluated using risk-reduction tools. Threat, vulnerability, and consequence will be re-evaluated based upon implementation of solutions.
 - An assessment of criticality will be used to identify and prioritize critical infrastructure and focus the risk assessment process of assets with significant criticality.
 - Criticality assessment will be based on critical asset factors that represent the mission of assets to the federal, state, local, and tribal entities.
 - Life cycle costs for identified solutions will be evaluated, including implementation costs and recurring costs, and discounted to produce a net present cost.
 - Resources will be allocated through cost-benefit analysis, comparing total risk reduction and costs.
 - From an actionable perspective, all communities of interest are responsible for risk communication. Risk communication may include but should not be limited to intelligence data, potential terrorism target selection or infrastructure selection, and anomalies which may result in prevention and or deterrence. Furthermore, there are tactical, strategic, and operational responsibilities for each respective community of interest and the following is merely a sample of roles and responsibilities. Each governing principle, or the dynamics thereof, may host each task in a different manner.
 - Federal, State, and local governments and the private sector all have a role in managing risk. Each should develop an understanding and appreciation of the principles of risk assessment, analysis and management. Each should develop a framework that integrates risk management in their business, and include a process for stakeholder buy-in and governance.
 - There are current departmental activities aligned to develop a national baseline for risk management architecture. The Department of Homeland Security has defined the framework as the appreciation for consequence, threat, and vulnerability. Given this foundation and the work of the Department, a target architecture should be forthcoming.
 - The following describes and provides an appreciation for risk management in the context of its predecessor functions of assessment and analysis. Ultimately, the work within this target capability needs to gravitate toward “terrorism risk” as it is that adversarial relationship that this target capability is designed for under the disciplines of homeland security. It is intended to establish the fundamental equations that define terrorism risk and to standardize terminology for conduction a terrorism risk assessment. The information contained herein should serve as guidance for any entity that is creating a methodology or tool to calculate, analyze, or manage the risk of terrorism.
 - Risk analysis methods have been used for many years for various purposes. For example; risk analysis is used to determine the replacement interval for equipment used in industrial plants. It is also used by insurance companies to determine the cost of insuring virtually anything that may be covered by loss and casualty insurance. Government and military organizations use risk analysis to evaluate the security of military bases and facilities. It is, therefore, logical to apply risk analysis to terrorism and homeland security.
 - There are many potential benefits of performing risk analysis for terrorism. A robust and repeatable risk assessment methodology can help entities better manage the risk of terrorism; allowing them to identify assets that are potentially at risk, develop appropriate solutions, and, most importantly, allow them to measure the potential effectiveness of those solutions in terms of risk reduction.
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- Although risk analysis has been used extensively in many different applications, there are fundamental differences in the nature of terrorism risk that require some modification to the basic methods and algorithms for assessing risk. The primary difference between terrorism risk and other types of risk is that terrorism is a human-caused event. Although estimates can be made as to the potential goals of terrorist groups, the targets that they might select, and the types of weapons that they might use, the actions of terrorists do not absolutely conform to any set of rules or statistics. Because relatively few attacks have occurred in the United States, historical data using trend analysis are also not likely to predict future events and may be of only limited use in predicting even the *kind* of attack that might be launched.
 - In addition, because of the human element, there is a linkage between terrorism risks at different potential targets. Unlike most forms of risk, where the likelihood of the event occurring at any given location is independent, with terrorism the likelihood of the event occurring is very much dependent on actions that occur at other potential targets. If security measures are increased at one target, the relative likelihood of attack can increase at other potential targets. This happens because additional security measures could direct terrorists away from one target and towards others with lower levels of deterrence.
 - Similarly, the relative value of a potential target can also have a major effect on the likelihood of attack. Terrorist target sites will meet certain goals for an attack, including; casualties, economic disruption, or symbolic importance. A larger relative value for one potential target over another makes it more likely that the site could be attacked. Changes in the relative value of other sites could have the effect of changing the risk of terrorism at a particular site, even if no change occurred at the site itself.
 - Standard algorithms and terminology for evaluating risk must be modified to deal with the effects of the human-element and of the linkages between targets.

Components of Terrorism Risk

- The basic components of any type of risk, including terrorism risk, are straightforward. In the most basic form, risk is simply the likelihood of an event occurring multiplied by the estimated consequence of that event.

$$\text{Risk} = (\text{Likelihood of Event}) \times (\text{Consequence of Event})$$

- Based on this equation, a risk therefore represents the expected outcome over a period of time of some uncertain event.

Relative versus Absolute Risk

- In most applications, risk and the components that make up risk are measured on an absolute scale. In these cases, the likelihood of an event is measured as a numeric probability or a frequency; the number of times that an event will occur over a set period of time. Consequence is generally measured in some easily-understood, relevant metric, such as dollars or lives lost.
- When both the **likelihood** and the **consequence** are measures in those absolute terms, then the calculated risk is also an absolute value. The risk would be the expected loss -- in terms of dollars or lives -- that would occur over a period of time.
- Absolute measures of risk are valuable because they allow a direct comparison of the cost of risk reduction measures against the expected savings of the risk reduction. Using absolute risk, insurance companies are able to calculate insurance premiums, automobile

manufacturers can evaluate the cost effectiveness of new safety measures, and power plant designers can calculate the level of equipment redundancy that will pay off over time.

- However, it is often very difficult, if not impossible, to measure the risk of terrorism in absolute terms. As discussed previously, because of the human element involved in terrorism, and the lack of historical data, it is not always practical to determine an absolute frequency of attack for a given asset. Because of the number of potential targets, the unknowns in determining terrorist goals, and the linkages between potential targets, it is typically not even possible to make accurate estimates for frequency of attack.
- Also, it is often difficult to make absolute estimates for the **consequence** of an attack. It is not always possible to capture the full long-term economic impacts of a terrorist attack, as these impacts are often driven by systemic failures and psychological reactions. Difficulties also arise in converting the different values by which **consequence** can be measured into a single metric. While statistics and methods exist to convert metrics such as casualties or environmental impact to dollars, they are not absolute and are often open to interpretation.
- Terrorism risk, therefore, must often times be measured on a relative basis. When calculating relative risk, **likelihood** and **consequence**, and their drivers need not be calculated as absolute values, but rather can be measured on relativistic, qualitative scales. For example; **likelihood**, rather than being measured as a frequency, can be rated on a scale of one to 100, based on an evaluation of the drivers that make a potential attack more or less likely. The measurement is on an artificial scale and does not indicate the absolute expectation of an attack occurring, but rather indicates the likelihood of one particular attack as compared to another.
- Using relative risk avoids having to make absolute estimates of risk drivers. However, the use of relative ratings eliminates the possibility of making direct, dollar to dollar, cost-benefit comparisons. Because risk is no longer measured in dollars, but rather in an artificial ‘risk’ scale, the benefit of risk reduction solutions can only be measured on the same scale. When comparing different solutions, it is possible to compare the risk reduction achieved for the investments made but it is no longer possible to determine the break-even point of investment.
- When assessing the risk of terrorism, the **likelihood** of occurrence is the product of two separate components; the likelihood of an attack occurring, threat, and the likelihood of that attack being successful, susceptibility.

$$\text{Likelihood} = (\text{Threat}) \times (\text{Susceptibility})$$
- The likelihood of an attack occurring is referred to as the *threat*. Again, if we were to measure this factor in absolute terms, the *threat* would be equal to the probability of an attack or the frequency of attack on an asset. However, because, it is, in many instances, difficult -- if not impossible -- to estimate these factors for terrorist attacks, *threat* can be evaluated on a relative scale.
- In this type of analysis, the likelihood of a particular type of attack occurring is driven by two factors: the overall likelihood of a certain type attack occurring, regardless of target; and the likelihood that a certain asset would be targeted for that type of attack.
- The overall likelihood of an attack occurring can be evaluated in a number of manners. The most appropriate method will depend on the type of asset, the type of attack, and the goals of the assessment. However, any method that is used to evaluate the *threat* should include the evaluation of two primary threat components: the likelihood of the attack and the target attractiveness.

$$\text{Threat} = f(\text{plausibility}, \text{target attractiveness})$$

- The **plausibility** measures the relative probability of a certain type of attack occurring, regardless of the particular target. This rating could be driven by a number of factors, examples of which include:
 - Difficulty of obtaining the type of weapon
 - Difficulty is transporting and using the weapon
 - Presence of Potential Threat Elements (PTEs) in the geographic area
 - Past history of attacks
 - Specific intelligence

- **Target attractiveness** measures the features of a particular asset that may make it more or less likely to be targeted by terrorists for a particular form of attack. Evaluation of **target attractiveness** should include an evaluation of two sets of features; *target value* and *deterrence*. *Target value* evaluates those features of an asset that make it more likely that an asset will be attacked; features that make the asset attractive as a target. These may include: potential for casualties, potential for economic disruption, and symbolic importance. *Deterrence* evaluates those features that make a target less likely to be attacked. These features primarily include security and response capabilities.
- In instances where frequency of attack can be reasonably evaluated using statistical analysis or some other direct form of estimate, then that metric can certainly be directly used for **target attractiveness**.
- The likelihood of an attack being successful is referred to as the *susceptibility*. In determining the susceptibility of an attack, it is assumed that the asset has been targeted, the terrorists have the required weapon and equipment, and that the attack will take place. The susceptibility then measures the probability that that attack would achieve its desired result. The desired result in this case refers to successful completion of the attack, not to the desired results in terms of damage or casualties.
- The susceptibility measures the probability that an attack would be successful given the constraints that are in place at the target, including physical constraints, operational constraints, and security measures. *Susceptibility* is sometimes also referred as “vulnerability to attack”.
- There are a number of methods that can be used to calculate or estimate *susceptibility*. These range from simple ratings of security capabilities to complex, simulation-based evaluation of detailed attack scenarios. The most appropriate method will depend on the type of asset and the goals of the risk assessment. In general however, an appropriate assessment of susceptibility would include an evaluation of physical features, security capabilities, and response capabilities that serve to prevent an attack from being successful. These capabilities can also be categorized as those that serve to deny, detect, delay, or defend against the attack.
- The Consequence of a terrorist attack is a product of the *criticality* of the target and the *impact* that an attack would have on that *criticality*.

$$\text{Consequence} = (\text{Criticality}) \times (\text{Impact})$$

- *Criticality* is broadly defined as the particular aspects or features of an asset that would make someone want to protect the asset against an attack. Generally, *criticality* is defined using a set of ‘Critical Asset Factors’. These factors define the specific features of an asset that could make it important to protect that asset from attack. Examples of typical critical asset factors include:

-
- Potential for casualties
 - Potential economic disruption
 - National strategic importance
 - Potential for environmental impact
 - The actual definition of the Critical Asset Factors will depend on the frame of reference in which the risk assessment is conducted (local, regional, national importance) and on the specific type of business or function of the asset. For example, the criticality of an electricity distribution asset may depend entirely on the amount of electrical throughput or the criticality of the assets that it serves.
 - Once critical asset factors are defined, potential targets should be evaluated against each factor to determine how that asset contributes to that area of *criticality*. The sum of the contributions of each asset equals the overall criticality.
 - The evaluation of the *criticality* of an asset measures the total ‘value’ of a potential target. However, not all forms of attack would completely eliminate this value. For example; a ”backpack” type bomb may kill or injure a number of people at a train station but certainly would not kill everyone in the station or destroy the station itself. For this reason, an additional factor, *impact*, is used to measure the portion of criticality that would likely be destroyed in a given attack.
 - The rating of *impact* must be tied to the Critical Asset Factors that define criticality. For each asset and criticality factor, the degree to which the contribution of that asset is destroyed is assessed. The total fraction of the assets criticality that is eliminated is the consequence of the attack.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

Risk assessment does not focus on single incidents but rather assesses risk across a number of viable threats and critical assets.

Approaches for Large-Scale Events

Various jurisdictions as well as owners and operators of Critical Infrastructure/ Key Resources have varying levels of functional requirements within this target area. The basic principles of Risk Management may be attributed to every jurisdiction with the acceptance that homeland security is a shared responsibility across the Nation.

Risk Management is the penultimate component for the target capability. There are a series of capabilities that build upon one another which may be likened to a Capability Maturity Model for Risk Management.

The Initial processes or foundation principles for Risk Management lie in the ability to simply understand and appreciate vulnerability. Vulnerability identification as defined in this capability will allow for local officials to understand and elaborate on their respective vulnerabilities to asset centric (a chemical facility) as well as systems of assets (a chemical facility co-located with a freight rail transfer station). These basic principles are necessary so as to allow for an appropriate elaboration of the basic risks in which a community or jurisdiction (no matter what size) assumes.

The repeatable processes is the ability now collate those Vulnerabilities and provide them an equal measurement or common criteria in which the responsible party may begin to equate a chemical facility to a bridge, or refinery to a federal building. This phase requires the user to initiate the binning of assets as well as process those asset consequences, vulnerabilities, and threats from a basic perspective. This repeatable process is a higher order capability still functional at every level of governance.

The Definition phase initiates a higher order of effort as well as the necessity to develop a pronounced division of labor as the collation of assets now must be dissected once again and paired with possible/potential/probable Threat criteria. Oftentimes this level of maturity requires the functions of Risk Communication so as to effectively elaborate on relative Threats which pose challenges to the system of assets within the jurisdiction. Furthermore this phase requires inter-departmental coordination as well as the ability to interact along the governing hierarchies where Threat data may be readily available. For instance coordination with the most local and or State Joint Terrorism Task Force is a function of this phase.

The Managed phase brings in the capabilities of appreciating consequence to its fullest extent. Mission, psychological, and economic are but three examples of consequence factors that will shape the decision-making processes of this level of maturity. The ability to attribute cost factors as well as formalize the opportunity costs of selecting one countermeasure to the Asset/Threat pair over another is a function of this phase. This phase takes into consideration the capability to conduct Risk Assessments by appreciating Consequence*Vulnerability*Threat culminating at a description of Risk for the asset or system under consideration. Of course other sub-functions such as capability and intent of the adversary are considered but those functions, like others require a more elaborate definition. This Managed phase is often found at the large facility or industry owner and or operator's perspective, large municipality level or county echelon where the attributes of a senior risk officer take shape around a functional office or person responsible for the decisions that will manage the challenges.

Finally there is the process of Optimization of the principles of Risk Management. With the Risk Assessment process underway there is the culmination of analyzing all the aggregated data from the Initial phases which now must be managed to achieve the best outcomes possible given the scarcity of resources (time, people, and money) against the likelihood of an incident. This is the function area where cost benefit and cost effective analysis converge as a function of Risk Management.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|--|
| Local law enforcement Urban Area working groups Regional Transit Security working groups Area maritime security committees | <ul style="list-style-type: none"> ▪ Personnel with skills and ability to promulgate local risk assessment and risk management strategies, with a focus on vulnerability assessments ▪ Personnel with skills and ability to participate in risk communication activities |

| Resource | Assigned Level and Quantity |
|---|---|
| Owners and Operators of Critical Infrastructure/Key Resources (CI/KR) | <ul style="list-style-type: none"> ▪ Personnel with skills and ability to promulgate emergency operations plans (EOPs) as part of local and regional risk management strategies ▪ Personnel with skills and ability to participate in risk communication activities |
| State Administrative Agencies (SAAs) | <ul style="list-style-type: none"> ▪ Personnel with skills and ability to promulgate state-wide risk assessment and risk management strategies ▪ Personnel with skills and ability to participate in risk communications activities ▪ Personnel with skills and ability to use risk reduction tools to evaluate alternate risk management strategies |
| Federal law enforcement and homeland security community Joint Terrorism Task Forces (JTTFs) National Intelligence community | <ul style="list-style-type: none"> ▪ Personnel with skills and ability to promulgate national risk assessment and risk management strategies ▪ Personnel with skills and ability to participate in risk communications activities ▪ Personnel with skills and ability to use risk reduction tools to evaluate alternate risk management strategies |

Linked Capabilities

- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Emergency Operations Center Management
- Information Collection and Threat Recognition
- Information Sharing and Collaboration
- Intelligence Fusion and Analysis
- Planning

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COMMUNITY PREPAREDNESS AND PARTICIPATION

Capability Definition

The American people have the capability (i.e., the necessary information, knowledge, skills, and abilities) to help prevent, protect against, respond to, and recover from all threats and hazards. Requirements to achieve this capability include collaboration among all levels of government, emergency responders, the private sector, civic organizations, faith-based groups, non-governmental organizations (NGOs), schools, and the general public; public education in the four mission areas of preparedness; training for citizens in life saving first aid, response skills, and surge capacity roles; and citizen participation in exercises, volunteer programs, and surge capacity support.

There are “Universal (U)” capabilities that everyone in America should have for the four mission areas of all-hazards preparedness: prevent, protect, respond, and recover. There are also “Specialized (Sp),” or advanced skills, knowledge, and abilities needed for those that live in high-threat areas, such as the terrorism threat in urban areas, natural hazard areas, and areas in close proximity to technological hazards. In addition to having personal preparedness capabilities, citizens must also have “Support (Su)” capabilities to augment local emergency responders and community safety efforts through year round volunteer programs and to serve in a response or surge capacity role.

While the means to achieve these levels of capability will vary, the full populace attains these capabilities, to include persons with disabilities (people with certain disabilities may require assistance from others to achieve or to perform the capability), those with language barriers, and those with low income.

Outcome

The public is educated in the four mission areas of preparedness; citizens are trained in life saving first aid, response skills, and surge capacity roles; and citizens participate in exercises, volunteer programs, and surge capacity support.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability should play a role in all ESFs and Annexes at the Federal, State, tribal, and local levels.

Capability Description

| Activity | Description |
|-----------------------|---|
| Prevent activities | <ul style="list-style-type: none"> ▪ Ensure that citizens are alert to unusual behavior in others that may indicate potential terrorist activity and that they know how to report such behavior with appropriate detail. ▪ Assist owners of critical infrastructure in increasing security measures and strengthening their connection to local law enforcement. ▪ Support the Community Oriented Policing philosophy by volunteering to support local law enforcement, which frees up sworn officers for highly skilled prevention responsibilities. |
| Protection activities | <ul style="list-style-type: none"> ▪ Conduct protection activities, to include: <ul style="list-style-type: none"> ▪ <u>Planning</u>: family preparedness and communications plans, to include personal care service providers and pets; learning about neighborhood, school, workplace, and community emergency plans; understanding alerts and warnings, and evacuation/in-place protection plans based on specific vulnerabilities of the location; ▪ Join <u>organizations</u> and programs that support the all-hazards homeland security mission; ▪ Collect and maintain <u>equipment</u>: emergency supplies kits at home, the workplace, and vehicle; equipment needed for surge responsibility; ▪ Take <u>training</u>: in emergency preparedness, relevant local threats, first aid, emergency response, and in surge capacity roles; ▪ Conduct and participate in <u>exercises</u>: conduct household, neighborhood, workplace, school drills in evacuation and in-place protection and participate in community emergency exercises. ▪ Take additional preparedness measures, as appropriate, if living in high-threat areas or if personal circumstances require special precautions. ▪ Perform mitigation measures on home and other property to reduce the impact from natural and human made disasters, including cyber attacks. ▪ Provide enhanced security for critical infrastructure and high-threat targets through locally sponsored law enforcement volunteer programs, such as watch groups and Volunteers in Police Service programs. ▪ Participate in volunteer programs that support public education, training, and the emergency responder disciplines year round such as the Citizen Corps program partners, CERT, Fire Corps, Medical Reserve Corps, Neighborhood Watch/USA on Watch, Volunteers in Police Service, Citizen Corps Affiliates and nongovernmental organization-sponsored volunteer opportunities. These services enable emergency responders, as highly skilled professionals, to focus more fully on their responsibilities in protecting the Nation. ▪ Leaders of civic organizations, places of worship, youth organizations, business associations, NGOs, and other organizations embrace hometown preparedness, participate on local Citizen Corps Councils, and provide information and opportunities to involve their members in all-hazards preparedness. |

| Activity | Description |
|---------------------|---|
| Respond activities | <ul style="list-style-type: none"> ▪ Ensure that citizens are aware of the incident situation ▪ Act appropriately according to official instructions, and provide self-care and bystander care. ▪ Augment official government emergency response activities with civilian manpower and private-sector resources, to include communications, medical surge, mass care, law enforcement support, fire service, transportation, damage assessment, light search and rescue, and backfilling emergency responder functions to free up more professional personnel for highly skilled response. |
| Recovery activities | <ul style="list-style-type: none"> ▪ Supplement the recovery effort with volunteer support and management of private-sector contributions/donations. This may include specialized services, such as pro bono legal and financial guidance, continued medical and mental health services, prolonged law enforcement protections, and community and social services. |

Critical Tasks

| UTL# | Task |
|------------------|---|
| Com.A. 2 3.4.5 | Incorporate consideration for individuals with disabilities and their care givers in all plans, procedures and protocols, including outreach, training and exercises, and volunteer opportunities. |
| Com.A. 2 3.4.5.1 | Incorporate consideration for individuals who do not speak English in all plans, procedures and protocols, including outreach, training and exercises, and volunteer opportunities. |
| Com.A 2.3.4.5.2 | Incorporate consideration for individuals with low income and limited resources in all plans, procedures and protocols, including outreach, training and exercises, and volunteer opportunities. |
| Com.A. 13.1 | Integrate citizen preparedness and participation into Federal, regional, State, tribal, urban, and local strategies and emergency operating plans, incident management systems, and mutual aid agreements. Include citizens in the planning process at all levels. |
| Com.A 13.1.2 | Leaders at the national, State and local levels promote citizen preparedness and participation. |
| Com.A 13.2 | Develop specific all-hazards preparedness requirements for all levels of citizen engagement and a process to sustain citizen capabilities for each level: <ul style="list-style-type: none"> ▪ Universal (all citizens age 9 and older) ▪ Specialized (by function, location, personal circumstances) ▪ Surge responsibility (personnel and private-sector/NGO financial and in-kind resources). |
| Com.A 13.3 | Develop and sustain through training and exercises surge capacity roles for citizens to support all functions of emergency response and recovery operations, including incident management, volunteer and donations management, community relations, |

| UTL# | Task |
|---------------|--|
| | medical surge, security surge, light search and rescue. |
| Com.A 13.3.1 | Deploy assets and resources identified for surge requirements as instructed. |
| Com.A 13.3.2 | Establish and maintain a “skills and resources” database of the jurisdiction’s citizens and private sector assets. |
| Com.A 13.3.3 | Revise and maintain EMAC agreements to include citizen surge personnel and private sector/NGO resources. |
| Com.A 13.4 | Develop and sustain all accessible training and exercises for citizens to achieve Universal and Specialized level capabilities in all hazards emergency preparedness, prevention, protection, response, and recovery. |
| Com.A 13.4.1 | Integrate citizens in all levels (national/international, regional, State, tribal, urban, local) and types of exercises (all hazards, terrorism, bioterrorism, natural disasters), to include citizen participation in exercise planning, implementation, and review. |
| Com.A 13.4.2 | Develop and sustain volunteer opportunities for citizens to support local emergency responders and community safety efforts year round, to include necessary training and equipment. |
| Com.A 13.4.3 | Establish and maintain a process to evaluate citizen preparedness and participation and to recognize exemplary citizens in preparedness programs. |
| Com.A 13.4.4 | Establish and maintain Citizen Corps Councils to foster greater collaboration between citizens, the private sector, NGOs, schools, faith-based groups, and other community organizations, and emergency responders and to oversee public education, training and exercises, and volunteer service in year round and surge support roles. |
| Com.A 13.6 | Provide continuing education and support for the public on: prevention, protection/mitigation, emergency response plans, alerts and warnings (including threat levels), evacuation/in-place protection plans and exercises, participating in government-sponsored emergency exercises, volunteer opportunities and training for year round volunteer role or surge capacity role in response and recovery. |
| Pro.C.3 2.1 | Plan, conduct and evaluate public education programs for prevention citizen, preparedness, response, and recovery capabilities. |
| Res.B.5 3.2.4 | Coordinate and integrate the resources and operations of external affairs organizations and private media outlets to provide the public with accurate, consistent, and timely information. |
| Res.C.3 3 | Coordinate mass care, housing, shelter, and human services support in response to incidents of national, regional, and State significance. |
| Com.A 13.5 | Support community infrastructure to achieve appropriate levels of preparedness, to include developing community-wide automated alerts and warning systems. |

Preparedness Measures and Metrics

Universal

Universal levels of citizen preparedness will be achieved incrementally for all people over 9 years of age or 82% of the total U.S. population. For simplification, 82% of the total population is noted as the final performance objective in this document.

- By 2010, 80% of people over age 9 will attain Universal preparedness = 68.8% total population
- By 2015, 85% of people over age 9 will attain Universal preparedness = 73.1% total population
- By 2020, 90% of people over age 9 will attain Universal preparedness = 77.4% total population
- By 2025, 95% of people over age 9 will attain Universal preparedness = 81.7% total population

Specialized

Population base for Specialized capabilities is based on high-threat areas for natural disasters, technological disasters, and terrorism, a geographic area that hosts approximately 90% of the total population, 86% of whom are over age 9, which equals a base number of 75% of the total population. Again, the Specialized level of preparedness will be achieved incrementally and for simplification, 72% of the total population is noted as the final performance objective.

- By 2010, 80% of people over age 9 will attain Specialized preparedness = 60% total population
- By 2015, 85% of people over age 9 will attain Specialized preparedness = 63.7% total population
- By 2020, 90% of people over age 9 will attain Specialized preparedness = 67.5% total population
- By 2025, 95% of people over age 9 will attain Specialized preparedness = 71.2% total population

Progress towards achieving the identified performance measures and objectives will be accomplished via national public opinion surveys and via assessments performed by State and local Citizen Corps Councils.

U=Universal, Sp=Specialized, SuY=Support: Year Round / SuS=Support: Surge

Universal (U) – capabilities that everyone in America should have for the four mission areas of all hazards preparedness: prevent, protect, respond, and recover.

Specialized (Sp) – advanced skills, knowledge, and abilities needed for those that live in high-threat / high-hazard areas (natural disasters, technological disasters, or terrorism).

Support (Su) – capabilities to support emergency responders year round and as surge capacity

Persons with disabilities, those with language barriers, and those with low income will achieve equal levels of capability for the Universal and Specialized levels and will serve according to ability at the Support level.

| Preparedness Measure | Preparedness Metrics |
|--|---|
| Percentage of citizens that are alert to unusual behavior in others that may indicate potential terrorist activity | 82% of U.S. population by 2025 |
| Percentage of citizens that are aware of heightened national threat levels | 82% of U.S. population by 2025 |
| Percentage of citizens with specialized training in terrorism awareness, suspicious behavior, and how to report such behavior with appropriate detail | 45% by 2025 (those over 14 years of age who live in a metropolitan area with over 1 M residents). |
| Percentage of private security personnel protecting critical infrastructure that are trained in terrorism detection and deterrence and in the incident command system (ICS) and emergency response skills | 80% of security personnel protecting privately owned critical infrastructure. |
| Percentage of trained volunteers that supplement local law enforcement departments, freeing up sworn officers for highly skilled prevention duties | 20% of current sworn officer capacity = 6.4 M hours/yr |
| Percentage of population that is educated about all-hazards preparedness via information that is distributed through the media, the internet, as well through multiple community venues including neighborhoods, schools, places of worship, the workplace, NGOs, and that has assessed specific vulnerabilities for which their geographic location is a target | 82% of U.S. population by 2025 is aware of general all-hazards preparedness measures, such as emergency supplies, family communications plans, and natural disaster mitigation. |
| Percentage of households that conduct some form of pre-incident preparation – have communication plan, have disasters supplies, practice evacuation/shelter-in-place | 82% of 105 M U.S. households by 2025. |
| Percentage of people familiar with workplace, school, community emergency plans | 82% of U.S. population by 2025. |
| Percentage of people that participate in an evacuation drill somewhere within community at least once a year | 82% of U.S. population by 2025. |
| Percentage of population with knowledge of threats and hazards for residential jurisdiction and/or general understanding of CBRNE and decontamination procedures | 72% of U.S. population by 2025. |
| Percentage of people that have training in preparedness for high-threat incidents, which may include life-saving first aid, emergency response skills, clear understanding of CBRNE and decontamination procedures, at least every two years. Training is | 72% of U.S. population by 2025. |

| Preparedness Measure | Preparedness Metrics |
|--|--|
| delivered throughout the community – schools, businesses, places of worship, civic organizations, NGOs, military – and includes cross-training between citizens and emergency responders | |
| Percentage of households, businesses, and schools that have implemented mitigation measures to protect property from natural hazards | 80% of those in high-threat areas by 2025. |
| Percentage of people that have strong knowledge of workplace, school, and community emergency plans | 72% of U.S. population by 2025. |
| Percentage of privately held critical infrastructure computer owners implement appropriate virus protections | 80% of privately owned critical infrastructure computer systems by 2025. |
| Percentage of citizens that volunteer with organizations and programs that support the all-hazards homeland security mission, to include conducting public education and outreach for all-hazards preparedness, support for training other citizens, and providing year round volunteer support for all emergency responder disciplines | 25% of U.S. population by 2025 volunteering an average of 8 hours per month. |
| Percentage of citizens (i.e. non-emergency responders) that participate in planning, implementing, and reviewing community emergency exercises at least once every two years. Citizen participation must reflect the population composition of the jurisdiction and include persons with disabilities, language barriers, and low income | 25% of those in high threat areas (natural disaster areas and metropolitan areas with 1 M or more residents) – 22.5% total population over 14; |
| Percentage of citizens that receive training and credentialing to augment and supplement official government emergency response with manpower. Includes cross-training among citizen volunteers and between citizens and emergency responders | 550,000 people |
| Percentage of citizens that are prepared to shelter-in-place, evacuate, or go to designated shelter and have emergency supplies on hand. (U) | 85% of potentially affected population |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--|
| Respond mission | |
| Percentage of affected population that is aware of the incident situation, acts appropriately according to official instructions, and provides self care and by-stander care | 85% of potentially affected population |
| Percentage of public communications directed at and accessible to individuals with disabilities and non-English speaking populations | 80% of all messages. |
| Percentage of citizens with disabilities or infirmities that obtain additional support to provide care or to augment self-care. | 85% of those with a disability or infirmity (approximately 20% of the total population has a self reported |

| Performance Measure | Performance Metric |
|--|--|
| | long lasting condition or disability.) |
| Percentage of pre-trained and credentialed citizens that augment and supplement official government emergency response with manpower and private sector in-kind resources as well as citizens trained ad hoc post incident | Up to 20% surge capacity for any given emergency response function; 50% - 100% surge with private sector in-kind resources (possibly higher for vaccination production) – time dependent on resource. |
| Recover mission | |
| Percentage of pre-trained and credentialed citizens that augment and supplement the recovery effort | Up to 20% surge capacity for recovery related activities for duration of recovery. |
| Ad hoc trained citizens participate in recovery efforts | Up to 50% surge capacity for recovery related activities for highest demand period of the recovery. Training process established within one week of incident, with training duration from one-day (community relations) to three days (CERT, POD staff assistance, EOC staff assistance, traffic control). |

Capability Elements

Personnel

- National Leadership for Community Preparedness and Participation to present national voice to promote integration of citizens in homeland security mission
- National Citizen Corps Council to provide strategies, plans, and exercise guidance
- Citizen Corps Councils to provide support for community social infrastructure
- Program Partners and Affiliate Organizations to provide public education and outreach materials, training, and volunteer opportunities
- Public Education Specialists to educate and support the public
- National Training Clearing House of citizen training courses
- State Training Specialists to provide train-the-trainer instruction and just-in-time training
- Neighborhood / Workplace Citizen Preparedness Groups to provide self-sustain for 72 hours
- Support - Year Round to free up first responders for primary professional duties.
- Support - Surge “NIMS typed” volunteers to support each ESF and emergency response, as needed

Planning Assumptions

(Unless otherwise noted, all population data is from 2000 census)

-
- People with disabilities, the very young and the very old, people with language barriers, and low income populations are adversely affected.
 - Medical community is functioning close to peak capacity at time of incident.
 - Emergency services will be overwhelmed.
 - With the exception of hurricanes and early signs of biological infection, there will be no warning before incidents occur.
 - Steps taken before an incident occurs (such as planning, training, exercises, and equipment) have a significant impact on reducing loss of life and property.
 - Professional responders and volunteers may get ill or fail to participate as expected due to fear of getting sick, or perceived greater need to care for their own families.
 - Information will need to be provided in multiple languages, multiple formats, and through multiple venues.
 - There are 280 million people and 109 million households in the U.S. (2000 Census data. Actual population now estimated at over 297 million.)
 - 85% of the U.S. population is over 9 years of age and under 85 years of age.
 - 58% of the total U.S. population lives in metropolitan area with 1 million or more residents; 78% of total population is over 14 years of age. Therefore, 45% of U.S population is over 14 years of age and lives in a metro area with 1 M or more residents and can receive Specialized training.
 - Civic organizations, places of worship, youth organizations, business associations, NGOs and other groups are willing to embrace hometown security and provide information and opportunities to get involved to their members.
 - 25% of U.S. population aged 3 and older attended school in spring of 2002 (nursery school through grad school).
 - 64% of the U.S. population aged 16 and over is in the labor force.
 - 84% of the U.S. population self-identifies with a religious belief and 43% of this group report attending worship services “weekly or more”, representing over 100 M people attending worship services weekly or more (35% of the total U.S. population).
 - 20% of the U.S. population self reports some type of long lasting condition or disability.
 - 4.5% of the U.S. population is 75 years of age or older, over 12 million people.
 - 12% of U.S. population reported 1999 family incomes below poverty threshold.
 - 42% of households have at least one personal computer in the home.
 - There are 800,000 sworn law enforcement officers in the U.S. or 1 officer for every 350 people.
 - There are 1.1 million firefighters in the U.S. (73% are volunteer) or 1 firefighter for every 255 people.
 - There are 860,000 personnel at all levels of pre-hospital service: basic EMT, intermediate EMT, and paramedics or 1 for every 325 people.
 - There are approximately 2.76M “emergency responders (law, fire, EMT/paramedic” in the U.S. <1% of the total U.S. population+.
 - Liability concerns do not preclude volunteers from participating.
-

- Emergency Management Assistance Compact (EMAC) agreements include surge capacity personnel.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|--|---|
| National Leadership for Community Preparedness and Participation | National leaders from White House, Secretaries of key federal agencies, State governors, military leadership, and congressional representation—organized to provide national voice to promote integration of citizens in homeland security mission. | Awareness of and content for Universal capabilities disseminated to entire nation. | As required to achieve national target capabilities. |
| National Citizen Corps Council | Approximately 50 national emergency responder discipline associations and NGOs collaborate to provide strategies, plans, and exercise guidance to involve their membership in reaching out to citizens in prevent, protect, response and recovery roles. Foster collaboration at state and local level. | All Hazards and Scenarios | 1 National Council |
| Citizen Corps Councils | Each Citizen Corps Council is composed of representatives of the emergency responders disciplines, civic organizations, NGOs, private sector, faith-based, schools, elected leadership, and other community stakeholders. Local Councils (either tribal, county, or city level) oversee local citizen opportunities for education, training/exercises, and volunteer support. | Reach Entire Nation | 56 state councils Local Councils that serve 99% of the U.S. population; estimated to be ~ 2500 Councils Council support includes adequate supplies and equipment and a minimum of one dedicated staff |
| Public Education Specialists | 20 specialists at the national level to coordinate relevant information by mission area, discipline, and outreach venue. State teams package information for their state. At a minimum each state has 3 | Educate 82% of the population | 20 Specialists at the National level 300 Specialists at the State level; number of specialists by State is weighted by State |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|----------------------------------|--|---|---|
| | <p>education specialists which educate and support the public in developing knowledge, skills, and abilities (both Universal and Specialized) to support four mission areas and to promote Support volunteer opportunities.</p> <p>Dedicated staff at local level for public education, alerts/warning, and crisis communications</p> | | <p>population</p> <p>Resources to develop and reproduce adequate numbers of outreach materials</p> <p>*These numbers would surge to address crisis communications during an incident</p> |
| National Training Clearing House | One national level clearing house of citizen training courses. | Provide Training Materials for all States | 1 National Clearing House to include classroom and online courses/resources |
| State Training Team | 10-20 state Train-the-trainer instructors for pre-incident training and post incident just-in-time training. | To achieve stated training goals | <p>Approximately 840 trained instructors; number of instructors per state is weighted by state population</p> <p>Online courses will also be available (see National Clearinghouse)</p> |
| Citizen Preparedness Team | <p>Each team is composed of persons based in neighborhoods, workplaces, schools, faith based organizations, military, etc. Members prepare themselves with basic necessities—food, water, medicine, power, communications equipment, shelter, and emergency plans; adequate number of members also receive training in first aid and emergency response skills. Their leader reports their status up the organizational / community chain.</p> | Each person in the high-threat areas participates on 2 teams (i.e. neighborhood and work/school/faith-based). | <p>80% of 98 M households organized into citizen preparedness teams by 2025.</p> <p>80% of labor force and student populations organized into teams by 2025.</p> <p>Team Equipment, as applicable</p> <p>Supplies: Emergency disaster kit for home, work and vehicle—sufficient food, water, medicine, etc.</p> |
| Support – Year Round | Providing services that free up first responders for primary professional duties (i.e. provide | Year round volunteers are not scenario driven, but | 25% of U.S. population by 2025 that volunteer an |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|--|---|
| | admin support, patrolling, public education or as needed by the disciplines) | can take care of responder duties (i.e. the non emergency portion- administrative activities, office duties, research, etc.) | average of 8 hours per month ~ 6.72 M hours |
| Support - Surge Volunteers (to be “NIMS typed”) Actual Surge requirement to be identified by other capabilities. | Composed of volunteers to support ESFs and emergency response as needed. Volunteers are identified in advance of incidents and agree to perform pre-defined roles in accord with the certifications they receive (“NIMS Typed”). Ad hoc training for Surge Support is also anticipated. | Up to 20% surge of current capacity | 2.8 million emergency responders x 20% = about 550 thousand |
| All resource organizations and activities include consideration and opportunities for participation for people with disabilities, non-English speaking populations, and those with low income. | | | |

Approaches for Large-Scale Events

Information above reflects all 15 scenarios.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| National Leadership for Community Preparedness and Participation | As needed to achieve national target capabilities. |
| National Citizen Corps Council | 1 Nationally |
| Citizen Corps Councils | State: 56 State Councils Local (tribal/County/City): ~ 2500 |
| Public Education Specialists | National: 20 State/Territory: 300; numbers per State weighted by State population |
| National Training Clearing House | 1 |

| Resource | Assigned Level and Quantity |
|---|--|
| State Training Specialists | 840; numbers per State weighted by State population |
| Citizen Preparedness Team | 80% of households, labor force and schools organized into citizen preparedness teams by 2025. Team Equipment: As applicable Supplies: Emergency disaster kit for home, work and vehicle—sufficient food, water, medicine, etc. |
| Support – Year Round Volunteers | 6.72 million hours |
| Support - Surge Volunteers (to be “NIMS typed”) | 550 thousand pre-incident and ad hoc trained volunteers |

Linked Capabilities

- Animal Health and Emergency Support
- CBRNE Detection
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Critical Infrastructure Protection
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Explosive Device Response Operations
- Fatality Management
- Firefighting Operations/Support
- Food and Agriculture Safety and Defense
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence Analysis and Production
- Intelligence/Information Sharing and Dissemination
- Isolation and Quarantine
- Law Enforcement Investigation and Operations
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge

-
- Onsite Incident Management
 - Planning
 - Public Health Laboratory Testing
 - Public Safety and Security Response
 - Responder Safety and Health
 - Restoration of Lifelines
 - Risk Management
 - Structural Damage and Mitigation Assessment
 - Triage and Pre-Hospital Treatment
 - Urban Search and Rescue
 - Volunteer Management and Donations
 - WMD/Hazardous Materials Response and Decontamination

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Prevent Mission Area

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INFORMATION GATHERING AND RECOGNITION OF INDICATORS AND WARNINGS

Capability Definition

Information gathering entails the gathering, consolidation, and retention of raw (analyzed) data and information from sources to include human sources, observation, technical sources and open (unclassified) materials. Unlike intelligence collection, information gathering is the continual gathering of only pure, unexamined data, not the targeted collection traditionally conducted by the intelligence community or targeted investigations. Recognition of indicators and warnings is the ability to see in this gathered data the potential trends, indications, and/or warnings of criminal and/or terrorist activities (including planning and surveillance) against U.S. citizens, government entities, critical infrastructure, and/or our allies.

Outcome

Locally generated threat and other criminal and/or terrorism-related information is identified, gathered, entered into an appropriate data/retrieval system, and provided to appropriate analysis centers.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the Terrorism Incident Law Enforcement and Investigation Annex.

Capability Description

| Activity | Description |
|-----------------------------------|---|
| Screen Information | Information is received, authenticated, and screened for relevance by the appropriate level of oversight/supervision in a timely manner. |
| Identify suspicious circumstances | Law enforcement, public safety, the general public, and/or private-sector personnel recognize and identify suspicious circumstances or indicators and warnings associated with planning, support, and operations related to potential criminal and/or terrorist-related activities. |
| Gather information | Gather information that could be used to identify terrorist operations. (in addition to “all-hazards”/“all-crimes”) from all sources (e.g., law enforcement, public health, public works, transportation, firefighting and emergency medical entities) through routine activities. |
| Establish needs | Information needs are clearly established and communicated to and from all levels of government. |

Critical Tasks

| UTL# | Task |
|---------------|--|
| Pre.A.2 1.1.1 | Provide States, local, and tribal authorities with clearly defined information needs based on the threat environment. |
| Pre.A.2 1.1.2 | Communicate information needs. |
| Pre.A.2 1.1.3 | Provide the Federal community with information to meet clearly defined information needs. |
| Pre.A.2 1.1.4 | Provide the Federal community with feedback on specificity and relevance of Federal information needs products. |
| Pre.A.2 1.1.5 | Develop and maintain operationally sound policies to comply with regulatory, statutory, privacy, and other issues that may govern the gathering of information. |
| Pre.A.2 1.2.1 | Gather homeland security information during routine day-to-day activities and pass to appropriate authorities. |
| Pre.A.2 1.2.2 | Identify items and materials used by criminal and/or terrorist organizations to carry out attacks. |
| Pre.A.2 1.2.3 | Recognize suspicious activities involving items and materials used by criminal and/or terrorist organizations. |
| Pre.A.2 1.2.5 | Conduct information gathering operations on critical infrastructure and other potentially high-risk locations or assets. |
| Pre.A.2 1.2.8 | Coordinate information gathering activities with relevant local, tribal, State, and Federal entities on an ongoing basis, in particular with the Joint Terrorism Task Force (JTTF) in terrorism-related cases. |
| Pre.A.2 1.3.1 | Recognize and identify suspicious circumstances or indicators and warnings that may be associated with planning, support, and operations related to potential criminal and/or terrorist-related activities. |
| Pre.A.2 1.3.2 | Utilize a predefined notification process to advise law enforcement of suspicious activity. |
| Pre.A.2 1.4.1 | Maintain procedures and/or systems to process the inflow of gathered information from all sources in a timely fashion. |
| Pre.A.2 1.4.3 | Catalog information provided by all sources and retain in a database to enable timely retrieval. |
| Pre.A.2 1.4.4 | Query databases or records to check for significance of information. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Key stakeholders in the Federal community develop clear and concise information needs based on the threat environment: <ul style="list-style-type: none"> ▪ The Federal community delivers its information needs to each State’s designated | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| <p>senior officials using a clearly defined process.</p> <ul style="list-style-type: none"> ▪ Each State’s designated senior officials can demonstrate receipt of information needs. ▪ Information needs are updated by the Federal community on an annual or as-needed basis. | |
| <p>Each State’s designated senior officials have a clearly defined process for uniformly and consistently communicating information needs to the local level:</p> <ul style="list-style-type: none"> ▪ The process has been implemented ▪ The process has been audited | Yes/No |
| <p>State, tribal, and local areas have a clearly defined process in their jurisdiction for requesting information from the Federal community, generally through their State’s designated senior official:</p> <ul style="list-style-type: none"> ▪ The process has been implemented ▪ The process has been audited | Yes/No |
| <p>Percentage of information needs products containing a feedback mechanism</p> | 100% |
| <p>Regulatory, statutory, and/or privacy policies that govern the gathering of information are in place and being adhered to</p> | Yes/No |
| <p>There is a clearly defined process, utilizing the chain of command, for passing information gathered by law enforcement and other agencies during routine day-to-day activities to appropriate authorities:</p> <ul style="list-style-type: none"> ▪ Feedback is provided to those responsible for gathering information ▪ The process has been implemented ▪ The process has been audited | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| <p>Law enforcement and appropriate agencies have defined plans and processes in place to:</p> <ul style="list-style-type: none"> ▪ Identify items and materials used by terrorist organizations and report suspicious activities related to them. ▪ Gather information on critical infrastructure and other potentially high-risk locations and assets. ▪ Increase information gathering activities regarding critical infrastructure and other potentially high-risk locations and assets, during an elevated threat level. ▪ Coordinate information gathering operations across jurisdictions ▪ Process gathered information. ▪ The plans and processes are implemented and audited | Yes/No |
| <p>Percentage of law enforcement and public safety personnel that has received:</p> <ul style="list-style-type: none"> ▪ Training in recognizing terrorism indicators and warning ▪ Refresher training in indicators and warnings. | Percent |
| <p>Law enforcement and public safety agencies have a defined process for providing all operational personnel with the most recent indicators and warnings to report</p> | Yes/No |
| <p>All jurisdictions have a system for public reporting of suspicious activity (e.g., 911, tip lines)</p> | Yes/No |
| <p>Appropriate governmental entities operate or participate in public education programs to raise public awareness of suspicious activities and how to report them</p> | Yes/No |
| <p>A communication avenue exists for key private-sector businesses to report suspicious activities to appropriate Federal, State, local, or tribal law enforcement entities</p> | Yes/No |
| <p>Appropriate governmental entities, in collaboration with appropriate private-sector agencies, have determined which businesses in each jurisdiction should be targeted for training in indications and warnings</p> | Yes/No |
| <p>Appropriate governmental entities conduct federally developed training in recognizing and reporting indicators and warnings at identified businesses (via a train-the-trainer program)</p> | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Standards exist for the content of reported information | Yes/No |
| All information is adequately cataloged and databased to enable timely retrieval | Yes/No |
| Processes, protocols, and technical capabilities exist to allow extraction of information from public, private, and law enforcement databases | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|---|
| Information provided by all sources is delivered through pre-established channels appropriate for the originating source. | Yes/No |
| Intelligence related to high risk infrastructure or an acute threat was prioritized and reported as soon as it was observed | Yes/No |
| Information provided by all sources met predefined standards for accuracy, completeness and consistency | Yes/No |
| Law enforcement personnel followed-up with a reporting organization if more information was necessary | Yes/No |
| Information provided by all sources was authenticated | Within 12 hours of initial observation |
| Law enforcement personnel acted upon authenticated validated | Within 1 hour of receiving such information |
| Law enforcement personnel used approved response protocols to dispatch the appropriate public or private sector personnel to the potential threat | Yes/No |
| Upon examination at the incident scene, law enforcement or related personnel were able to differentiate suspicious behaviors and activities from illegal or potentially threatening actions | Yes/No |

Capability Elements

Personnel

- Personnel involved in information gathering and intelligence analysis
- Multi-agency/discipline personnel at all levels to support information identification, gathering, and recognition (e.g., medical personnel, law enforcement, etc.)
- Joint Terrorism Task Forces (JTTFs)

Planning

-
- Plans and procedures for information gathering and recognition of indicators and warnings
 - Plans and procedures for developing information needs
 - National Incident Management System (NIMS)
 - National Criminal Intelligence Sharing Plan (U.S. Department of Justice Global Information Sharing Initiative)
 - Global Justice Information Sharing Initiative: Fusion Center Guidelines (U.S. Department of Justice Global Information Sharing Initiative)
 - Office for Domestic Preparedness (ODP) Guidelines for Homeland Security: Terrorism Prevention and Deterrence

Organization and Leadership

- National Incident Management System (NIMS)
- National Response Plan (NRP)
- Applicable legislation, plans, directives, policies, and procedures
- Joint Terrorism Task Forces (JTTFs)
- State homeland security officials
- Fusion centers/processes

Equipment and Systems

- Information sharing network architecture (e.g., Regional Information Sharing System (RISS), Joint Regional Information Exchange System (JRIES), National Law Enforcement Telecommunication System (NLETS), FBI Criminal Justice Information Services/National Crime Information Center (CJIS/NCIC) networks)
- Information sharing network standards- survivable; interoperable; compatible; secure; accessible
- Data synthesis software (hazard prediction, assessment, and threat modeling software)
- Interoperable communications equipment
- Data collection/information gathering software
- Access to early detection/alert programs and networks and all-source information (i.e. Public Health Information Network, Biosense, Homeland Security Information Network, Information Sharing and Analysis Centers, etc.)
- Interoperable communications (e.g., voice, data, and fax) through landlines, cell lines, satellite, internet, and/or radio
- Surveillance equipment

Training

- Linkage of crime analysis queries from patrol officers with database cues that classify subjects and advise appropriate action
- Awareness of the Select Agent Program for weaponized agents
- Accessing geo-coded information
- Identification of, and response to, terrorists conducting surveillance of potential targets
- Recognition of dual-use equipment and materials
- Legally appropriate response to data relayed by members of the community

-
- Awareness training for both law enforcement and non-law-enforcement personnel and the general public
 - Cultural competence
 - Foreign languages

Exercises, Evaluations, and Corrective Actions

- Exercises with information gathering and recognition of indicators and warnings components
- System for incorporating lessons learned into plans and procedures

Planning Assumptions

- Prevention consists of those activities that serve to detect, deter, and disrupt terrorist threats or actions against the United States and its interests. These activities decrease the perpetrators' chance of success, mitigate attack impact, minimize attack visibility, increase the chance of apprehension or detection, and obstruct perpetrators' access to resources. Tasks in this area are important regardless of a single type of threat, adversary capability, time or location of incident. Similarly, these capabilities reflect many tasks routinely undertaken by law enforcement and related organizations as they conduct traditional all-hazards, all-crimes activities.
- This capability applies to all potential terrorist incidents and is applicable to all 12 terrorism-related National Planning Scenarios. Initial planning, however, has been focused on bombing using improvised explosives device, chlorine tank explosion, aerosol anthrax, improvised nuclear device, and a radiological dispersal.
- Effective prevention depends on timely, accurate, and actionable information about the adversary, their operations, their support, potential targets, and methods of attack. Homeland security intelligence/information fusion is the overarching process of managing the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. Although the primary emphasis of fusion is to identify, deter, and respond to emerging terrorism-related threats and risks, a collateral benefit to Federal, State, local, and tribal entities is that it will support ongoing efforts to address nonterrorism-related, all-hazards, all-crimes issues.
- Both the Planning Factors For A Single Incident section and the Approaches for Large-Scale Events section have been omitted because there is no incident or large-scale event that necessarily occurs before these capabilities come in to play.
- Intelligence/information fusion is an ongoing, cyclical process that incorporates three primary capabilities: Information Gathering and Recognition of Indicators and Warnings; Intelligence Analysis and Production; and Intelligence/Information Sharing and Dissemination.
- All appropriate objectives and critical tasks will be exercised regularly at all levels in order to measure performance and demonstrate capability.

Planning Factors for a Single Incident

Not Applicable

Approaches for Large-Scale Events

Not Applicable

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Personnel to gather information and pass to appropriate authorities | Federal, regional, State, local, and tribal private sector |
| Personnel to recognize and report suspicious activity | Federal, regional, State, local, and tribal law enforcement and public safety agencies The general public Private sector businesses |
| Personnel to process (receive, authenticate, and screen) information | Federal, regional, State, local, tribal, law enforcement, and public safety personnel |
| Joint Terrorism Task Force (JTTF) personnel | Federal, regional, State, local, tribal, law enforcement, and public safety agencies |
| Plans and procedures for information gathering and recognition of indicators and warnings | Federal, regional, State, local, tribal, law enforcement, and public safety agencies |
| Plans and procedures for developing information needs | Federal, regional, State, local, tribal, law enforcement, and public safety agencies |
| System for public reporting of suspicious activity (911, tip lines, etc.) | Federal, regional, State, local, tribal, law enforcement, and public safety agencies |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Food and Agricultural Safety and Defense
- Intelligence Analysis and Production
- Intelligence/Information Sharing and Dissemination

- Interoperable Communications
- Law Enforcement Investigation and Operations
- Planning
- Risk Management
- Public Health
- Restoration of Lifelines

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INTELLIGENCE ANALYSIS AND PRODUCTION

Capability Definition

Intelligence Analysis and Production is the merging of data and information for the purpose of analyzing, linking, and disseminating timely and actionable intelligence with an emphasis on the larger public safety and homeland security threat picture. This process focuses on the consolidation of analytical products among the intelligence analysis units at the Federal, State, local, and tribal levels for tactical, operational, and strategic use. This capability also includes the examination of raw data to identify threat pictures, recognize potentially harmful patterns, or connect suspicious links to discern potential indications or warnings.

Outcome

Timely, accurate, and actionable intelligence/information products are produced in support of prevention, awareness, deterrence, response, and continuity planning operations.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the Terrorism Incident Law Enforcement and Investigation Incident Annex.

Capability Description

| Activity | Description |
|----------------------------------|---|
| Establish fusion center | Establish and maintain a multidisciplinary, all-source information/intelligence fusion center/process that undertakes an “all-hazards” and “all-crimes” approach. |
| Establish fusion center | Fusion center/processes and capabilities are staffed during all operational hours with individuals who have the appropriate training and expertise to handle the receipt, analysis, and dissemination of intelligence. |
| Review information | Intelligence analysts at the fusion center/process have access to and receive collected information. |
| Analyze information/intelligence | The fusion center/process integrates and analyzes relevant information/intelligence. |
| Develop analytic products | Analytic products developed by fusion center/processes are consumer-tailored, clear, and objective and support the development of performance-driven, risk-based prevention, protection, and response programs at all levels. |

Critical Tasks

| UTL# | Task |
|---------------|--|
| Pre.A.4 2.1.1 | Establish and maintain a fusion center/process using the national guidelines and standards. |
| Pre.A.4 2.1.2 | Sustain technical and procedural connectivity with critical intelligence and information streams. Access repositories at all levels of classification as |

| UTL# | Task |
|---------------|--|
| | necessary. Ensure appropriate technological redundancy. |
| Pre.A.4 2.1.3 | Incorporate the fusion center/process principles of the Criminal Intelligence Model Policy (International Association of Chiefs of Police [IACP]). |
| Pre.A.4 2.1.4 | Establish and maintain communications, including electronic connectivity with other region fusion center/processes. |
| Pre.A.4 2.1.5 | Coordinate the fusion center/process with the Joint Terrorism Task Force (JTTF) and FBI Field Intelligence Group (FIG) for all terrorist-related information. |
| Pre.A.4 2.2.3 | Train permanent and assigned analytical staffs. |
| Pre.A.4 2.2.5 | Adhere to privacy and security rules in operating fusion center/process |
| Pre.A.4 2.3.1 | Receive, extract, or collect information from all available sources, including all relevant databases and systems, on a continuous basis and with appropriate technological redundancy. |
| Pre.A.4 2.3.2 | Prioritize intelligence based on relevance of the information and the finished intelligence products to potential threat elements. |
| Pre.A.4 2.3.3 | Ensure that unclassified briefings, reports and alerts are used whenever possible to provide credible information that allows public safety, private sector and non-law enforcement agencies to develop intelligence- and information-driven prevention plans without compromising source or collection methods. |
| Pre.A.4 2.4.1 | Blend, reconcile, and deconflict data, information, and intelligence received from multiple sources. |
| Pre.A.4 2.4.2 | Identify patterns and trends that may indicate emerging, immediate or long-term threat condition. |
| Pre.A.4 2.4.3 | Identify links between terrorism related intelligence and information related to traditional criminal activity so as to identify activities indicative of an imminent or potential threat. |
| Pre.A.4 2.4.4 | Utilize any and all relevant and useful analytic methodologies that provide a more comprehensive and useful product. |
| Pre.A.4 2.5.1 | Analyze information needs on a continuous basis for short- and long-term intelligence requirements. |
| Pre.A.4 2.5.2 | Provide terminology/lexicon glossary to all relevant fusion center/process entities to eliminate agency-to-agency terminology confusion. |
| Pre.A.4 2.5.3 | Provide briefings, reports and/or alerts tailored to recipients with detailed, specific information on actions or activities that may be indicative of an emerging threat. |
| Pre.A.4 2.5.4 | Use tear-line formats to ensure that State, local and/or tribal officials with varying levels of clearance have access to useful information |
| Pre.A.4 2.5.5 | Develop a broad, national, uniform template for analytic products |
| Pre.A.4 2.5.6 | Archive information and intelligence in a searchable repository to support future efforts by all fusion analysts. |
| Pre.A.4 2.5.7 | Vet and review products prior to distribution. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| A state fusion center strategy is in place, that: <ul style="list-style-type: none"> ▪ Was developed to conform to guidelines outlined in <i>Fusion Center Guidelines</i> ▪ Provides for a coordinated interface to the Federal government | Yes/No |
| Key leaders in fusion center/process have and understand the Fusion Center Resource CD | Yes/No |
| Funding sources for analytical and support staff have been identified | Yes/No |
| All personnel are trained in the intelligence cycle | Yes/No |
| Basic training courses have been developed by the appropriate Federal entities | Yes/No |
| Advanced training courses have been developed by the appropriate Federal entities | Yes/No |
| All fusion center/process staff receive annual awareness training on relevant privacy and security rules, and regulations (28 CFR and any other relevant State statutes and regulations) | Yes/No |
| Each analyst has had a minimum number of hours of training | Yes/No |
| Center personnel are trained in promoting the fusion center ethos and mission | Yes/No |
| All analysts at relevant agencies and centers/processes are trained in relevant methods and tools | Yes/No |
| Percentage of analysts at relevant agencies and centers/processes that are trained to identify precursors and links between crime and terrorism | Percentage |
| Fusion center/process participants ensure that analysts understand the tailoring | Yes/No |
| As part of the information gathering process, informal meetings are facilitated on a quarterly basis between fusion center/process analysts and those responsible for information gathering | Yes/No |
| The center has electronic access to relevant networks, classified and unclassified (e.g., Regional Information Sharing Systems/Law Enforcement Online (RISS/LEO), Homeland Security Information Network (HSIN), and various public health networks) | Yes/No |
| Simple access to and from the fusion center/process has been established for those responsible for gathering information (via an 800 number) | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| The volume of transactions using information networks are recorded; actions taken in light of those transactions are tracked | Yes/No |
| Efficient connectivity exists with the Joint Terrorism Task Force (JTTF) and Field Intelligence Guide (FIG)) | Yes/No |
| MOUs are used to define processes and responsibilities for information sharing and to ensure deconfliction with other fusion centers/processes | Yes/No |
| Appropriate State and local entities provide personnel to the fusion center/process as required | Yes/No |
| Staffing of analysts is conducted in accordance with national standards | Yes/No |
| The fusion center/process is assigned personnel with diverse subject matter expertise from key relevant departments, organizations, agencies or offices on a permanent, or liaison basis | Yes/No |
| Participants establish procedures to benchmark analysts' capabilities | Yes/No |
| Percentage of analysts who are granted appropriate clearances | Percentage |
| Job descriptions reflect the region's applicable risks, threats, and critical infrastructure | Yes/No |
| A procedure is established for conducting annual performance reviews for staff | Yes/No |
| The individual performance review process identifies problems and develops career development plans | Yes/No |
| All personnel demonstrate appropriate knowledge of the operating systems and intelligence processes required to perform intelligence functions | Yes/No |
| Federal standards are established to prequalify the fusion center/process in physical and clearance requirements to receive, store, and control secret/secure information | Yes/No |
| The fusion center/process has the physical means to receive, store, and control secret/secure information | Yes/No |
| The fusion center/process has access to Regional Information Sharing System Program/Law Enforcement Officer (RISS/LEO), HSIN, various public health networks, and so forth | Yes/No |
| All State, local, and tribal law enforcement databases comply with national standards | Yes/No |
| A clearly defined process, consistent with established intelligence community standards exists | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| to establish threat at the management level | |
| A clearly defined process for developing an unclassified briefing is established | Yes/No |
| An annual, standardized classified to unclassified information review process (including ratio) has been established | Yes/No |
| Feedback procedures have been established | Yes/No |
| Audit standards for reviewing work products are established | Yes/No |
| The center/process has an accessible repository for analytic methods/tools/techniques | Yes/No |
| All participants establish a producer-to-consumer feedback cycle to monitor consumer satisfaction with the analytic product | Yes/No |
| Participating agencies have provided a glossary of terms, updated annually, to the center/process | Yes/No |
| Permanent analytic staff are knowledgeable in the region's applicable risks, threats, and critical infrastructure, and is properly trained and/or experienced in relevant analytical methods and practices | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--------------------|
| Information received from the fusion center was disseminated to street level personnel | Within 12 hours |
| A clearly defined process or procedure was used to disseminate information and products | Yes/No |

Capability Elements

Personnel

- Multi-disciplinary personnel to support intelligence analyses (e.g., public health analysts, HazMat analysts, etc.)
- Intelligence personnel (e.g., analysts, supervisors, officers)
- Administrative and support personnel (e.g., information technology/communications, fusion center staff, security)
- Public health analysts
- Personnel with security clearances
- Joint Terrorism Task Forces (JTTFs)

Planning

- Presidential Decision Directive (PDD) 39 and PDD 62

-
- National Criminal Intelligence Sharing Plan (U.S. Department of Justice Global Information Sharing Initiative)
 - Global Justice Information Sharing Initiative: Fusion Center Guidelines (U.S. Department of Justice Global Information Sharing Initiative)
 - The Intelligence Community (National Intelligence Director, CIA, and related Federal intelligence organizations)
 - Central Intelligence Agency (CIA) Factbook on Intelligence
 - Office for Domestic Preparedness (ODP) Guidelines for Homeland Security: Terrorism Prevention and Deterrence

Organization and Leadership

- National Incident Management System (NIMS)
- National Response Plan (NRP)
- Applicable legislation, plans, directives, policies, and procedures
- Joint Terrorism Task Forces (JTTFs)
- State homeland security officials
- Fusion centers/processes

Equipment and Systems

- Hardware, software, and internet-based systems that allow for information exchange and dissemination
- Information sharing network architecture (e.g., Regional Information Sharing System (RISS)/Law Enforcement Online (LEO), Joint Regional Information Exchange System (JRIES), National Law Enforcement Telecommunication System (NLETS), FBI Criminal Justice Information Services/National Crime Information Center (CJIS/NCIC) networks)
- Information sharing network standards- survivable; interoperable; compatible; secure; accessible
- Data synthesis software (hazard prediction, assessment, and threat modeling software)
- Interoperable communications equipment
- Access to early detection/alert programs and networks and all-source information (i.e. Public Health Information Network, Biosense, Homeland Security Information Network, Information Sharing and Analysis Centers, etc.)
- Interoperable communications (e.g., voice, data, and fax) through landlines, cell lines, satellite, internet, and/or radio

Training

- Basic and advanced intelligence analysis training for intelligence operations personnel (e.g., commanders/supervisors, officers, analysts)
- Training in promoting the fusion center ethos and mission for fusion center/process personnel
- Awareness training on relevant privacy and security rules, regulations, etc. (28CFR and any other relevant State statutes and regulations)
- Training in the intelligence cycle
- Training in relevant methods and tools for all analysts at relevant agencies and centers/processes

- Training in identification of precursors and links between crime and terrorism for analysts at relevant agencies and centers/processes

Exercises, Evaluations, and Corrective Actions

- Exercises on intelligence cycle operations (concurrent with varying threat levels)
- System for incorporating lessons learned into plans and procedures

Planning Assumptions

- Prevention consists of those activities that serve to detect, deter, and disrupt terrorist threats or actions against the United States and its interests. These activities decrease the perpetrators’ chance of success, mitigate attack impact, minimize attack visibility, increase the chance of apprehension or detection, and obstruct perpetrators’ access to resources. Tasks in this area are important regardless of a single type of threat, adversary capability, time or location of incident. Similarly, these capabilities reflect many tasks routinely undertaken by law enforcement and related organizations as they conduct traditional all-hazards, all-crimes activities.
- This capability applies to all potential terrorist incidents and is applicable to all 12 terrorism-related National Planning Scenarios. The analysis of national targets focused on bombing using improvised explosives device, chlorine tank explosion, aerosol anthrax, improvised nuclear device, and a radiological dispersal.
- Effective prevention depends on timely, accurate, and actionable information about the adversary, their operations, their support, potential targets, and methods of attack. Homeland security intelligence/information fusion is the overarching process of managing the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. Although the primary emphasis of fusion is to identify, deter, and respond to emerging terrorism-related threats and risks, a collateral benefit to Federal, State, local, and tribal entities is that it will support ongoing efforts to address non-terrorism-related, all-hazards, all-crimes issues.
- The Planning Factors for A Single Incident section and the Approaches for Large-Scale Events section do not apply because there is no incident or large-scale event that necessarily occurs before these capabilities come in to play.
- Intelligence/information fusion is an ongoing, cyclical process that incorporates three primary capabilities: Information Gathering and Recognition of Indicators and Warnings; Intelligence Analysis and Production; and Intelligence/Information Sharing and Dissemination.
- All appropriate objectives and critical tasks will be exercised regularly at all levels in order to measure performance and demonstrate capability.

Planning Factors for a Single Incident

Not Applicable

Approaches for Large-Scale Events

Not Applicable

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|----------|-----------------------------|
|----------|-----------------------------|

| Resource | Assigned Level and Quantity |
|--|--|
| Fusion Centers/Processes | Federal, State, local, large urban areas, intrastate regions, and interstate regions |
| Personnel to support intelligence analyses (e.g., public health analysts, HazMat analysts, etc.) | Federal, regional, State, local, tribal, and personnel provided from law enforcement, public health and other appropriate agencies on a permanent or liaison basis |
| Hardware, software, and internet-based systems that allow for information exchange and dissemination | Federal, regional, State, local, tribal, and all appropriate law enforcement, public health, and other appropriate agencies |
| Terminals with network access to relevant systems (RISS/LEO, HSIN, etc.) | Federal, regional, State, local and/or tribal Fusion Center sites |
| Develop national standards training for intelligence analysts | Federal |
| Joint Terrorism Task Force (JTTF) Personnel | Federal, State, local, tribal Larger jurisdictions designate liaison to the JTTF Smaller jurisdictions have procedures to communicate with the JTTF |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Epidemiological Surveillance and Investigation
- Information and Gathering and Recognition of Indicators and Warnings
- Intelligence Analysis and Production
- Intelligence/Information Sharing and Dissemination
- Law Enforcement Investigation and Operations
- Planning
- Public Health Laboratory Testing
- Risk Management

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INTELLIGENCE/INFORMATION SHARING AND DISSEMINATION

Capability Description

The Intelligence/Information Sharing and Dissemination capability provides necessary tools to enable efficient prevention, protection, response, and recovery activities. Intelligence/Information Sharing and Dissemination is the multijurisdictional, multidisciplinary exchange and dissemination of information and intelligence among the Federal, State, local, and tribal layers of government, the private sector, and citizens. The goal of sharing and dissemination is to facilitate the distribution of relevant, actionable, timely, and preferably declassified or unclassified information and/or intelligence that is updated frequently to the consumers who need it. More simply, the goal is to get the right information to the right people at the right time.

An effective intelligence/information sharing and dissemination system will provide durable, reliable, and effective information exchanges (both horizontally and vertically) between those responsible for gathering information and the analysts and consumers of threat-related information. It will also allow for feedback and other necessary communications in addition to the regular flow of information and intelligence.

Outcome

Effective and timely sharing of information and intelligence occurs across Federal, State, local, tribal, regional, and private sector entities to achieve coordinated awareness of, prevention of, protection against, and response to a threatened or actual domestic terrorist attack, major disaster, or other emergency.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs)/Annexes:

- ESF #1: Transportation
- ESF #2: Communications
- ESF #3: Public Works and Engineering
- ESF #4: Firefighting
- ESF #5: Emergency Management
- ESF #6: Mass Care, Housing, and Human Services
- ESF #7: Resource Support
- ESF #8: Public Health and Medical Services
- ESF #9: Urban Search and Rescue
- ESF #10: Oil and Hazardous Materials Response
- ESF #11: Agriculture and Natural Resources
- ESF #12: Energy
- ESF #13: Public Safety and Security
- ESF #14: Long-Term Recovery and Mitigation
- Biological Incident Annex
- Cyber Incident Annex
- Terrorism Incident Law Enforcement and Investigation Annex

Activities Performed with the Capability

| Activity | Description |
|--------------------------------|---|
| Information sharing system | All pertinent stakeholders across all disciplines are identified and incorporated into the information flow through a clearly defined information sharing system. |
| Vertical flow of information | Information flows vertically (up and down from the Federal level) within law enforcement and other appropriate agencies in a timely and effective manner. |
| Horizontal flow of information | Information flows across disciplines (among fire departments, EMS units, public works, the private sector, and so forth) at all levels and across jurisdictions in a timely and efficient manner. |

Critical Tasks

| UTL# | Task |
|---------------|---|
| Pre.A.5 1.1 | Identify all Federal, State, regional, tribal and local stakeholders for inclusion in the information sharing framework. |
| Pre.A.5 1.1.2 | Identify non-law enforcement governmental entities and officials for inclusion in the information sharing framework. |
| Pre.A.5 1.1.3 | Adhere to pre-defined security clearances and need-to-know parameters when disseminating information and intelligence. |
| Pre.A.5 1.1.4 | Declassify or provide tear lines for relevant information and/or intelligence. |
| Pre.A.5 1.1.5 | Identify appropriate law enforcement and other enforcement governmental personnel for receipt of security clearances at an appropriate level to ensure effective dissemination of critical information. |
| Pre.A.5 1.1.6 | Comply with regulatory, statutory, privacy-related, and other issues that may govern the sharing of information. |
| Pre.A.5 1.1.7 | Prevent, report, and/or address inappropriate disclosures of information and/or intelligence. |
| Pre.A.5 1.2.1 | Share intelligence and information systematically between Federal and State entities in a timely manner. |
| Pre.A.5 1.2.3 | Provide relevant intelligence and/or information from Federal or State entities to local authorities in a usable format. |
| Pre.A.5 1.2.4 | Disseminate relevant information and/or intelligence products to street-level law enforcement personnel. |
| Pre.A.5 1.2.5 | Provide intelligence and/or information to local authorities in a timely manner. |
| Pre.A.5 1.3.1 | Adhere to horizontal coordination across jurisdictions among law enforcement and other appropriate agencies at all levels through effective and timely information sharing. |
| Pre.A.5 1.3.2 | Share intelligence and/or information across disciplines in a timely and effective manner. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| There are adequate numbers of trained personnel at all levels (especially at dispatch or communications centers) to process and disseminate information | Yes/No |
| Personnel are aware of and trained to adhere to pre-defined security clearances and need-to-know parameters | Yes/No |
| Appropriate personnel are trained in processing and disseminating information and intelligence | Yes/No |
| Distribution lists are up-to-date with points of contact routinely verified on a periodic basis | Yes/No |
| Relevant entities identified and have access to relevant systems | Yes/No |
| Memoranda of Understanding or similar agreements between appropriate entities exist and are on file | Yes/No |
| Federal agencies have a process in place to declassify or provide tear lines for relevant information and/or intelligence | Yes/No |
| An adequate number of appropriate law enforcement and other governmental personnel are identified and receive security clearances to enable timely sharing and dissemination | Yes/No |
| Appropriate law enforcement and other governmental entities receive security clearances at an appropriate level | Yes/No |
| Regulatory, statutory, and/or privacy policies are in place and followed | |
| Appropriate entities have a clearly defined process for preventing, reporting, and addressing the inappropriate disclosure of information and/or intelligence: <ul style="list-style-type: none"> ▪ The process has been implemented ▪ The process has been audited | Yes/No Yes/No |
| There are clearly defined mechanisms/processes (reduced to a single pipeline wherever possible and prudent) for sharing information/intelligence between Federal and State sources. The process is <ul style="list-style-type: none"> ▪ Clearly-defined and documented ▪ Technologically proficient for the entities involved | Yes/No Yes/No |
| Alternative, supplemental, and back-up mechanisms for routing information and/or intelligence to the necessary agencies are available and routinely evaluated | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Mechanisms exist to provide feedback and/or followup information as needed | Yes/No |
| Federal and/or State entities have established metrics to measure the quality/usefulness of intelligence/information that is passed to local authorities | Yes/No |
| All law enforcement personnel have received the Criminal Intelligence Coordinating Council (CICC) Outreach Package promoting the concept of intelligence-led policing | Yes/No |
| Local agencies have established procedure/protocol for providing intelligence products or relevant information to street-level law enforcement personnel | Yes/No |
| Fusion Centers/processes and Department of Homeland Security (DHS) Information Sharing and Analysis Center (ISAC) program for critical infrastructure ensure the participation of appropriate private-sector entities | Yes/No |
| Joint Terrorism Task Forces have a process for sharing relevant information with the private sector in a timely manner | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Percent of law enforcement intelligence/information passed to local authorities that was deemed useful or actionable | Percent |
| Information received from the fusion center was disseminated to street level personnel | Within 12 hours |
| A clearly defined process or procedure was used to disseminate information and products | Yes/No |

Capability Elements

Personnel

- Personnel involved in the operational aspects of information sharing (e.g., information technology (IT) personnel, law enforcement, public health, fire, Emergency Medical Service (EMS), transportation, and other non-law enforcement personnel)
- Federal, State, local, tribal, private sector, personnel involved in information sharing and collaboration initiatives, and other key stakeholders
- Joint Terrorism Task Forces (JTTFs)
- Fusion center/process personnel

Planning

-
- Memorandums of Understanding (MOUs) and Coordination Agreements for information sharing and dissemination
 - National Criminal Intelligence Sharing Plan (U.S. Department of Justice Global Information Sharing Initiative)
 - Global Justice Information Sharing Initiative: Fusion Center Guidelines (U.S. Department of Justice Global Information Sharing Initiative)
 - Office for Domestic Preparedness (ODP) Guidelines for Homeland Security: Terrorism Prevention and Deterrence
 - Information sharing plans, procedures, and protocols

Organization and Leadership

- National Incident Management System (NIMS)
- National Response Plan (NRP)
- Applicable legislation, plans, directives, policies, and procedures
- Joint Terrorism Task Forces (JTTFs)
- State homeland security officials
- Fusion centers/processes

Equipment and Systems

- Information sharing network architecture (e.g., Regional Information Sharing System (RISS)/Law Enforcement Online (LEO), Joint Regional Information Exchange System (JRIES), National Law Enforcement Telecommunication System (NLETS), FBI Criminal Justice Information System/National Crime Information Center (CJIS/NCIC) networks)
- Information sharing network standards- survivable; interoperable; compatible; secure; accessible
- Hardware and software physical and network security
- Data synthesis software (hazard prediction, assessment, and threat modeling software)
- Data collection/information gathering software
- Access to early detection/alert programs and networks and all-source information (e.g., Public Health Information Network, Biosense, Homeland Security Information Network, Information Sharing and Analysis Centers, etc.)
- Interoperable communications (e.g., voice, data, and fax) through landlines, cell lines, satellite, internet, and/or radio

Training

- Use and handling of classified information
- Information sharing plans, procedures, and protocols
- Identification of useful information
- Legally appropriate responses to data relayed by members of the community
- Dissemination of information to a fusion center or task force
- National Incident Management System (NIMS)
- Joint training among cooperating jurisdictions
- Awareness-level training on collaborative prevention and protection measures

Exercises, Evaluations, and Corrective Actions

- Exercises incorporate intelligence/information sharing and dissemination components concurrent with varying threat levels
- Exercises test awareness of multi-agency and multi-jurisdictional vulnerabilities and procedures
- System for incorporating lessons learned into plans and procedures

Planning Assumptions

- Prevention consists of those activities that serve to detect, deter, and disrupt terrorist threats or actions against the United States and its interests. These activities decrease the perpetrators' chance of success, mitigate attack impact, minimize attack visibility, increase the chance of apprehension or detection, and obstruct perpetrators' access to resources. Tasks in this area are important regardless of a single type of threat, adversary capability, time or location of incident. Similarly, these capabilities reflect many tasks routinely undertaken by law enforcement and related organizations as they conduct traditional all-hazards, all-crimes activities.
- This capability applies to all potential terrorist incidents and is applicable to all 12 terrorism-related National Planning Scenarios. Initial planning, however, has been focused on bombing using improvised explosives device, chlorine tank explosion, aerosol anthrax, improvised nuclear device, and a radiological dispersal.
- Effective prevention depends on timely, accurate, and actionable information about the adversary, their operations, their support, potential targets, and methods of attack. Homeland security intelligence/information fusion is the overarching process of managing the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. Although the primary emphasis of fusion is to identify, deter, and respond to emerging terrorism-related threats and risks, a collateral benefit to Federal, State, local, and tribal entities is that it will support ongoing efforts to address non-terrorism-related, all-hazards, all-crimes issues.
- Both the Planning Factors For A Single Incident section and the Approaches for Large-Scale Events section have been omitted because there is no incident or large-scale event that necessarily occurs before these capabilities come in to play.
- Intelligence/information fusion is an ongoing, cyclical process that incorporates three primary capabilities: Information Gathering and Recognition of Indicators and Warnings; Intelligence Analysis and Production; and Intelligence/Information Sharing and Dissemination.
- All appropriate objectives and critical tasks will be exercised regularly at all levels in order to measure performance and demonstrate capability.

Planning Factors for a Single Incident

Not Applicable

Approaches for Large-Scale Events

Not Applicable

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Personnel involved in the operational aspects of information sharing (e.g., information technology (IT) personnel, law enforcement, public health, fire, emergency medical services (EMS), transportation, and other non-law enforcement personnel) | Federal, regional, State, local, tribal |
| Equipment and systems required for information sharing and collaboration | Federal, regional, State, local, tribal |
| Joint Terrorism Task Force (JTTF) personnel | Federal, State, local, tribal Larger jurisdictions designate liaison to the JTTF Smaller jurisdictions have procedures to communicate with the JTTF |
| Alternate, supplemental and back-up routing procedures | Federal, regional, State, local, tribal |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence Analysis and Production
- Law Enforcement Investigation and Operations
- Planning
- Risk Management
- Fatality Management

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LAW ENFORCEMENT INVESTIGATION AND OPERATIONS

Capability Description

Law enforcement Investigations and Operations is the capability that includes the broad range of activities undertaken by law enforcement and related entities to detect, examine, probe, investigate, and conduct operations related to potential terrorist activities. Current and emerging investigative techniques are used, with an emphasis on training, legal frameworks, recognition of indications and warnings, source development, interdiction, and related issues specific to antiterrorism activities.

Outcome

Suspects involved in criminal activities related to homeland security are successfully deterred, detected, disrupted, investigated, and apprehended. All counterterrorism-related cases, including not only primary cases, but also secondary, tertiary, and obtusely-related cases are aggressively prosecuted.

Relationship to National Response Plan (ESF)/Annex

This capability supports the Terrorism Incident Law Enforcement and Investigation Annex:

- ESF #8: Public Health and Medical Services
- ESF #9: Urban Search and Rescue

Capability Description

| Activity | Description |
|---------------------|--|
| Investigations | <ul style="list-style-type: none"> ▪ Law enforcement personnel are able to carry out effective investigations of criminal/suspicious activities potentially related to terrorism. ▪ Law enforcement personnel coordinate effectively with critical infrastructure, key resource and private-sector officials to facilitate an investigation. |
| Information Sharing | <ul style="list-style-type: none"> ▪ Law enforcement and other appropriate personnel effectively receive, develop, and share information to aid in an investigation. |
| Planning | <ul style="list-style-type: none"> ▪ Incident response plans are developed and maintained. |
| Training | <ul style="list-style-type: none"> ▪ Specialized units/duly authorized and specially trained personnel are utilized for search, seizure, and/or intervention/interdiction operations |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Pre.C.1 2.2.1.1 | Develop, implement, and maintain an interagency or multi-jurisdictional training plan that ensures commonality in terrorism investigation subject matter being presented to law enforcement (State, local, tribal) and non-law enforcement (Department of Motor Vehicles (DMV), public health and safety) personnel. |
| Pre.C.1 2.2.1.2 | Implement proper procedures and processes when conducting terrorism-related investigations. |
| Pre.C.1 2.2.1.3 | Follow standard crime-scene procedures. |
| Pre.C.1 2.2.1.5 | Recognize indications and warnings of terrorism that arise in the investigations they conduct. |
| Pre.C.1 2.2.1.7 | Engage in effective source development activities. |
| Pre.C.1 2.2.2.1 | Identify and maintain liaisons with appropriate lead Federal terrorism investigation entities. |
| Pre.C.1 2.2.2.2 | Use communications mechanisms to aid investigative and operational activities. |
| Pre.C.1 2.2.2.3 | Establish and maintain a clear line of reporting for ongoing investigation information. |
| Pre.C.1 2.2.3.1 | Conduct outreach with targeted industries/facilities related to an investigation. |
| Pre.C.1 2.2.3.2 | Conduct targeted outreach with Federal, State, local, and tribal governments related to an investigation. |
| Pre.C.1 2.2.3.3 | Conduct targeted outreach with private businesses related to an investigation. |
| Pre.C.1 2.2.4.2 | Conduct coordinated incident response actions. |
| Pre.C.1 2.2.5.2 | Develop, implement, and maintain a plan for using Federal specialized units or personnel in conjunction with an active investigation of a critical event. |
| Pre.C.1 2.2.5.3 | Develop a government-wide program to ensure that the armed forces (particularly maritime forces) and appropriate law enforcement agencies have the capability to operate together in a mutually supportive and complementary role. |
| Pre.C.1 2.2.6.1 | Train appropriate investigative personnel in the proper use of personal protective equipment. |
| Pre.C.1 2.2.6.2 | Provide training in general safety procedures for a variety of potentially hazardous environments. |
| Pre.C.1 2.2.6.3 | Federal, State, local, and tribal law enforcement are able to address onsite CBRNE (chemical, biological, radiological, nuclear, explosives) hazards. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Training plans have been developed independently or in cooperation with other jurisdictions, per federally defined guidelines | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| All jurisdictional training plans: <ul style="list-style-type: none"> ▪ Designate a centralized training facility and/or lead agency responsible for joint training programs ▪ Establish a mechanism for notifying/updating participating agencies of training opportunities and scheduling | Yes/No |
| Federally sponsored training programs utilize train-the-trainer methods as appropriate to enable the broadest possible reach to all levels of government | Yes/No |
| Federally developed awareness training requirements are offered to non-law enforcement (public safety, code enforcement, public health and private sector security) relating to legal responsibilities and limitations, preservation of potential or suspected crime scenes, and maintaining control/custody of evidence (videotapes, documents, etc.) | Yes/No |
| Federal entities identify and/or develop training and education courses that they will make available for all State, local, and Tribal entities in the areas of interviewing techniques and cultural awareness training | Yes/No |
| Appropriate law enforcement personnel are trained in the FBI 12-step process of evidence collection/preservation | Yes/No |
| State, local, and tribal personnel are trained and educated regarding the Federal assets that are available to them | Yes/No |
| State, local, and tribal personnel are trained in appropriate Federal responsibilities in prevention and investigation matters | Yes/No |
| Training is tailored to address regional trends/issues by State, local, and tribal officials | Yes/No |
| Training is repeated/updated at least on a periodic basis | Yes/No |
| Appropriate personnel are trained in cultural awareness as it relates to terrorism | Yes/No |
| Appropriate personnel are trained in source recruitment and development | Yes/No |
| All law enforcement personnel are educated and trained to recognize terrorist techniques and procedures, including suspicious criminal and noncriminal activity and indicators | Yes/No |
| Designated personnel are trained to recognize indicators of a hazardous or contaminated environment | Yes/No |
| Designated personnel are trained in the proper use of Personal Protective Equipment | Yes/No |
| All personnel receive safety awareness training from appropriate agencies or units (e.g., HazMat, bomb squad, military EOD unit) | Yes/No |
| Appropriate personnel are trained and educated on the National Incident Management System (NIMS) | Yes/No |
| Agencies adhere to established policies regarding training intervals and requirements | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|--|
| All State, local, and tribal jurisdictions provide DHS with a list of their cultural awareness training needs, in order by priority | Yes/No |
| All Federal, State, local, and tribal law enforcement entities established connections with appropriate JTTF field offices to establish routine and appropriate communications for all personnel: <ul style="list-style-type: none"> ▪ Larger jurisdictions or entities have identified a designated liaison with the Joint Terrorism Task Force (JTTF) ▪ Smaller jurisdictions have a procedure in place to communicate with the JTTF, as needed ▪ All Federal and Tribal entities have established appropriate relationships (e.g., designated liaison, part-time liaison) with all JTTF offices ▪ State and local law enforcement know how to contact the JTTF for any potential terrorism threat or activity | Yes/No Yes/No Yes/No Yes/No |
| Processes and procedures are in place for law enforcement at all levels to: <ul style="list-style-type: none"> ▪ Identify and respond to suspicious activities and persons through the appropriate channels ▪ Identify individuals planning and coordinating terrorist-related activities ▪ Apprehend and interdict terrorist suspects ▪ Gather, catalogue, and preserve evidence for prosecutorial purposes and attribution | Yes/No Yes/No Yes/No Yes/No Yes/No |
| Federal entities have established standard procedures and processes for conducting terrorism-related investigations | Yes/No |
| Law enforcement at all levels use Memorandums of Understanding (MOUs) to facilitate the conduct of an ongoing investigation | Yes/No |
| Investigative policies, procedures, and processes are reviewed on a periodic basis | Yes/No |
| The U.S. Department of Homeland Security (DHS) and Department of Justice (DOJ/FBI) provide a comprehensive list of Federal, State, local, and tribal resources available to all law enforcement entities and provide updates as appropriate | Yes/No |
| All appropriate entities follow legal protocols on handling and disseminating information related to an ongoing investigation | Yes/No |
| All appropriate entities ensure that sources remain confidential throughout the investigative process | Yes/No |
| Communication mechanisms are routinely tested via tabletop exercise (TTX) and functional exercise (FX) to ensure they are operating effectively | Yes/No |
| An investigative liaison or mechanism is in place to communicate targeted information needs/requirements to information collectors | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Notification processes and procedures are in place to share information to/from Federal, State, local, and tribal and local officials regarding an on-going investigation | Yes/No |
| A mechanism for tracking leads from Federal, State, local, and tribal officials has been developed and is maintained so that all entities can view where the information is being taken for action | Yes/No |
| State, local, and tribal plans have been revised to include all required changes from the NIMS and National Response Plan (NRP) | Yes/No |
| Investigative personnel are familiar with the Terrorist Incident Annex to the NRP | Yes/No |
| Plans and protocols are in place for sharing incident-specific information from Federal partners with State, local, and tribal authorities, Emergency Operations Centers (EOCs), and other pertinent entities | Yes/No |
| A mechanism is in place for conveying among entities the prevention efforts taken by Federal, State, local, and tribal officials | Yes/No |
| State, local, and tribal law enforcement either possess or have access to special operations teams (e.g., SWAT teams) | Yes/No |
| Standard policies and procedures exist for deploying special operations teams | Yes/No |
| Sufficient specialized units or personnel exist within the State, local, and/or tribal jurisdiction to ensure coverage of at least two simultaneous contingencies | Yes/No |
| State, local, and/or tribal jurisdictions develop and maintain formal MOU's, policies, or procedures for accessing specialized units or personnel in an emergency | Yes/No |
| Formal MOU's, policies, or procedures exist that clearly define the duties and responsibilities of Federal specialized units/personnel | Yes/No |
| A mechanism is in place for State, local, and tribal law enforcement entities to request/authorize that specific Federal specialized unites or personnel be assigned to conduct joint operations | Yes/No |
| DHS/DOJ/DoD interoperability capabilities are developed and maintained through joint training and exercises | Yes/No |
| DHS/DOJ/DoD common doctrine and equipment has been identified ,developed, and maintained | Yes/No |
| DHS and DOJ, in coordination with DoD develop and maintain a plan for attaining and maintaining U.S. government counterterrorism operational response capabilities along their functional lines of responsibility in the Atlantic, Pacific, and Gulf Coast operating areas | Yes/No |
| Designated personnel have an identified source for and access | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| to basic personal protection equipment (e.g., Chem/Bio protective mask, protective overgarments) | |
| Appropriate processes, procedures and plans are in place for notifying proper authorities in the event of CBRNE hazards/threats | Yes/No |
| Procedures/protocols are in place for relaying CBRNE-related lab analysis (e.g., type, quantity, lethality) to FBI laboratory entities | Yes/No |
| Information flow plans/process for onsite personnel and detection capabilities are developed for relaying investigative information rapidly | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|---|
| Information is relayed as soon as possible to the JTTF | Within 24 hours |
| Law enforcement investigators receive timely threat and intelligence information | Yes/No |
| FBI Hazardous Materials Response unit (HMRU) collects evidence, processes material/evidence, and identifies the source or precursors of CBRNE | Yes/No |
| Personnel demonstrate basic knowledge of minimum safe distances and of how to establish adequate perimeter, containment and DECON procedures | Yes/No |
| State, local, and tribal law enforcement deployed special operations teams | Yes/No |
| Federal specialized units or personnel were deployed | Within 24 hours of authorization to deploy. |
| Law enforcement used investigative information to identify potential vulnerabilities/target lists | Yes/No |
| Law enforcement notified industry/facilities of how to identify and report suspicious material, activity, or personnel related to the ongoing investigation | Yes/No |
| Law enforcement notified Federal, State, local, and tribal governments of how to identify and report suspicious material, activity, or personnel related to the ongoing investigation | Yes/No |
| Law enforcement notified private businesses relevant to an ongoing investigation of how to identify and report suspicious material, activities, or personnel related to the ongoing investigation | Yes/No |

Capability Elements

Personnel

- Investigative personnel
- Joint Terrorism Task Forces (JTTFs)

- Liaison to JTTF (as appropriate)
- Evidence collection personnel
- Forensic analysis personnel

Planning

- Jurisdictional training plan
- Crime scene investigation and procedures for handling evidence and/or remains
- Outreach to Critical Infrastructure/Key Resources in jurisdiction
- Mechanisms for requesting/authorizing assignment of Federal assets
- Office for Domestic Preparedness (ODP) Guidelines for Homeland Security: Terrorism Prevention and Deterrence
- National Criminal Intelligence Sharing Plan (U.S. Department of Justice Global Information Sharing Initiative)
- National Maritime Security Response Plan (via HSPD-13)

Organization and Leadership

- Joint Terrorism Task Forces (JTTFs)
- Anti-Terrorism Advisory Councils (ATACs)
- National Incident Management System (NIMS)
- National Response Plan (NRP)
- Applicable legislation, plans, directives, policies, and procedures

Equipment and Systems

- Evidence preservation equipment
- Forensic equipment and facilities
- Laboratory equipment
- Interoperable communications equipment
- Interview and surveillance equipment
- Personal protective equipment (PPE)

Training

- Multi-level, multi-jurisdictional terrorism-related investigation and operations
- Understanding of Federal roles and responsibilities, assets available
- Recognition of and response to terrorism indications and warnings (I&W) during investigations
- Crime scene analysis, forensics
- Cultural awareness, foreign languages
- Source recruitment and development
- Personal protective equipment (PPE)
- NIMS, NRP Terrorist Incident Annex
- Tactical capabilities for intervening a potential threat element (PTE)

Exercises, Evaluations, and Corrective Actions

- Exercises that incorporate a law enforcement investigation and/or operations (i.e., surveillance, interviewing, interdiction / apprehension) component

-
- Exercises that incorporate intervention based on retrieval of information from information sharing networks and/or fusion center
 - System for incorporating lessons learned into plans and procedures

Planning Assumptions

- Prevention consists of those activities that serve to detect, deter, and disrupt terrorist threats or actions against the United States and its interests. These activities decrease the perpetrators' chance of success, mitigate attack impact, minimize attack visibility, increase the chance of apprehension or detection, and obstruct perpetrators' access to resources. Tasks in this area are important regardless of a single type of threat, adversary capability, time or location of incident. Similarly, these capabilities reflect many tasks routinely undertaken by law enforcement and related organizations as they conduct traditional all-hazards, all-crimes activities.
- This capability applies to all potential terrorist incidents and is applicable to all 12 terrorism-related National Planning Scenarios. Initial planning, however, has been focused on bombing using improvised explosives device, chlorine tank explosion, aerosol anthrax, improvised nuclear device, and a radiological dispersal.
- Effective prevention depends on timely, accurate, and actionable information about the adversary, their operations, their support, potential targets, and methods of attack. Homeland security intelligence/information fusion is the overarching process of managing the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. Although the primary emphasis of fusion is to identify, deter, and respond to emerging terrorism-related threats and risks, a collateral benefit to Federal, State, local, and tribal entities is that it will support ongoing efforts to address nonterrorism-related, all-hazards, all-crimes issues.
- Both the Planning Factors For A Single Incident section and the Approaches for Large-Scale Events section have been omitted because there is no incident or large-scale event that necessarily occurs before these capabilities come in to play.
- Intelligence/information fusion is an ongoing, cyclical process that incorporates three primary capabilities: Information Gathering and Recognition of Indicators and Warnings; Intelligence Analysis and Production; and Intelligence/Information Sharing and Dissemination
- All appropriate objectives and critical tasks will be exercised regularly at all levels in order to measure performance and demonstrate capability.

Planning Factors for a Single Incident

Not Applicable

Approaches for Large-Scale Events

Not Applicable

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Interagency and multi-jurisdictional training plan that ensures commonality in terrorism investigation | 100%, of appropriate Federal, regional, State, local, tribal |
| Develop and sponsor “train the trainer” programs on Federal assets and roles and responsibilities, terrorism indications and warning in criminal investigations, and recognition of hazardous materials/threats | Federal |
| Joint Terrorism Task Force (JTTF) personnel | Federal, State, local, tribal Larger jurisdictions designate liaison to the JTTF. Smaller jurisdictions have procedures to communicate with the JTTF. |
| Investigative personnel | Federal, Regional, State, local, tribal |
| Evidence collection and forensic analysis personnel | Federal, Regional, State, local, tribal |
| Established special operations (e.g., SWAT teams) units or access to units as necessary | Federal, Regional, State, local, tribal Sufficient specialized units or personnel within the State, local, and/or tribal jurisdiction to ensure coverage of at least two simultaneous contingencies. |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Explosive Device Response Operations
- Fatality Management
- Food and Agriculture Safety and Defense
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence Analysis and Production
- Intelligence/Information Sharing and Dissemination

-
- Isolation and Quarantine
 - Medical Surge
 - Onsite Incident Management
 - Planning
 - Public Health Laboratory Testing
 - Public Safety and Security Response
 - Restoration of Lifelines
 - WMD/Hazardous Materials Response and Decontamination

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CBRNE DETECTION

Capability Definition

The Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Detection capability provides the ability to detect CBRNE materials at points of illegal manufacture, transportation, and use. This capability includes the detection of CBR agents through area monitoring, but not by their effects (i.e., symptoms) on humans and animals which is addressed through the public and animal health capabilities. The CBRNE Detection target capability does not include actions taken to mitigate the consequences of a CBR (Chemical, Biological, Radiological) release or activities to render any CBRNE device safe.

The CBRNE Detection target capability is not just about technology, but rather the ability to recognize potential CBRNE threats through equipment, education, and effective protocols. The importance of training, communication, and close coordination with intelligence, public safety, public health, and international partners is recognized as critical enabling element factor of this capability. However, only the CBRNE detection specific tasks to these cross-cutting elements have been identified in this capability.

Definitions are as follows:

- **Transport:** The movement of CBRNE material outside and within the borders of the U.S. and its territories.
- **Manufacture:** The illegal production of CBRNE material within the borders of the U.S. and its territories.
- **Deployment:** The relocation of CBRNE material to desired operational areas, to include critical infrastructure and key resources. Deployment encompasses all activities from origin through destination.
- **Emplacement:** The act of positioning CBRNE material to execute an attack.
- **Use:** The employment of CBRNE material within the U.S. and its territories.

Outcome

Chemical, biological, radiological, nuclear, and/or explosive (CBRNE) materials are rapidly detected, identified, and safely managed at borders, critical locations, events, and incidents

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs) and Annex:

- ESF #1 Transportation
- ESF #2 Communications
- ESF #3 Public Works and Engineering
- ESF #5 Emergency Management
- ESF #8 Public Health and Medical Services
- ESF#10 Oil and Hazardous Materials Response
- ESF #11 Agriculture and Natural Resources
- ESF #12 Energy
- ESF #13 Public Safety and Security
- Terrorism Incident Law Enforcement and Investigation Annex

Capability Description

| Activity | Description |
|-------------------|--|
| Detect | Detect CBRNE material at points of manufacture, transportation, and use. |
| Characterize | Describe or portray the qualities of detected CBRNE material. |
| Develop Protocols | Establish CBRNE detection protocols and procedures. |
| Develop Standards | Establish CBRNE detection standards. |
| Warn | Provide CBRNE warning information to intelligence, public safety, and public health officials. |

Critical Tasks

| UTL# | Task |
|-------------------|--|
| Com.A 10 | Provide equipment acquisition and certification standards. |
| Com.A 12.3 | Develop regional coordination plans or activities that involve all Federal, tribal, State, local, and private stakeholders. |
| Com.C.1.1 | Develop procedures to facilitate the exchange of information and data among Federal, regional, State, local and tribal agencies. |
| Com.C.1.2 | Establish policies and procedures for communications and warnings. |
| Com.C.3.2 | Establish and maintain interoperable information systems network. |
| Com.D 1.4 | Develop technology standards for government and private sector. |
| Com.D.3.3 | Research and develop technologies for detecting chemical, biological and radiological, and explosive material. |
| Com.D.3.4 | Validate analytical methods to detect chemical, biological, radiological and nuclear material. |
| Pre.B.1 3.1.1.2.1 | Develop standards for CBRNE detection technologies, including sensitivity and selectivity standards. |
| Pre.B.1 3.1.1.4 | Prioritize CBRNE detection technology solution alternatives. |
| Pre.B.1 3.1.2 | Develop and implement protocols for resolving CBRNE alarms and the detection of suspect material. |
| Pre.B.1 3.1.2.1 | Establish coordination and/or mutual aid agreements with external CBRNE detection and alarm resolution capabilities. |
| Pre.B.1 3.1.2.2.1 | Identify key land, sea and air interdiction points (e.g., sea and air ports, border crossings, etc.). |
| Pre.B.1 3.1.3 | Develop and implement training to enable personnel to recognize the presence of CBRNE material (e.g., first responders, law enforcement, intelligence, and medical community). |
| Pre.B.1 3.1.3.1 | Establish key personnel training standards for CBRNE detection. |

| UTL# | Task |
|-----------------|--|
| Pre.B.1 3.1.3.3 | Provide CBRNE support equipment and threat device handling training to operations and investigation personnel. |
| Pre.B.1 3.2.1.4 | Provide stand-off detection technologies. |
| Pre.B.1 3.2.1.5 | Provide point detection technologies. |
| Pre.B.1 3.2.1.6 | Test and exercise CBRNE detection and resolution protocols regularly. |
| Pre.B.1 3.2.4.2 | Implement CBRNE detection and awareness programs for the public, private sector and key personnel (to include: safety and security personnel, first response personnel, and the intelligence community). |
| Pre.B.1 3.2.4.3 | Publish and distribute CBRNE detection awareness material. |
| Pre.B.1 3.2.5.1 | Coordinate CBRNE material threat and discovery information with intelligence, public safety, public health and other appropriate agencies. |
| Pre.B.1.4 | Inspect and monitor cargo at key interdiction points for potential CBRNE material. |
| Pre.B.1 4.1 | Identify CBRNE material at points of illegal manufacture, deployment, emplacement, or use within the U.S. and its territories. |
| Pre.B.1 4.1.1 | Detect the use of CBRNE material in a community and/or venue. |
| Pre.B.1 4.1.1.1 | Conduct ad hoc CBRNE material detection in a community and/or venue. |
| Pre.B.1 4.1.1.2 | Conduct continuous CBRNE material detection in a community and/or venue. |
| Pre.B.1 4.1.1.3 | Investigate a venue for the possible emplacement of a CBRNE device |
| Pre.B.1 4.1.2 | Characterize CBRNE material used in a community and/or venue. |
| Pre.B.1 4.1.3 | Provide CBRNE data to appropriate personnel, to include: intelligence community, law enforcement personnel, first responders, and the general public. |
| Pre.B.1 4.1.4 | Use intelligence information to focus CBRNE material searches and surveillance activities. |
| Pre.B.1 4.1.5 | Provide CBRNE material detection information that can be used for attribution efforts to appropriate personnel to include: law enforcement and intelligence community personnel. |
| Pre.B.1 4.1.6 | Use medical information (e.g., syndromic surveillance and medical diagnostic tests) to focus CBRNE detection capabilities. |
| Pre.B.1 4.1.7 | Detect illegal manufacturing of CBRNE material at potential manufacturing sites. |
| Pre.B.1 4.1.8 | Detect CBRNE material on personnel or items entering/boarding events, aircraft, mass transit, or other high impact targets. |
| Pre.B.1 4.2 | Identify material at key interdiction points requiring further inspection. |
| Pre.B.1 4.2.1 | Use intelligence information to target suspect containers or shipments. |
| Pre.B.1 4.2.2 | Screen material (e.g., baggage, mail, etc.) to detect CBRNE material at all ports of entry (e.g., sea and airports, border crossing points, etc.) and Critical Infrastructure/Key Resources (CI/KR). |

| UTL# | Task |
|-----------------|--|
| Pre.B.1 4.3 | Work collectively with foreign governments to target, pre-screen, and inspect shipments in foreign ports before departure to the U.S. (e.g., Container Security Initiative). |
| Pre.B.1 4.6 | Develop and implement global standards for cargo screening for CBRNE material. |
| Pre.B.2 2.1 | Detect the ground, air, and sea transport and/or deployment of CBRNE material into and within the U.S. and its territories. |
| Pre.B.3 3.4.1.2 | Screen people to detect CBRNE material at all ports of entry and at all Critical Infrastructure/Key Resources (CI/KR). |
| Pro.B.2 1.4 | Conduct CBRNE detection requirements analysis for Critical Infrastructure/Key Resources (CI/KR). |
| Pro.B.2 1.5 | Implement CBRNE detection capabilities, as deemed appropriate by assessments and threat levels, at required Critical Infrastructure/Key Resources (CI/KR). |
| Pro.A.2 4.2.1 | Assess prioritized critical infrastructure/key resources (CI/KR) for CBRNE detection requirement. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Technological shortfalls in CBRNE detection have been identified | Yes/No |
| A research and development program is in place to address the CBRNE detection technological shortfalls | Yes/No |
| There is a program to test and evaluate new technology in the appropriate operational environment | Yes/No |
| There is a program for the timely development of standards for emerging technology | Yes/No |
| A process has been developed to identify and integrate appropriate technology in to the operational environments | Yes/No |
| Appropriate personnel have been identified for CBRNE detection training, to include: <ul style="list-style-type: none"> ▪ Law enforcement personnel ▪ Transit police and security ▪ Fire personnel, HazMat personnel ▪ Public health professionals ▪ Private sector security ▪ Critical infrastructure employees | Yes/No |
| CBRNE detection training materials have been developed and validated | Yes/No |
| Percent of personnel trained to meet jurisdictional CBRNE detection requirements | Percent |
| Public education campaigns exist for CBRNE detection | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| CBRNE technical support is available (on-site or through “reach back”) | Yes/No |
| A standard list of CBRNE threats of concern has been developed | Yes/No |
| An appropriate level of CBRNE detection sensitivity has been identified for the identified threats of concern | Yes/No |
| CBRNE detection sensitivity thresholds comply with appropriate international, national, state, and local standards | Yes/No |
| Detection/surveillance thresholds have been set to the specified level of sensitivity | Yes/No |
| Key CBRNE detection interdiction points have been identified | Yes/No |
| Key interdiction points are assessed and updated on an annual basis | Annually |
| A regional CBRNE detection plan has been developed and coordinated | Yes/No |
| The regional CBRNE detection plan has been exercised | Yes/No |
| Protocols exist for resolving CBRNE detection alarms | Yes/No |
| Protocols have been developed and incorporated in plans to communicate CBRNE detection activities, locations, anomalies and their resolution to appropriate personnel (e.g., intelligence, law enforcement, and public health communities) | Yes/No |
| CBRNE detection plans were linked to CI/KR assessments | Yes/No |
| Procedures exist for CBRNE detection capabilities at CI/KR under various threat conditions | Yes/No |
| Integrated CBRNE detection architectures exist for all levels of government (Federal, State, local, tribal) | Yes/No |
| CBRNE detection interdiction sites have been assessed for potential circumvention | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--------------------|
| Percent of people and material (e.g., baggage, cargo, mail, etc.) screened for CBRNE material at all ports of entry and Critical Infrastructure/Key Resources (CI/KR) | Percent |
| Percent of checked baggage and cargo screened entering/boarding events, aircraft, mass transit, or other potential targets | Percent |
| Percent of passengers and event attendees screened entering/boarding events, aircraft, mass transit, or other potential targets | Percent |

| Performance Measure | Performance Metric |
|---|---------------------------|
| Percent of CBRNE alarms, or suspect material discoveries, at interdiction points that are resolved | Percent |
| Suspicious material is analyzed (either on-site or via laboratory support) | Yes/No |
| CBRNE detection interdiction sites have been assessed for potential circumvention | Yes/No |
| CBRNE detection efforts were informed by intelligence, public safety, and public health information | Yes/No |
| Accurate records are kept of all suspect issues or alarms and their resolution | Yes/No |
| Venues were inspected for potential CBRNE threats prior to major events | Yes/No |
| Ad-Hoc CBRNE Surveillance capabilities were deployed in response to potential threats | Yes/No Deployment Time |

Capability Elements

Personnel

- CBRNE detection operator personnel
- Laboratory staff for agent identification
- Border control and other targeted ‘defense layers’ personnel
- Appropriate critical infrastructure personnel
- Local law enforcement, first responders and medical communities

Planning

- Mutual aid agreements and/or memoranda of understanding (MAAs/MOUs), including protocols for coordination with intelligence community
- CBRNE detection standard operating procedures, including regional coordination plans and protocols for resolving alarms
- Public health and environmental laws/regulations
- Facility response plans as required by law (Superfund Amendment Reauthorization and Recovery Act Title III)
- Worker safety regulations
- Technological research and development process

Organization and Leadership

- National Incident Management System (NIMS)
- National Response Plan (NRP)
- Interim National Infrastructure Protection Plan (NIPP)
- Applicable legislation, plans, directives, policies, and procedures

Equipment and Systems

- Interoperable communications equipment
- Detection and monitoring equipment

- Laboratory testing equipment

Training

- National Incident Management System (NIMS)
- CBRNE materials/device training
- CBRNE detection equipment training
- CBRNE awareness training for appropriate public safety, critical infrastructure, and volunteer personnel

Exercises, Evaluations, and Corrective Actions

- Threat Awareness seminars to educate intelligence and law enforcement communities on possible CBRNE weapons acquisition, manufacture, transport and employment
- System of Red Team exercises to assess screening technologies and processes
- System for incorporating lessons learned into plans and procedures
- CBRNE detection exercises

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the improvised explosives device, chlorine tank explosion, aerosol anthrax, improvised nuclear device, and radiological dispersal. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- Prevention consists of those activities that serve to detect, deter, and disrupt terrorist threats or actions against the United States and its interests. These activities decrease the perpetrators' chance of success, mitigate attack impact, minimize attack visibility, increase the chance of apprehension or detection, and obstruct perpetrators' access to resources. Tasks in this area are important regardless of a single type of threat, adversary capability, time or location of incident. Similarly, these capabilities reflect many tasks routinely undertaken by law enforcement and related organizations as they conduct traditional all-hazards, all-crimes activities.
- Effective prevention depends on timely, accurate, and actionable information about the adversary, their operations, their support, potential targets, and methods of attack. Homeland security intelligence/information fusion is the overarching process of managing the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. Although the primary emphasis of fusion is to identify, deter, and respond to emerging terrorism-related threats and risks, a collateral benefit to Federal, State, local, and tribal entities is that it will support ongoing efforts to address non-terrorism-related, all-hazards, all-crimes issues.
- Both the Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the capability section and the Approaches for Large-Scale Events section have been omitted because there is no incident or large-scale event that necessarily occurs before these capabilities come in to play.
- Intelligence/information fusion is an ongoing, cyclical process that incorporates three primary capabilities: Information Gathering and Recognition of Indicators and Warnings; Intelligence Analysis and Production; and Intelligence/Information Sharing and Dissemination. The CBRNE Detection capability relates closely to all three stages of this process.
- All appropriate objectives and critical tasks will be exercised regularly at all levels in order to measure performance and demonstrate capability.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

Not Applicable

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|--|
| CBRNE detection technology R&D | Federal |
| Protocols to ensure coordination with intelligence community | Federal, State, local, tribal |
| Public Education program to help people recognize threats | Federal, State, local, tribal |
| CBRNE detection operator personnel | Federal, State, local, tribal |
| CBRNE detection and monitoring equipment | Federal, State, local, tribal |
| Training for personnel at interdiction points | Federal, State, local, tribal |
| Laboratory staff for agent identification | Federal, State, local |
| Laboratory testing equipment | Federal, regional, State |
| Mutual aid agreements and/or memoranda of understanding (MAAs/MOUs), including protocols for coordination with intelligence community | Federal, regional, State, local, tribal, private |
| CBRNE detection standard operating procedures, including regional coordination plans and protocols for resolving alarms | Federal, regional, State, local, tribal |
| Facility response plans as required by law (SARA Title III) | Federal, State, local, tribal, private |

Linked Capabilities

- Animal Health Emergency Support
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Environmental Health
- Epidemiological Surveillance and Investigation
- Explosive Device Response Operations
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence/Information Sharing and Dissemination
- Intelligence Analysis and Production
- Law Enforcement Investigation and Operations
- Medical Surge
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response

- Risk Management
- WMD/Hazardous Materials Response and Decontamination

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Protect Mission Area

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CRITICAL INFRASTRUCTURE PROTECTION (CIP)

Capability Definition

Critical Infrastructure Protection (CIP) capability enables public and private entities to identify, assess, prioritize, and protect critical infrastructure and key resources so they can detect, prevent, deter, degrade, and mitigate deliberate efforts to destroy, incapacitate, or exploit the Nation’s critical infrastructure and key resources.

Outcome

The risk to, vulnerability of, and consequence of attack to critical infrastructure are reduced through the identification of critical infrastructure; conduct, documentation, and standardization of risk assessments; prioritization of assets; decisions regarding protective and preventative programs; and implementation of protective and preventative plans.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs)/Annexes:

- ESF #1: Transportation
- ESF #2: Communications
- ESF #3: Public Works and Engineering
- ESF #4: Firefighting
- ESF #5: Emergency Management
- ESF #8: Public Health and Medical Services
- ESF #10: Oil and Hazardous Materials Response
- ESF #11: Agriculture and Natural Resources
- ESF #12: Energy
- ESF #13: Public Safety and Security
- ESF #14: Long-Term Community Recovery and Mitigation
- Cyber Incident Annex
- Terrorism Incident Law Enforcement and Investigation Annex

Capability Description

| Activity | Description |
|-----------------|--|
| Identification | Identify critical infrastructure and key resources (CI/KRs) (including ‘top-screen’ process if many assets and systems) |
| Risk assessment | Assess risk to CI/KRs (including assessments of threat, vulnerability, and consequences). |
| Prioritization | Prioritize CI/KRs based on risk assessment. |
| Protection | <ul style="list-style-type: none"> ▪ Based on prioritization and regulations, develop protective or preventive plans and programs to detect, deter, degrade, or mitigate risk to priority CI/KRs. |

| Activity | Description |
|--------------------------|---|
| | <ul style="list-style-type: none"> Implement and exercise protective or preventive plans to detect, deter, degrade, or mitigate risk to priority CI/KRs. |
| Partnering | Partner/coordinate with Federal, State, local, and tribal entities and the private sector. |
| Research and development | Initiate critical infrastructure protection (CIP)-related research and development to address protection needs. |

Critical Tasks

| UTL# | Task |
|-------------|--|
| Pro.A.1 1 | Identify Critical Infrastructure/Key Resources (CI/KRs) within the Nation, region, State, or local area. |
| Pro.A.1 1.4 | Develop sector-specific security goals. |
| Pro.A.1 1.5 | Develop selection criteria to identify Critical Infrastructure/Key Resources (CI/KRs). |
| Pro.A.1 1.6 | Conduct a “top-screen” consequence analysis to determine which assets and systems are high consequence and therefore require risk assessment. |
| Pro.A.1 1.7 | Develop and implement surge capacity plans to increase critical infrastructure protection (CIP) capacity during a crisis. |
| Pro.A.1 1.8 | Develop and operate intergovernmental partnerships for critical infrastructure protection (CIP) activities. |
| Pro.A.1 1.9 | Establish a national critical infrastructure protection (CIP) research and development program. |
| Pro.A.2 1.3 | Conduct detailed threat and vulnerability assessments on high-consequence Critical Infrastructure/Key Resources (CI/KRs). |
| Pro.A.2 3.1 | Determine risk profiles of high-consequence Critical Infrastructure/Key Resources (CI/KRs). |
| Pro.A.2 3.3 | Conduct an interdependency analysis to determine the relationship of risks within and across sectors. |
| Pro.A.2 4 | Prioritize high-risk Critical Infrastructure/Key Resources (CI/KRs) for consideration of protective measures. |
| Pro.A.2 5 | Share the results of interdependency assessments within and across Critical Infrastructure/Key Resource (CI/KR) sectors. |
| Pro.A.3 1 | Develop and operate public-private partnerships for critical infrastructure protection (CIP) activities. |
| Pro.B.1 1 | Develop protective programs and plans to reduce the general level of risk for the highest risk Critical Infrastructure/Key Resources (CI/KRs). |

| UTL# | Task |
|-------------|---|
| Pro.B.1 1.1 | Develop protective programs and plans to respond to and recover from specific threat-initiated actions. |
| Pro.B.2 1 | Implement detection measures such as inspection surveillance, employee monitoring, and security counterintelligence. |
| Pro.B.2 2 | Implement deterrence and defense protective measures, including measures to prevent an attack and to mitigate or reduce impact. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---|
| The office is adequately staffed to implement the critical infrastructure protection (CIP) Plan. | Yes/No |
| The critical infrastructure protection (CIP) plan is developed with the appropriate components. | Within one year of issuance of approved risk assessment methodology |
| An appropriate risk methodology (i.e., takes into account the threats, consequences, and vulnerabilities) has been developed and approved by the Federal Government for critical infrastructure protection (CIP). | Yes/No |
| If many assets and systems have been identified, a consequence or “top-screen” analysis has been performed. | Yes/No |
| Potential threats to Critical Infrastructure/Key Resources (CI/KRs) and high consequence systems have been identified. | Yes/No |
| A vulnerability assessment tool has been developed. | Yes/No |
| Critical Infrastructure/Key Resources (CI/KRs) and high consequence systems are normalized and prioritized for consideration of protective programs. | Yes/No |
| Frequency of exercises to test the effectiveness of protective measures | Annually |
| Government Coordinating Councils (GCCs): <ul style="list-style-type: none"> ▪ Have been established for each sector. ▪ Reviewed each sector’s CIP Plan. | Yes/No |

| Sector Coordinating Councils (SCC) have: <ul style="list-style-type: none"> ▪ Been established for each sector. ▪ Reviewed each sector’s CIP Plan. | Yes/No |
|--|--|
| Preparedness Measure | Preparedness Metric |
| A mechanism for coordinating CIP efforts has been established for Federal and State authorities. | Yes/No |
| Sector security goals have been established for each sector. | Yes/No |
| The national CIP Research and Development Plan has been established. | Yes/No |
| A CIP information-sharing mechanism has been established. | Yes/No |
| Percentage of high-risk assets and systems for which protective programs and/or mitigation strategies have been developed | 100% |
| Memoranda of Understanding (MOUs) to ensure cooperation with respect to CIP | Signed by all relevant parties within one year of official Target Capabilities List (TCL) publication. |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Procedures for analyzing threats, vulnerabilities, consequences, and risks (after updated threat information is received and after incidents) are in place and implemented | Yes/No |
| Percentage of high-consequence assets that have completed vulnerability assessments | 100% |
| Percentage of high-risk assets for which risk has been measurably reduced | 100% |
| Percentage of high-consequence assets that have completed a risk assessment | 100% |
| Risk analysis results were disseminated to the proper authorities. | Yes/No |
| Percentage of high-risk assets and systems for which protective programs and/or mitigation strategies have been implemented | 100% |
| Percentage of high-risk assets that have active protective programs to measurably reduce risk | 100% |

| | |
|---|------|
| Percentage of high-risk assets and systems for which plans for surge capacity during a crisis have been developed | 100% |
| Percentage of high-risk assets and systems for which continuity of operations plans have been developed | 100% |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- CIP planning personnel
- Risk analysis personnel
- Personnel to complete vulnerability assessments
- Infrastructure security specialists
- Infrastructure intelligence analysts

Planning

- National Infrastructure Protection Plan (with sector-specific annexes)
- CIP Research and Development Plan
- State and/or Regional CIP plans
- Risk assessment (including vulnerability, consequences and threats) standards
- Memorandums of Understanding (MOUs) to ensure cooperation with respect to CIP

Equipment

- Equipment for detection
- Equipment for protection
- Equipment for mitigation

Training

- Vulnerability assessment training
- Risk assessment training

Exercises

- System to “Red Team” critical infrastructure protective measures and technology
- Critical infrastructure attack exercises

Planning Assumptions

- Critical infrastructure protection (CIP) may be applicable to any of the 15 National Planning Scenarios, as any terrorist, accidental, or natural catastrophic event could disrupt or destroy critical infrastructure assets or key resources in one or more critical infrastructure/key resource (CI/KR) sectors. However, for purposes of determining National Targets, no scenarios were specifically considered, because much of the CIP activities take place on an ongoing basis between incidents. Although protective activities are also implemented in response to particular threats or events, information regarding whether an affected assets is considered “critical” needs to be provided before any implementation can occur.

- Under the CIP process defined in the Interim NIPP, protection of CI/KR requires an initial determination of whether the asset/system in question is “critical” and risks being posed. Therefore, protection activities are conducted on a case-by-case basis.
- National Targets for Critical Infrastructure Protection will be developed in coordination with the finalization and implementation of the National Infrastructure Protection Plan (NIPP).
- Resource needs at the state and local level may be determined through the development of a model that takes into account the presence and density of CI/KR assets in various geographic areas.
- The understanding of criticality related to interdependent systems continues to evolve. Additional guidance will be provided as it is developed.
- State and local law enforcement is available to support CI/KR protection efforts, as required.
- Critical Infrastructure information is able to be shared between Federal and State authorities and the private sector in a protected and secure way.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability
Not applicable

Approaches for Large-Scale Events

Unlike other Capabilities, CIP does not focus on post-event actions (see instead “Restoration of Lifelines, etc), but the types of incidents that occur can play a role in CIP planning and risk assessment, as the Critical Tasks detail.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| <i>The information presented in this table will be refined as the National Infrastructure Protection Plan (NIPP) is finalized and implemented.</i> | |
| Critical infrastructure protection (CIP) planning personnel | Office at the Department of Homeland Security (DHS), each Federal agency with CIP responsibilities. Each State office with CIP responsibilities |
| Public and private sector coordinators | Office at the Department of Homeland Security (DHS), each Federal agency with CIP responsibilities Each State with CIP responsibilities |
| Risk analysis personnel | Federal – part of DHS and other Federal agencies. State -- Number based on state needs. |
| Personnel to complete vulnerability assessments | Federal – part of DHS and other Federal agencies. State/local/private -- Number based on state needs. |

| Resource | Assigned Level and Quantity |
|---|---|
| Infrastructure security specialists | Federal – part of DHS and other Federal agencies. State/local/private -- Number based on state needs. |
| Infrastructure intelligence analysts | Federal -- Within DHS and relevant federal agencies State -- Number based on state needs. |
| National Infrastructure Protection Plan (w/ Sector-Specific annexes) | Completed per Homeland Security Presidential Directive (HSPD)-7. |
| CIP Research and Development Plan | Completed per HSPD-7. |
| CIP Plans | State and/or Regional |
| Risk assessment (including vulnerability, consequences and threats) standards | Standards disseminated by national CIP Manager within one year of official Target Capabilities List (TCL) publication. |
| Equipment for detection | Federal/State/Local/private sector – Based on outcomes of risk assessment. |
| Equipment for protection | Federal/State/Local/private sector – Based on outcomes of risk assessment. |
| Equipment for mitigation | Federal/State/Local/private sector – Based on outcomes of risk assessment. |
| Vulnerability assessment training | Initial national training program for Federal, State, and local personnel developed within one year of Target Capabilities List (TCL) publication. State/Local/private sector -- Participation in training program based on state needs. |
| Risk assessment training | Initial national training program for Federal and State personnel developed within 1 year of TCL publication. State/Local -- Participation in training program based on state needs. |
| System to Red Team critical infrastructure protective measures and technology | Federal – National program developed within one year of Target Capabilities List (TCL) publication. |
| Critical infrastructure prevention/protection attack exercises | Federal -- Develop program compliant with Homeland Security Exercise and Evaluation Program (HSEEP) within one year of Target Capabilities List (TCL) publication. |

| Resource | Assigned Level and Quantity |
|----------|--|
| | <p>State -- Participate in Federal exercises, as appropriate. Develop state-based HSEEP-compliant program with one year of Federal program publication.</p> <p>Local/private sector -- Participate in Federal and State exercises, as appropriate.</p> |

Linked Capabilities

- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Explosive Device Response Operations
- Food and Agriculture Safety and Defense
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence Analysis and Production
- Intelligence/Information Sharing and Dissemination
- Law Enforcement Investigations and Operations
- Planning
- Public Safety and Security Response
- Restoration of Lifelines
- Risk Management
- Structural Damage and Mitigation Assessment

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FOOD AND AGRICULTURE SAFETY AND DEFENSE

Capability Definition

Food and Agriculture Safety and Defense Is the capability to prevent, protect against, respond to, and recover from chemical, biological and radiological contaminants, and other hazards that affect the safety of food and agricultural products. This includes the timely eradication of outbreaks of crop diseases/pests, assessments of the integrity of the food producing industry, the removal and disposal of potentially compromised materials from the U.S. food supply, and decontamination of affected food manufacturing facilities or retail points of purchase or service. This also includes appropriate laboratory surveillance to detect human illness or food product contamination. It is accomplished concurrent to protecting public health and maintaining domestic and international confidence in the U.S. commercial food supply. Additionally, the public is provided with accurate and timely notification and instructions related to an event and appropriate steps to follow with regard to disposal of affected food products and appropriate decontamination procedures.

Outcome

Threats to food and agriculture safety are prevented, mitigated, and eradicated; trade in agricultural products is restored; affected products are disposed of; affected facilities are decontaminated; public, animal, and plant health are protected, notification of the event and instructions of appropriate actions are effectively communicated with all stakeholders; and confidence in the U.S. food supply is maintained.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs)/Annexes:

- ESF #8: Public Health and Medical Services
- ESF #11: Agriculture and Natural Resources
- Biological Incident Annex
- Interim Draft Food and Agriculture Incident Annex
- Terrorism Incident Law Enforcement and Investigation Annex

Capability Description

| Activity | Description |
|--|--|
| Disease surveillance | <ul style="list-style-type: none"> ▪ Determination of the extent of an outbreak. ▪ Timely detection of new cases. |
| Food supply surveillance and investigation | <ul style="list-style-type: none"> ▪ Collection of product samples for testing for the presence of chemical, biological, or radiological agents. ▪ Management of samples to ensure utilization of appropriate collection |

| Activity | Description |
|-------------------------------|---|
| | <p>procedures and chain of custody.</p> <ul style="list-style-type: none"> ▪ Traceback/Trace forward of contaminated food products. ▪ Environmental assessment of contaminated food facility. |
| Epidemiological investigation | <ul style="list-style-type: none"> ▪ Investigation of disease and its determinants in a population. ▪ Characterization, case classification, and identification of a source of a public health event. ▪ Determining of source of a plant disease event. ▪ Defining the population at risk. |
| Laboratory testing | <ul style="list-style-type: none"> ▪ Testing of food product samples to detect the presence of a contaminant or to confirm the identification of an agent. ▪ Testing of plants/crops for diseases. ▪ Managing samples to ensure chain of custody requirements |
| Vulnerability assessments | <ul style="list-style-type: none"> ▪ Assessing vulnerabilities within the farm-to-table continuum for specific commodities in order to identify potential mitigation strategies or preventive measures. |
| Logistical support | <ul style="list-style-type: none"> ▪ Coordination with Federal, State, tribal, local and private sector partners for logistical support and supplies in all types of disasters. |
| Operations management | <ul style="list-style-type: none"> ▪ Using the Incident Command System to mobilize and coordinate logistics, operations, and planning in the event of an incident. |
| Prevention | <ul style="list-style-type: none"> ▪ Deterring and preventing acts of accidental contamination or intentional introduction of agents into foods or crops. |
| Protection | <ul style="list-style-type: none"> ▪ Implementing detection measures to reduce the likelihood of contamination or an attack. ▪ Developing plans, procedures, and protocols for action in the event of contamination or an attack to limit the impacts. ▪ Training to convey scientific and operational information regarding higher likelihood events to responders and stakeholders prior to an event occurring |

Critical Tasks

| UTL# | Task |
|---------------|---|
| Pro.A.2 1 | Conduct vulnerability assessments of critical assets and key resources. |
| Pro.B.2 1.1.2 | Manage surveillance activities for agriculture and natural resources. |
| Pro.B.2 1.1.3 | Develop methods for emergency assessment of firms that manufacture, prepare, and hold U.S. Department of Agriculture (USDA) regulated commodities |
| Pro.B.2 1.1.5 | Develop methods for emergency assessment of firms that manufacture, prepare, and hold U.S. Food and Drug Administration (FDA)-regulated |

| UTL# | Task |
|-----------------|---|
| | commodities. |
| Pro.C.1 3.1.2.1 | Provide laboratory and diagnostic support, subject matter expertise, and technical assistance. |
| Pro.C.1 3.2.1 | Coordinate investigation activities. |
| Pro.C.1 3.2.3.3 | Coordinate with Federal, State, and local agencies to ensure the safety and security of meat, poultry, and egg products in retail groceries and food service establishments and institutions. |
| Pro.C.1 3.2.3.4 | Coordinate with Federal, State, and local agencies to ensure the safety and security of products in retail and food service establishments and institutions. |
| Pro.C.1 3.2.3.6 | Ensure the safety, efficacy, and security of regulated foods, the blood supply, and drugs, medical devices, and other U.S. Department of Health and Human Services (HHS)-regulated products. |
| Pro.C.1 3.2.3.7 | Ensure the Nation’s commercial supply of food is safe and secure following an incident of national significance. |
| Pro.C.1 4.1.3 | Integrate surveillance findings related to human health, animal health, food, agriculture, and environment. |
| Pro.C.1 4.2.2 | Compile information about threats to food. |
| Res.A.1 1.2.2 | Develop guidelines or procedures for properly conducting a coordinated outbreak investigation. |
| Res.A.1 3.1.2 | Coordinate evidence preservation procedures. |
| Res.A.1 3.1.2.1 | Maintain chain-of-custody procedures. |
| Res.A.1 3.3.1 | Ensure close coordination and cooperation among regional, State, Federal, and international agencies and with the private sector and nongovernmental associations to facilitate response efforts. |
| Res.A.1 3.4.5 | Direct agricultural processes for surveillance and testing and isolation or quarantine for threats to agricultural assets and the food supply. |
| Res.A.1 4.5.1.1 | Inspect the safety and security of the food infrastructure in the affected area. |
| Res.A.1 4.5.1.2 | Inspect the safety and security of the agricultural infrastructure in the affected area. |
| Res.A.1 4.5.2 | Inspect and monitor meat, poultry, and egg establishments that can continue to operate in the affected area. |
| Res.A.1 4.5.3 | Inspect food facilities that can continue to operate in the affected area. |
| Res.A.1 4.5.4 | Conduct inspection and monitoring of food establishments in affected areas. |
| Res.A.1 4.5.5 | Use laboratory testing and field investigations to identify products that are safe and fit for human consumption. |

| UTL# | Task |
|-----------------|---|
| Res.A.1 4.5.6 | Conduct product tracing to determine the source, destination, and disposition of adulterated or contaminated products. |
| Res.A.1 4.5.7 | Ensure the adequacy of resources. |
| Res.B.1 1.2.8 | Develop plans and procedures for worker health and safety. |
| Res.B.1 1.4.2 | Develop, adapt, or implement plans to support IC, UC, or other agencies as needed. |
| Res.B.1 3 | Activate the incident command system. |
| Res.B.1 4 | Activate the Multi-Agency Coordination Center (MACC) (e.g., Emergency Operations Center (EOC)). |
| Res.B.1 6 | Conduct emergency management at MACC. |
| Res.B.1 6.1.1.5 | Provide direction, information, and support as appropriate to incident command (IC) or unified command (UC) and joint field offices. |
| Res.B.2 1.5 | Develop plans and procedures to respond to a disease outbreak. |
| Res.B.2 3.6.1 | Coordinate food response and recovery. |
| Res.B.2 3.6.2 | Coordinate food facility decontamination. |
| Res.B.2 3.6.3 | Coordinate cleaning and decontamination of affected food facilities. |
| Res.B.2 3.6.4 | Coordinate the disposal of contaminated food. |
| Res.B.2 3.6.5 | Request subject matter expertise from supporting agencies to assist in the response and recovery effort. |
| Res.B.2 3.6.7 | Coordinate and provide food and agricultural response support. |
| Res.B.2 5.5 | Conduct decontamination. |
| Res.B.2 5.5.1 | Identify assets for decontamination activities. |
| Res.B.2 5.6.1 | Perform clean-up operations |
| Res.B.2 5.6.2 | Implement hazardous material disposal plan. |
| Res.B.2 9.1.1 | Determine the need for a food embargo or detention. |
| Res.B.2 9.1.2 | Determine the need for food condemnation, retention, or seizure. |
| Res.B.2 9.1.3 | Determine the need to stop the movement of food. |
| Res.B.2 9.1.4 | Provide food safety and security response support. |
| Res.B.2 9.2.1 | Control all identified Food Safety and Inspection Service-inspected products at inspected establishments that are suspected of being contaminated through product recall, administrative detention, and plant closures. |

| UTL# | Task |
|----------------|---|
| Res.B.2 9.2.2 | Control any foodstuffs or other HHS-regulated products suspected of being contaminated following an establishment’s inspections through product recall, administrative detention, and plant closures. |
| Res.B.2 9.2.3 | Control all identified products at inspected facilities suspected of being contaminated through product recall and administrative detention. |
| Res.B.2 10.2.3 | Stop all interstate movement of regulated animals and plant articles and means of conveyance as needed. |
| Res.B.5 1 | Develop plans, procedures, and policies for coordinating, managing, and disseminating public information |
| Res.B.5 1.1 | Prepare emergency public information plans |
| Res.B.5 1.1.1 | Plan and provide for external media support and operations |
| Res.B.5 1.1.3 | Develop a communication network with State homeland security departments |
| Res.B.5 1.2 | Develop crisis communications plan |
| Res.B.5 1.3 | Develop and maintain emergency declaration protocols and templates |
| Res.B.5 1.3.1 | Establish regional and State plans and protocols and requests for assistance |
| Rec.C.4 3 | Coordinate agricultural recovery programs. |
| Rec.C.4 6.1 | Use the results from a food sample analysis to determine the breadth of contamination. |
| Rec.C.4 6.3 | Provide for embargoed food storage. |
| Rec.C.4 6.5 | Dispose of contaminated food. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Food defense plans are available that identify roles and responsibilities of all stakeholders (i.e. government, academia, and private sector). | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---|
| Food defense plans are available that identify roles and responsibilities of all stakeholders (i.e. government, academia, and private sector). | Yes/No |
| <p>Procedures are in place for the following:</p> <ul style="list-style-type: none"> ▪ Sample collection ▪ Chain of custody of laboratory samples ▪ After hours receipt of samples ▪ Triaging samples dependent on priority ▪ Traceback/trace forward investigations ▪ Rapidly informing the public once the contaminated food has been identified ▪ Coordinating public communications between government, academia, and the private sector ▪ Controlling contaminated products (i.e. seizure, embargo, condemnation, administrative detention) ▪ Appropriate disposal of affected food and/or agricultural products ▪ Appropriate decontamination of affected food facilities. ▪ Quick recall of affected food or agricultural products from the marketplace ▪ Verifying effectiveness and timeliness of food and agricultural product recalls | <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> |
| Memorandums of agreements are in place to facilitate response. | Yes/No |
| Field staff or other designated first responders have appropriate qualifications. | Yes/No |
| Field staff or other designated first responders have hazard awareness training. | Yes/No |
| Redundant emergency communication capabilities are in place | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Time to begin epidemiological investigation from time reported to health department. | 3 hours |
| Time to conduct epidemiological investigation from time reported to health department. | 2 – 3 days |

| Performance Measure | Performance Metric |
|---|---|
| Time for samples to reach the laboratory. | Up to 24 hours |
| Time to begin analysis after samples reach the lab. | 1 hour |
| Lab has been notified that samples are being sent. | Yes/No |
| Time for laboratory samples to be analyzed. | Dependent on type of contaminant and whether screening and/or confirmatory analysis conducted |
| Federal/State authorities had access to laboratories with validated methods for detection/identification of pathogens, chemical, biological, and radiological contaminants. | Yes/No |
| Length of time to initiate traceback investigation once notified of contaminated food product involved. | 1 hour |
| Length of time to initiate trace forward investigation once notified of contaminated food product involved. | 1 hour |
| Boilerplate consumer messages were developed. | Yes/No |
| Food facilities potentially affected were identified. | Yes/No |
| Assets for decontamination procedures were identified. | Yes/No |
| Decontamination was conducted in accordance with local protocol for all contaminated personnel, equipment and animals. | Yes/No |
| Determination of quantity of food product was returned. | Yes/No |
| Protective gear was available for field staff or other designated first responders. | Yes/No |
| Appropriate number of trained personnel were identified to respond to the State or local EOC and possibly the Joint Operations Facility in support of a response and recovery effort. | Yes/No |
| The FBI was notified if the event appeared to be due to intentional contamination. | 6-12 hours |
| Hazardous Material Disposal Plan was implemented. | Yes/No |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Human Disease Surveillance Team
- Food Investigation Team
- Decontamination Team
- Disposal Team
- Laboratory personnel for sample analysis
- Laboratory personnel for confirmatory testing
- Food Emergency Response Network (FERN) reference laboratories
- Scientific resources from CDC, EPA, FDA, and USDA
- Risk Communication Team
- Embargo/Recall Team
- Public information staff
- Law enforcement to secure the scene
- Law enforcement to investigate the event
- Information technology (IT) support
- Transportation support
- Microbiologists, toxicologists, food technologists, veterinarians, and epidemiologists

Organizations

- Incident command
- FDA emergency operations staff
- FDA Office of Criminal Investigations
- Centers for Disease Control and Prevention
- U.S. Department of Agriculture (USDA) Emergency Operations Center (EOC)
- USDA Office of the Inspector General
- USDA Food Safety Inspection Service (FSIS) Emergency Operations Center (EOC)
- FBI Strategic Information and Operations Center (SIOC)
- State and Local Public Health and Agriculture agencies
- State and Local EOC's
- PulseNet national network of public health and food regulatory agency laboratories

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios except for blister agents and nerve agents, the capability planning factors were developed from an in-depth analysis of the Food Contamination scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
 - The capability applies to a wide range of incidents and emergencies including accidental or deliberate disease outbreaks, natural disasters, nuclear and conventional events with potential for contamination of the food supply.
-

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- The identification of an intentional contamination incident involving a food product in the U.S. would have national implications. Because of the movement of food products around the US, it is highly probable that multiple food facilities in multiple States would be contaminated. Even States that eventually are found to have no contaminated product will initially require a stepped up effort to ensure that no contaminated product is in their State. If terrorists were to introduce a chemical or biological agent into a food product at multiple sites simultaneously, the requirements for resources would increase proportionately and exist in many States simultaneously. The requirements for tactical (incident command) resources will increase proportionately with the amount of product/products contaminated.
 - It is likely that States would share resources, yet States would have to balance the sharing of resources with their need to protect public health within their State. The amount of tactical resource requirements would vary depending on the concentration of food facilities. In high concentration areas, the spread may be rapid and many food facilities that purchased contaminated food may be affected. In areas with low concentration of food facilities/people, logistical obstacles such as driving time or distance between involved locations may present additional challenges. The multiplication factors used to gear up from a single point introduction incident to a multiple (national) site introduction assumes resource requirements to increase proportionately with the number of introductions. In estimating national resource requirements, it was assumed the scenario would affect 25 States directly, but all 50 States would have increased workload. The time to resolve the scenario would vary depending on number of site introductions and multiple different food items contaminated.
 - This scenario is very limited in scope and only lists a food commodity regulated by the U.S. Department of Agriculture (ground beef). The Food and Drug Administration regulates 80 percent of the nation's food supply – everything except meat, poultry, and egg products which are regulated by USDA. Other scenarios could have potentially more far reaching effects. This is based on vulnerability assessments conducted by FDA and USDA.
 - Assume all response personnel in key positions are able to respond to their respective response positions after the contaminant has been introduced and they respond as expected.
 - Assume that sector partners are connected to an information sharing and analysis or fusion system concept where preventative and protective measure information is proactively being shared.
 - Assume that Multi-Agency Coordination is adequately being addressed at the State, Federal and Local levels and the agencies are coordinating as expected.
 - The following information is needed to effectively detect/respond to/recover from to an event:
 - Quantity of product affected
 - Distribution of product
 - Product type or types contaminated
 - Laboratory capability
 - Ability to determine the cause of illness
 - Ability to determine the food item associated with illness or to rule out certain food items
-

- Ability to traceback product
 - Ability to trace forward product
 - Ability to effectively recall all affected product
 - Appropriate disposal of recalled product
 - Appropriate decontamination of food facility or other locations where food was available for purchase
 - Risk communication to consumers about appropriate food disposal instructions
- Recovery Timeline could potentially be months due to the breadth of the event
 - Communication with our international partners

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Food Contamination)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|----------------------------------|--|--|--|
| Incident Command | Fully Expanded incident command system (ICS) | <u>Federal</u> Sufficient numbers to respond to 25 State incident <u>State</u> Sufficient numbers to respond to 25 State incident. <u>Additional staff</u> 4-6 SME* per 24 hours 4-6 policy staff per 24 hours *SMEs are microbiologists, toxicologists, food technologists, veterinarians, epidemiologists, etc... | Assume that normal staffing for activation of all appropriate emergency operation centers (EOCs) is in place. In addition to normal staffing, Subject Matter Experts (SMEs) and policy staff are needed to support the response. <u>Additional staff</u> 4-6 SME* per 24 hours 4-6 policy staff per 24 hours |
| FDA Emergency Operations Center | To manage the FDA Emergency Operations Center facility | Based on staffing for a one month period In additional to normal staffing, the EOC would need 8-10 people/8 hour shift | 24-30 additional staff |
| USDA Emergency Operations Center | To manage the USDA | Based on staffing for a one month period | |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---------------------------------------|--|---|--|
| | Emergency Operations Facility | In additional to normal staffing, the EOC would need 7 SMEs/8 hour shift | 21 additional staff |
| USDA/FSIS Emergency Operations Center | To manage the FSIS Emergency Operations Center | Based on staffing for a one month period. In additional to normal staffing, the EOC would need 7 SMEs/8 hour shift. | 21 additional staff |
| State Emergency Operations Centers | To manage the response within each State | 60 Staff is the normal operating number. In addition to normal staffing, 6-8 SMEs and policy staff would be needed/ 8 hour shift | 18-24 additional staff |
| Human disease surveillance personnel | Track all reportable disease and specified syndromes within a defined area | 1 supervisor (MD, PhD, or Doctor of Veterinary Medicine (DVM)) per 8 hour shift, 2 epidemiologists per 8 hour shift, 1 IT staff per 8 hour shift per team, 1 statistician per 8 hour shift per team | Assume 100% staff needs for 30 days at 25 locations All 30 days: 20 supervisors 40 epidemiologists 20 IT staff 20 statisticians |
| Food Investigation Team | Coordinated Federal/State/local response to food facilities, conduct investigations, and collect samples at food facilities in all 50 States. Initially all 50 states will be on heightened alert and will be investigating food facilities in each State. | 25 field teams of 4 people per food facility for 2 days to collect traceback and trace forward information and take product samples. Teams may be split in order to cover a larger number of facilities. Assume 1000 food facilities per State are potentially contaminated. | 100 staff/state x 50 states = 5000 staff |
| Decontamination Team | Coordinated Federal/State/local response at all affected food facilities in 25 States | Field team of 4 people per affected facility. Assume 10 teams/State. Assume that decontamination takes 2 days per facility. Assume 100 food facilities per State are | 40 staff/State x 25 States = 1000 staff 5 SME/State x 25 states = 125 staff 112 supervisors |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|---|---|
| | | contaminated. Assume 5 SMEs per State Assume 1 supervisor per 10 employees | |
| Disposal Team | Coordinated Federal/State/local response to dispose of affected food products in 25 States | Field team of 4 people per disposal site. Assume 50 sites per State. Also assume 5 semi-tractor trailers are needed per affected facility. Assume 100 facilities per state have product that needs to be properly disposed. Assume 5 SME per State Assume 1 supervisor per 10 employees | 200 staff/State x 25 States = 5000 staff 500 semi-tractor trailers are needed 5 SME x 25 States = 125 staff 512 supervisors |
| Laboratory Personnel (Sample Analysis) | Capability to analyze 200 samples/ lab/ week in each of 50 states | 20 lab analysts/State lab Assume at least one Food Emergency Response Network lab per State Assume 1 supervisor per 10 employees | 1000 laboratory analysts 100 supervisors |
| Laboratory Personnel (Confirmatory Testing) PulseNet, etc | Capability to analyze 50 confirmatory samples/ lab/ week in each of 50 States | 5 lab analysts/State lab Assume 1 supervisor per 10 employees | 250 laboratory analysts 25 supervisors |
| Risk Communication Team | Coordinated Federal/State response in 50 states | 5-10/state 5 per Federal agency involved (Assume 5 Federal agencies are involved) | 5-10/State x 50 states = 250-500 staff at state level 5/Federal agency x 5 Federal agencies = 25 staff at federal level |
| Embargo/Recall Team | Coordinated Federal/State/local response in 25 States | 10 compliance officers/State 5 recall staff/State 5 recall staff at Federal level at HQ 6-10 Federal compliance officers (FDA and USDA)/State | 10 compliance officers/State x 25 states =250 compliance officers at the State level 5 x 25 = 125 recall staff/State 5 x 25 = 125 recall staff at Federal level |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|---|---|
| | | | 6-10 x 25 = 150-250 Federal compliance officers participating at the state level |
| Public Information Staff | Coordinated Federal/State/local response in 50 states | 4 staff /8 hour shift at state level 5 staff per Federal agency (Assume 5 Federal agencies are involved) | 12 staff/24 hours for each state = 600 staff total 25 staff at federal level |
| Law enforcement securing of scene | Coordinated Federal/State/local response in 25 states | 2 staff per contaminated facility Assume 100 facilities are contaminated per State | 2 staff x 100 facilities x 25 States = 500 personnel |
| Law enforcement investigation of event | Coordinated Federal/State/local response in 25 states | 2 staff per contaminated facility Assume 100 facilities are contaminated per state | 2 staff x 100 facilities x 25 States = 500 personnel |
| IT Support | 25 States | One per 20 staff One Blackberry, one cell phone, one laptop, and one portable printer for each person deployed | 700 IT support staff 12,000 blackberries 12,000 cell phones 12,000 laptops 12,000 portable printers |
| Additional Transportation Needs | Vehicles to transport personnel within 25 States | One vehicle per two people deployed | 6,000 vehicles |

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|--|
| Incident Command | All 50 states would be on heightened alert. Full Staffing. |
| Food and Drug Administration (FDA) Emergency Operations Staff | Single Site in Rockville, MD. 24-30 support staff. This is in addition to normal staffing of an EOC. 8-10 support staff/8 hour shift. This includes SMEs and policy staff |

| Resource | Assigned Level and Quantity |
|---|--|
| <p>United States Department of Agriculture (USDA) Emergency Operations Center</p> | <p>Single Site in Washington, DC. 21 additional Staff. Based on staffing for a one month period In additional to normal staffing, the EOC would need 7 SMEs/8 hour shift</p> |
| <p>State Emergency Operations Center (EOC)</p> | <p>60 staff is the normal operating number</p> |
| <p>USDA/ Food Safety Inspection Service (FSIS) Emergency Operations Center</p> | <p>Single Site in Washington, DC. 21 additional staff. In additional to normal staffing, the EOC would need 7 SMEs/8 hour shift.</p> |
| <p>Human Disease Surveillance Team</p> | <p>All 50 States would be affected. 25 States with contaminated products and/or human illness. Surveillance would be conducted in all 50 States. Assume 100% staff needs for 30 days at 50 locations All 30 days: 40 supervisors 80 epidemiologists 40 IT staff 40 statisticians 1 supervisor (MD, PhD, or DVM) per 8 hour shift, 2 epidemiologists per 8 hour shift, 1 IT staff per 8 hour shift per team, 1 statistician per 8 hour shift per team</p> |
| <p>Food Investigation Team</p> | <p>Initially all 50 States will be on heightened alert and will be investigating food facilities in each State. 100 staff/State x 50 States = 5000 staff. 25 field teams of 4 people per food facility for 2 days to collect traceback and trace forward information and take product samples. Teams may be split in order to cover a larger number of facilities. Assume 1000 food facilities per state are potentially contaminated. Assume 1 supervisor /10 staff</p> |

| Resource | Assigned Level and Quantity |
|--|--|
| Decontamination Team | <p>25 states with contaminated product. 40 staff/State x 25 states = 1000 staff. 125 decontamination Subject Matter Experts (SME). 112 supervisors.</p> <p>Field team of 4 people per affected facility. Assume 10 teams/state. Assume that decontamination takes 2 days per facility. Assume 100 food facilities per state are contaminated. Assume 5 SME per state</p> |
| Disposal Team | <p>25 States with contaminated product. 200 staff/State x 25 States = 5000 staff. 500 semi-tractor trailers are needed. 125 disposal SMEs. 512 supervisors.</p> <p>Field team of 4 people per disposal site. Assume 50 sites per state. Also assume 5 semi-tractor trailers are needed per affected facility. Assume 100 facilities per state have product that needs to be properly disposed. Assume 5 SME per State Assume 1 supervisor per 10 employees</p> |
| Laboratory Personnel (Sample Analysis) | <p>All 50 States would initially be analyzing food products. 100 laboratory analysts. 100 supervisors.</p> <p>20 lab analysts/State Assume 1 supervisor per 10 employees</p> |
| Laboratory Personnel (Confirmatory Testing) PulseNet | <p>25 states with contaminated product. 125 laboratory analysts. 12 supervisors.</p> <p>5 lab analysts/state Assume 1 supervisor per 10 employees</p> |

| Resource | Assigned Level and Quantity |
|-------------------------|---|
| Risk Communication Team | All 50 States. 250-500 staff at State level. 25 staff at Federal level. 5-10/State 5 per Federal agency involved (Assume 5 Federal agencies are involved) |

| Resource | Assigned Level and Quantity |
|--|---|
| Embargo/Recall Team | 25 States affected. 50 compliance officers/State. 75 recall staff/State. 75 recall staff at Federal level. 2 compliance officers/State 5 recall staff/State 5 recall staff at Federal level |
| Public Information Staff | All 50 States. 12 staff/24 hours for each State= 600 staff total. 25 staff at federal level. Rationale: 4 staff /8 hour shift at State level 5 staff per federal agency (Assume 5 federal agencies are involved) |
| Law Enforcement securing of scene | 25 States affected. 2 staff x 100 facilities x 25 States = 500 personnel. 2 staff per contaminated facility Assume 100 facilities are contaminated per State |
| Law Enforcement investigation of Event | 25 States affected. 2 staff x 100 facilities x 25 States = 500 personnel. 2 staff per contaminated facility Assume 100 facilities are contaminated per State |

| Resource | Assigned Level and Quantity |
|---------------------------------|---|
| IT Support | 25 States affected. 700 staff. 12,000 blackberries. 12,000 cell phones. 12,000 laptops. 12,000 portable printers. One per 20 staff One Blackberry, one cell phone, one laptop, and one portable printer for each person deployed |
| Additional Transportation Needs | 25 States affected. 6,000 One vehicle per two people deployed |

Linked Capabilities

- Animal Health Emergency Support
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Critical Resource Logistics and Distribution
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Mass Care (Sheltering, Feeding, and Related Services)
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response
- Responder Safety and Health
- Risk Management

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EPIDEMIOLOGICAL SURVEILLANCE AND INVESTIGATION

Capability Definition

The Epidemiological Surveillance and Investigation capability is the capacity to rapidly conduct epidemiological investigations. It includes exposure and disease (both deliberate release and naturally occurring) detection, rapid implementation of active surveillance, maintenance of ongoing surveillance activities, epidemiological investigation, analysis, communicating with the public, and providers about case definitions, disease risk and mitigation, and recommendation for the implementation of control measures.

Outcome

Potential exposure and disease is identified rapidly (determine exposure, mode of transmission and agent, and interrupt transmission to contain the spread of the event and reduce number of cases). Confirmed cases are reported immediately to all relevant public health, food regulatory, environmental regulatory and law enforcement agencies. Suspected cases are investigated promptly, reported to relevant public health authorities, and accurately confirmed to ensure appropriate preventive or curative countermeasures are implemented. An outbreak is defined and characterized; new suspect cases are identified and characterized based on case definitions on an ongoing basis; relevant clinical specimens are obtained and transported for confirmatory laboratory testing; the source of exposure is tracked; methods of transmission identified; and effective mitigation measures are communicated to the public, providers and relevant agencies are recommended, as appropriate.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Function (ESF)/Annexes:

- ESF#8: Public Health and Medical Services
- Biological Incident Annex
- Terrorism Incident Law Enforcement and Investigation Annex

Capability Description

| Activity | Description |
|-------------------------------|---|
| Surveillance | <ul style="list-style-type: none"> ▪ Ongoing and event-specific collection of health data. <i>(Note: Need to interface with CBRNE Detection)</i> |
| Detection | <ul style="list-style-type: none"> ▪ Recognition of events of public health significance. |
| Epidemiological Investigation | <ul style="list-style-type: none"> ▪ The investigation of disease and its determinants in a population; characterization, case classification, and identification of a source of a public health event; and defining the population at risk. |
| Team Management And Planning | <ul style="list-style-type: none"> ▪ Overall management, coordination liaison with internal and external partners (Lab and Occupational/Environmental Health); overall management and coordination of surveillance and investigation operations. |
| Mitigation | <ul style="list-style-type: none"> ▪ Develop a mitigation strategy based on the investigation. |

| Activity | Description |
|--|--|
| Logistics Support | <ul style="list-style-type: none"> Logistical support to ensure continued operations during the incident such as technical support, security, surge capacity, deployment, transportation; transportation of materials, resources and staff. |
| Epidemiological Decision on Laboratory Testing | <ul style="list-style-type: none"> Clinical – need for ability to provide initial laboratory testing (screening and confirmation). Subsequent symptomatic patients may not require testing. Hospitalized patients will require support usually provided to patients with severe respiratory illness (e.g. Intensive Care Unit [ICU], blood gasses). Public Health – ability to confirm (culture and sub-typing). |
| Care Provider Training | <ul style="list-style-type: none"> Prior to an event of public health significance, develop communications (e.g., fact sheets) to physicians and hospitals regarding appropriate use of testing of symptomatic and non-symptomatic patients during an event of public health significance. <i>(Note: Needs to interface to Emergency Public Health Information and Warning)</i> |
| Communications And Health Education | <ul style="list-style-type: none"> The timely communication of important health information and investigation status to internal and external governmental partners, industry, the media, the lay public, health care providers, and other parties of interest. |

Critical Tasks

| UTL# | Task |
|------------------|---|
| Res.A.1 4.4.1.1 | Lead public health investigations to determine source of disease in collaboration with law enforcement. |
| Res.A.1 4.4.2.10 | Maintain chain of custody. |
| Res.A.1 4.4.3.4 | Report instances of disease that raise the index of suspicion of terrorist or criminal involvement to FBI Headquarters. (National Response Plan) |
| Res.A.1 4.4.4 | Conduct an after action debriefing (hotwash) to identify deficiencies that require corrective actions in areas such as, personnel, training, equipment, and organizational structure. |
| Res.A.1 3.2.5 | Coordinate examination of deceased suspect patients with the medical examiner and/or disaster mortuary |
| Res.A.1 4.4 | Conduct epidemiological investigations. |
| Res.B.2 8.2 | Create registries of ill, exposed and potentially exposed persons. |
| Res.B.2 8.3 | Make public health recommendations for prophylaxis and other interventions. |
| Res.B.2 8.4.1 | Monitor effectiveness of mitigation steps. |
| Res.B.2 8.6 | Conduct special studies of critical public health issues. |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Time from initial notification to public health epidemiologist to initiate initial investigation. (definition: initiate initial investigation equals when the epidemiologist begins data collection) | Within 3 hours |
| Time for all suspected cases to be contacted for more detailed epidemiologic follow-up. | 75% of known suspected cases (or proxies) will be interviewed within 48 hours of identification of the index case. |
| Time to identify suspect case and send to key Federal, State, and local public health partners (e.g., CDC, FBI, law enforcement, State, and local) | Within 3 hours |
| Time for a health alert that describes the initial report of an indexed case along with known cases, possible risk factors, and initial public health interventions to be distributed via Epi-X, Health Alert Network (HAN), Fax, and e-mail. | Within 12 hours of initiation of case investigation. |
| Time for active case findings in all affected States to be initiated. | Within 24 hours of established working case definition. |
| Time for an initial report to be produced describing all suspected cases by person, place and time. | Within 60 hours of identification of the index case. |
| Time from first identification of agent to first recommendation for public health intervention. | Within 6 hours. |
| Time from initial laboratory confirmation of high priority diseases or events with suspicion of terrorism to notification of law enforcement. | Within one hour. |
| Time from epidemiologist acquisition of clinical diagnostic specimens/samples to receipt at the laboratory response network (LRN). | Within 6 hours |
| Time from laboratory confirmation of index case(s)/agent to creation of case definitions. | Within 12 hours |
| Time from case definition to dissemination of case definitions and public health instructions to all hospitals in jurisdiction through health alert network (HAN). | Within 12 hours |
| Percent of public health epidemiological staff with sufficient | 100% |

| Performance Measure | Performance Metric |
|---|---|
| equipment (e.g., PPE, IT, communication, clinical sampling equipment, specimen collection material) to conduct investigation. | |
| Time for State to notify local or local to notify State of receipt of notice of a case with a high index of suspicion of an immediately notifiable condition. | 1 hour from receipt |
| Time to have a knowledgeable public health professional answer a call of urgent public health consequence 24/7/365. | 15 minutes or less |
| Percent of key partners identified in response plan that are notified/alerted using the existing public health emergency communication system identified in the plan. | 100% # of successful transmissions to key response plan partners/# of key response plan partners |
| Time to issue information to the public that acknowledges the event, provides status, and commits to continued communication once a response plan is activated. | Within 60 minutes |
| Time to obtain message approval and authorization for distribution of public health and medical information to clinicians and other responders once message has been finalized. | Within 60 minutes |
| Percent of known cases and exposed successfully tracked from identification through disposition to enable follow-up. | 100% # of known cases identified that were tracked through disposition/# of known cases identified |
| Time from initial notification to public health epidemiologist to initiate initial investigation. (definition: “initiate initial investigation” means when the epidemiologist begins data collection) | Within three hours |

Capability Elements

Personnel

- Local health department-based surveillance team to track suspect case reports within their jurisdiction
- Epidemiologic investigation teams interview cases and perform investigations
- Active surveillance teams to find cases in hospitals and the community
- Special Studies Team to undertake focused scientific investigations of interest

Organization and Leadership

- CDC DEOC to coordinate CDC response
- State/Local EOC to coordinate state response to incident

Equipment and Systems

- Computers and communication equipment (Laptops, Blackberry / Cell phones)
- Personal protective equipment (PPE)
- Equipment cache

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Anthrax and Pandemic Influenza scenarios. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- Estimates are made of the needs for communities to respond to this emergency once identified and for baseline resources needed for timely initial detection
- *B. anthracis* spores added directly to product without aerosolization
- Ground beef was sent San Diego, Seattle, and Phoenix
- Orange juice was sent to Albuquerque, Las Vegas, and Palm Springs
- Patient presentations involved gastrointestinal, oropharyngeal, and cutaneous forms of anthrax.
- Clinical and laboratory confirmation (LRN) occurred between days 2 and 5 after index case presentation
- Production facilities and distribution system mechanisms will be contaminated until formally decontaminated
- Cases will continue sporadically following public health intervention due to consumers and retailers failing to discard/return/destroy contaminated product
- No simultaneous disasters are occurring during the same time
- There will be an unprecedented level of public concern, anxiety, and fear as a result of this incident
- Assume field investigation will last 10 days at full personnel strength and then another 20 days at 50 percent personnel strength.
- Assume health departments and Emergency Operation Centers (EOC) will require 100 percent surge staffing for 30 days in 10 cities (6 affected cities and 4 neighboring areas that have high levels of anxiety/concern) and at CDC.
- Staff requirements detailed in this worksheet represent State, local and Federal to existing resources that are devoted to routine (baseline) public health activities.
- Assume that staff at the local level may include Federal or State employees; assume that staff at the State level may include Federal employees.
- Assume that for every case interviewed, 10 ill persons with diseases other than anthrax will need to be interviewed in a more abbreviated manner. Assume these “non-case” interviews

will take half the time of a case interview. Given that 2,300 cases are indicated in the scenario, this means that 25,300 total interviews will need to be conducted.

- Assume 100% of cases and 50% of non cases will be interviewed during first 10 days. The remaining 50% of non-cases will be interviewed during the next 20 days.
- Assume there will be 100 facilities (hospital emergency departments) requiring active surveillance in 10 locations.
- Assume 10 special studies will be conducted. Each study will require 50 interviews.
- The food contamination scenario explored would be considered a national response that involves local, State and Federal resources.
- To provide 24 hour coverage for the first 10 days, the national response described in this scenario would require a staff of 110 epidemiology supervisors, 451 epidemiologists, 60 data entry staff, 40 IT staff, 30 statisticians, 60 public health advisors, 10 occupational/environmental epidemiologists, 50 non-epidemiologist interviewers, 10 subject matter experts and 10 State bioterrorism coordinators.
- Over the next 20 days of the investigation, staffing could be reduced to 70 epidemiology supervisors, 270 epidemiologists, 31 data entry staff, 30 IT staff, 30 statisticians, 40 public health advisors, 10 occupational/environmental epidemiologists, 50 non-epidemiologist interviewers, 10 subject matter experts and 10 State BT coordinators.
- The percent of staff contributions to the investigation from the State and local levels is dependent on baseline availability of resources. It should be noted that the Council of State and Territorial Epidemiologists (CSTE) *2004 National Assessment of Epidemiology Capacity: Findings and Recommendations* sites a 40 percent deficiency of trained public health epidemiologists nationally.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Anthrax and Pandemic Influenza)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|---|--|
| Local health department-based surveillance team (staff may be drawn from local, state or federal resources) | Track all reportable diseases within the defined area | Per 12 hour shift <ul style="list-style-type: none"> ▪ 1 supervisor (MD, DVM, or PhD level) and 2 epidemiologists. ▪ 1 IT staff ▪ 1 statistician | Assume 100% staff needs for 30 days at 10 locations. All 30 Days: <ul style="list-style-type: none"> ▪ 20 supervisors ▪ 40 epidemiologists ▪ 20 IT staff ▪ 20 statisticians |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|---|--|
| Active surveillance/case finding team | Find cases in local hospitals and emergency departments | One epidemiologist (or public health nurse or public health advisor) per 12 hour shift per facility (e.g. hospital ER in affected region). | Assume 100% staff needs for first 10 days, and 50% staffing for next 20 days at 100 facilities in 10 cities. <u>First 10 days:</u> 200 epidemiologists per day. <u>Next 20 days:</u> 100 epidemiologists per day. |
| Special Studies Team | Undertake focused scientific investigations of interest. | Personnel per study: <ul style="list-style-type: none"> ▪ 1 Epidemiology supervisor (MD, DVM, or PhD) ▪ 5 Epidemiologists or scientists ▪ 1 Public Health Advisor ▪ 1 Subject Matter Expert ▪ 1 interviewer per 10 persons ▪ 1 statistician | Assume 10 studies conducted, 500 interviews. <u>All 30 days:</u> <ul style="list-style-type: none"> ▪ 10 epidemiology supervisors ▪ 50 epidemiologists or scientists ▪ 10 public health advisors ▪ 10 subject matter experts ▪ 50 interviewers ▪ 10 statisticians |
| CDC Department Emergency Operations Center (DEOC) | Coordinate CDC response to incident | Personnel per 12 hour shift: <ul style="list-style-type: none"> ▪ 1 Senior Epidemiology supervisor ▪ 1 Federal-State liaison Epidemiologist per affected State ▪ 5 support epidemiologists | Assume 100% staff needs for first 10 days, and 50% staffing for next 20 days. <u>First 10 Days (per day)</u> <ul style="list-style-type: none"> ▪ 20 epidemiology incident commanders ▪ 20 senior epidemiology supervisors |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|---------------------------------------|--|---|
| | | <ul style="list-style-type: none"> ▪ 1 public health advisor (PHA) ▪ 1 Data entry manager ▪ 10 data entry staff | <ul style="list-style-type: none"> ▪ 20 federal state-liaison epidemiologists ▪ 10 support epidemiologists ▪ 20 public health advisors (PHA) ▪ 20 data entry staff <p><u>Next 20 Days:</u></p> <ul style="list-style-type: none"> ▪ 10 senior epidemiology supervisors per day ▪ 10 federal state-liaison epidemiologists per day ▪ 5 support epidemiologists per day ▪ 10 public health advisors (PHAs) per day ▪ 10 data entry staff per day |
| State/Local EOC | Coordinate State response to incident | <ul style="list-style-type: none"> ▪ 1 Epidemiology Incident Commander; ▪ 1 BT coordinator per state; ▪ 1 Senior Epidemiology supervisor per 12 hour shift; ▪ 5 support epidemiologists per 12 hour shift; ▪ 1 PHA per 12 hour shift. ▪ 1 Database | <p>Assume 100% staff needs for first 10 days, and 50% staffing for next 20 days. Assume 10 affected States (6 with cases + 4 additional).</p> <p><u>First 10 Days (per day)</u></p> <ul style="list-style-type: none"> ▪ 10 epidemiology incident commanders per day ▪ 10 BT coordinators ▪ 20 senior epidemiology |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|--|---|
| | | <ul style="list-style-type: none"> manager ▪ 1 programmer ▪ 2 analysts ▪ 2 transport teams: each with 1 driver ▪ 1 clerical staff member ▪ 1 IT person | <ul style="list-style-type: none"> supervisors ▪ 50 support epidemiologists ▪ 20 PHAs <p><u>Next 20 Days:</u></p> <ul style="list-style-type: none"> ▪ 10 epidemiology incident commanders ▪ 10 BT coordinators ▪ 10 senior epidemiology supervisors per day ▪ 25 support epidemiologists per day ▪ 10 PHAs per day |
| Equipment | | Laptops – 1 per 2 persons deployed; Blackberry/cell phone – 1 per person deployed; Portable printers – 1 per 10 laptops; PPE and appropriate equipment cache per person | <p><u>First 10 Days:</u> 256 Laptops, 511 Blackberry/Cell phones, 26 portable printers, 511 PPE, 511 appropriate equipment cache.</p> <p><u>Next 20 Days:</u> 171 Laptops, 341 Blackberry/Cell phones, 17 portable printers, 341 PPE, 341 appropriate equipment cache.</p> |

Approaches for Large-Scale Events

Pandemic Flu – For all teams, the work force will be diminished by one-third. The need for epidemiologic investigation will be far reduced relative to surveillance needs. Resource needs for pandemic flu are orders of magnitude greater.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Local health department-based surveillance team | Local: 24-hour coverage per affected county. <i>(Staff may be drawn from local, State, or Federal resources)</i> |
| Investigation team | Local: 24-hour coverage per affected county. |
| Active case finding/surveillance | Local: 24-hour coverage per affected county. |
| Special studies team | As needed – staff may include Federal, State, and local personnel. |
| CDC Department Emergency Operations Center (DEOC) | Federal – 24 hour coverage. |
| State EOC | State – 24 hour coverage. |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Fatality Management
- Food and Agriculture Safety and Defense
- Isolation and Quarantine
- Law Enforcement Investigation and Operations
- Mass Care
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge
- Planning
- Public Health Laboratory Testing
- Responder Safety and Health
- Risk Management
- Triage and Pre-Hospital Treatment
- WMD/Hazardous Materials Response and Decontamination

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PUBLIC HEALTH LABORATORY TESTING

Capability Definition

The Public Health Laboratory Testing capability is the ongoing surveillance, rapid detection, confirmatory testing, data reporting, investigative support, and laboratory networking to address potential exposure, or exposure, to all-hazards which include chemical, radiochemical, and biological agents in all matrices including clinical specimens, food and environmental samples, (e.g., water, air, soil). Such all-hazard threats include those deliberately released with criminal intent, as well as those that may be present as a result of unintentional or natural occurrences.

Outcome

Chemical, radiochemical, and biological agents causing, or having the potential to cause, widespread illness or death are rapidly detected and accurately identified by the public health laboratory within the jurisdiction or through network collaboration with other appropriate local, State, and Federal laboratories. The public health laboratory, working in close partnership with public health epidemiology, environmental health, law enforcement, agriculture and veterinary officials, hospitals and other appropriate agencies, produces timely and accurate data to support ongoing public health investigations and the implementation of appropriate preventative or curative counter-measures.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Function (ESF)/Annexes:

- ESF#8: Public Health and Medical Services
- Biological Incident Annex
- Terrorism Incident Law Enforcement and Investigation Annex

Critical Tasks

| UTL# | Task |
|-----------------|---|
| | Response Management |
| Pro.C.1 1.1.4.1 | Function as the gatekeeper for the Laboratory Response Network (LRN) within the jurisdiction. |
| Pro.C.1 1.1.4.2 | Function as the Laboratory Response Network (LRN) Sentinel and LRN Clinical Chemistry laboratories. |
| Pro.C.1 1.1.4.3 | Function as the Laboratory Response Network (LRN) Reference laboratories for biological terrorism agents. |
| Pro.C.1 1.1.4.4 | Function as Laboratory Response Network (LRN) Chemical laboratories. |
| | Safety and Security |
| Pro.C.1 1.1.1.7 | Hire and/or maintain a biosafety officer for each facility. Develop a contingency plan for a breach in biosafety. |
| | Network Establishment |
| Pro.C.1 1.1.5.1 | Identify, establish and maintain working collaboration with all LRN Sentinel and LRN Clinical Chemistry laboratories within the jurisdiction. |

| UTL# | Task |
|-----------------|---|
| Pro.C.1 1.1.5.2 | Develop and maintain an accurate and current database of contact information and capability for all the LRN Sentinel and LRN Clinical Chemistry laboratories. |
| Pro.C.1 1.1.5.3 | Provide all the LRN Sentinel and LRN Clinical Chemistry laboratories with updated LRN Reference laboratory contact information. |
| Pro.C.1 1.1.5.4 | Establish and maintain collaborative linkages with other state laboratories, e.g., environmental, agriculture, veterinary and university, as well as the jurisdiction's National Guard Civil Support Team (CST) and other first responders. |
| Pro.C.1 1.1.5.5 | Establish and maintain linkages with federal laboratory networks and member laboratories within the jurisdiction, e.g., the Food Emergency Response Network (FERN), National Animal Health Laboratory Network (NAHLN), and the EPA. |
| Pro.C.1 1.1.5.6 | Establish and maintain a sentinel laboratory advisory committee or equivalent that meets at least annually and includes representatives from clinical microbiology, clinical chemistry, veterinary, food and environmental laboratories in your jurisdiction. |
| Res.A.1 2.2.3.7 | Coordinate response planning, drills and exercises for the laboratory with all relevant partners. |
| | Communication |
| Pro.C.1 1.1.6.1 | Establish and utilize a state and local health alert network (HAN) for electronic connectivity with all LRN Sentinel and LRN Clinical Chemistry laboratories. |
| Pro.C.1 1.1.6.2 | Establish and maintain connectivity with the State Emergency Operations Center (SEOC) and other official components of the state and local emergency response, including the Emergency Management Assistance Compact (EMAC). |
| Pro.C.1 1.1.6.3 | Establish and maintain communication linkages with local, state, and federal (e.g., CDC DEOC and LRN) public safety and law enforcement entities, e.g., police, fire, emergency management, and the FBI. |
| | Resource Acquisition and Maintenance |
| Res.A.1 1.2.4.1 | Provide a ready supply of the reagents required for rapid testing of biological threat agents by LRN Reference laboratories. |
| Res.A.1 1.2.4.2 | Maintain a ready supply of the reagents, not supplied by CDC, required for rapid testing of biological threat agents at the reference level. |
| Res.A.1 1.2.4.3 | Maintain an accurate inventory of reagents and supplies in their respective laboratories. |
| | Technology Transfer |
| Pro.C.1 1.1.1.8 | Develop and validate, in partnership with LRN Reference and LRN Chemical laboratories, standard laboratory methods to test for chemical and biological threat agents. |

| UTL# | Task |
|------------------|---|
| Pro.C.1 1.1.1.9 | Transfer standardized technology and laboratory methods from the CDC to state and local LRN Reference and LRN Chemical laboratories |
| Pro.C.1 1.1.1.10 | Develop, in collaboration with CDC, e.g., EPA, FDA, USDA, and DOD, additional standardized, validated methods for chemical and biological agents in non-clinical samples. |
| Pro.C.1 1.1.1.11 | Integrate new advanced biological and chemical rapid identification methods, as they are developed and approved by the LRN, into the current laboratory testing algorithm for human, environmental, animal or food specimens. |
| | Training |
| Res.A.1 2.2.3.1 | Participate in a CDC-approved proficiency testing program to assure laboratory competency. |
| Res.A.1 2.2.3.2 | Participate in training provided by other federal partners for the use of standardized methods to detect and identify chemical and biological agents. |
| Res.A.1 2.2.3.3 | Provide information and training on the use of appropriate safety and security equipment and procedures. |
| Res.A.1 2.2.3.4 | Train all LRN Sentinel laboratories in the use of LRN biological agent rule-out protocols, specimen or isolate referral responsibilities and notification algorithms. |
| Res.A.1 2.2.3.5 | Participate in CDC training to use standardized protocols to detect biological agents. |
| Res.A.1 2.2.3.6 | Participate in CDC training as required for designated levels of chemical preparedness, e.g., LRN Level-1, -2, or -3. |
| | Sample and Specimen Management |
| Pro.C.1 1.1.1.5 | Establish and maintain a jurisdiction-wide transport system to assure timely receipt of samples or specimens for laboratory testing. |
| Res.A.1 4.2.1 | Perform triage screening on environmental samples per Department of Homeland Security and Environmental Protection Agency protocols. |
| Res.A.1 4.2.2.1 | Communicate requirements for all-hazard specimen or sample collection, packaging, and shipping to submitters, e.g., FBI, CST, first responders, HazMat teams, and LRN Sentinel and LRN Clinical Chemistry laboratories. |
| Res.A.1 4.2.2.2 | Provide consultation to all submitters regarding appropriate collection and shipment of specimens or samples for testing. |
| | Surveillance |
| Pro.C.1 4.1.4.1 | Acquire timely isolates of selected enteric and invasive biological agents from all LRN Sentinel laboratories. |
| Pro.C.1 4.1.4.2 | Quickly analyze the isolates submitted by LRN Sentinel laboratories using advanced technologies to rapidly identify and subtype isolates. |
| Pro.C.1 4.1.4.3 | Provide reference analysis and identification of unusual or emerging biological agents present in communities. |
| Pro.C.1 4.1.4.4 | Perform analyses for BioWatch 24/7/365. |
| Pro.C.1 4.1.4.5 | Enhance, in coordination with public health epidemiology partners, capacity to apply standardized molecular methods (e.g., DNA sequencing) in real-time to support surveillance and outbreak investigations as appropriate. |
| | Detection |

| UTL# | Task |
|-----------------|---|
| Res.A.1 4.2.3.1 | Evaluate clinical specimens from patients exposed to chemical or radiochemical agents, e.g., tests for blood gases, CBC analysis, and enzyme levels (link with HRSA). |
| Res.A.1 4.2.3.2 | Test initial 20-40 clinical specimens to assess human exposure by measuring metabolites of chemical agents (e.g., of nerve agents). |
| Res.A.1 4.2.3.3 | Provide surge capacity for CDC to measure metabolites (e.g., of nerve agents, in clinical specimens). |
| Res.A.1 4.2.3.4 | Test environmental samples for toxic industrial chemicals and materials. |
| Res.A.1 4.2.4.1 | Contact the nearest LRN Reference laboratory when unable to identify or rule-out emerging infectious agents or possible bioterrorism agents. |
| Res.A.1 4.2.4.2 | Identify all emerging infectious agents or possible bioterrorism agents using available LRN protocols. |
| | Confirmation |
| Res.A.1 4.2.3.5 | Confirm results using CDC clinical chemical chemistry detection methods |
| Res.A.1 4.2.4.3 | <i>Biological:</i> Use standardized, validated Laboratory Response Network (LRN) protocols to detect emerging infectious agents or possible bioterrorism agents in clinical specimens, food, or environmental samples. |
| Res.A.1 4.2.4.4 | Verify reactive BioWatch samples. |
| Res.A.1 4.2.4.5 | Verify reactive samples from the Biohazard Detection Systems (BDS) located in facilities of the U.S. Postal Service (USPS). |
| | Notification and Reporting |
| Res.A.1 4.3.1.1 | Report surveillance results suggestive of an outbreak immediately to public health epidemiology. |
| Res.A.1 4.3.1.2 | Report results of CDC chemical or biological testing to submitting LRN Reference and Chemical laboratories through the secure LRN website. |
| Res.A.1 4.3.1.3 | Notify appropriate public health, public safety, and law enforcement officials immediately (24/7) of presumptive and confirmed laboratory results of chemical and biological threat agent. |
| Res.A.1 4.3.1.4 | Report confirmed laboratory results to all submitters in a timely manner using PHIN-compliant Laboratory Information Management Systems (LIMS). |
| | Investigative Support |

| UTL# | Task |
|-----------------|---|
| Res.A.1 4.3.2.1 | Work in close partnership with public health epidemiology and environmental health, and poison control to provide timely data to assure implementation of effective prevention, detection, and control measures, including treatment. |
| Res.A.1 4.3.2.2 | Collaborate with law enforcement and perform testing of evidentiary samples (link to Law Enforcement). |
| | Follow-Up |
| Res.A.1 4.3.3.1 | Test additional clinical specimens by CDC or another qualified select Laboratory Response Network (LRN) Reference lab for retrospective assessment of chemical exposure following an event. |
| Res.A.1 4.3.3.2 | Coordinate testing of environmental samples for assessment and remediation. |
| | Definitive Characterization |
| Res.A.1 4.3.4.1 | Isolate emerging infectious or biological threat agents tested by CDC and qualified select Laboratory Response Network (LRN) reference laboratories using CLIA approved methods to determine the agent’s susceptibility to antimicrobial drugs used for prevention and control. |
| Res.A.1 4.3.4.2 | Use CLIA approved methods for antimicrobial susceptibility testing |
| | Genotyping |
| Res.A.1 4.3.5.1 | Determine whether an emerging infectious disease agent or a biological threat agent consists of single or multiple strains. |

Capability Description

| Activity | Description |
|--|---|
| Detect outbreaks of disease | <ul style="list-style-type: none"> ▪ Provide reference analysis and identification of unusual or emerging biological agents found in surveillance efforts ▪ Evaluate specimens from those exposed ▪ Test environmental samples |
| Confirm nature of the outbreak | Verify reactive samples to confirm nature of outbreak |
| Report outbreaks to law enforcement authorities | Report surveillance results to public health epidemiology officials |
| Support public health epidemiological investigations to determine origin and cause | Provide timely data in support of epidemiological, environmental health and/or poison control efforts |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| LRN Reference and LRN Chemical laboratories have an internal competency training program for LRN methods. | Yes/No |
| LRN Reference laboratory offers training to LRN Sentinel and LRN Clinical Chemistry laboratories annually. | Yes/No |
| Percent of participating LRN Reference laboratories and Level-1 and Level-2 LRN chemical laboratories that pass their proficiency tests according to CDC criteria. | 100% |
| Percent of LRN Sentinel and LRN Clinical Chemistry laboratories that participate in State-developed training programs, <i>i.e., by LRN Reference laboratories</i> (responsibility aligns with HRSA) | 100% |
| LRN Reference laboratory has a PHIN compliant Laboratory Information Management System (LIMS). | Yes/No |
| LRN reference laboratory has a system to maintain an inventory of reagents and supplies to support LRN testing. | Yes/No |
| CDC (BPRP) produces and/or acquires sufficient reagents to maintain LRN reference testing of biological threat agents. | Yes/No |
| Percent of Health Resources & Services Administration (HRSA) funded hospitals that have PHIN compliant IT systems that are interoperable with their jurisdictional public health agency. (responsibility aligns with HRSA and interface with Interoperable Communications, Epidemiology and Medical Surge TCLs) (Reference National Bioterrorism Hospital Preparedness Program FY2005 Continuation Guidance HRSA Announcement number 5-U3R-05-001) | 100% |
| At least annually, tests are conducted of select LRN Sentinel and LRN Clinical Chemistry laboratory to reach a knowledgeable public health laboratory professional at the jurisdictional confirmatory LRN Reference and LRN Chemical laboratories 24/7/365 by landline phone. | Yes/No |
| Public health laboratory professionals are reached by landline phone within 15 minutes | Yes/No |
| At least annually, tests are conducted of select LRN sentinel and LRN clinical chemistry laboratory to reach a knowledgeable public health laboratory professional at jurisdictional confirmatory LRN laboratory 24/7/365 by redundant means not dependent on electricity, cellular/landline phone service, internet (e.g., radio/satellite | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---|
| phone). | |
| Public health laboratory professionals are reached within 30 minutes | Yes/No |
| Percent of LRN Sentinel and LRN Clinical Chemistry laboratories within the LRN jurisdiction that successfully acknowledge receipt of health alerts. Testing must be at least annually and include at least one priority category (i.e., alert, advisory, update, etc.). <i>Note: Reference PHIN Preparedness Functional Area Partner Communication and Alerting</i> | 100% (# of successful acknowledgements/# of Sentinel laboratories within jurisdiction) |
| Components include organization and management, communication, and reporting as well as the following: <ul style="list-style-type: none"> ▪ Specimen/sample collection, transport and handling ▪ Worker safety ▪ Appropriate Biosafety Level (BSL) working conditions for each threat agent ▪ Staffing and training of personnel ▪ Quality control and assurance ▪ Proficiency testing to include routine practicing of LRN validated assays as well as participation in the LRN’s proficiency testing program, and submission of proficiency testing results electronically through the LRN secure website ▪ Threat assessment in collaboration with epidemiology, HazMat, local law enforcement and Federal Bureau of Investigations (FBI) to include screening for radiological, explosive and chemical risk of specimens ▪ Intake and testing prioritization ▪ Appropriate levels of supplies and equipment needed to respond to bioterrorism events or other public health emergencies with a strong emphasis on surge capacities needed to effectively respond to a bioterrorism incident. ▪ Compliance with select agent rule and subsequent registration ▪ Compliance with USDA/APHIS transport regulation and permit requirements biosecurity requirements | 100% |
| The laboratory has: <ul style="list-style-type: none"> ▪ A primary system that ensures delivery of specimens/samples 24/7/365 ▪ A secondary courier (e.g., state patrol helicopter) system that ensures rapid delivery in an emergency situation. | Yes/No Yes/No |
| At least one operational Biosafety Level Three (BSL-3) facility is available within jurisdiction for testing for biological agents. | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|--|
| If not immediately possible, BSL-3 practices, as outlined in the CDC-NIH publication “Biosafety in Microbiological and Biomedical Laboratories, 4th Edition” (BMBL), should be used (see www.cdc.gov/od/ohs) or formal arrangements (i.e., MOU) should be established with a neighboring jurisdiction to provide this capability. | Yes/No |
| Laboratory registration, operations, safety, and security are consistent with both the minimum requirements set forth in Select Agent Regulation (42 CFR 73) and the US Patriot Act of 2001 (P.L. 107-56) and subsequent updates. | Yes/No |
| A public health laboratory website is in place that includes, at a minimum: <ul style="list-style-type: none"> ▪ Information about protocol updates for rule-out testing ▪ Department of Transportation (DOT) compliant packaging and shipping ▪ Chain-of-custody guidelines ▪ CDC endorsed material on referral of clinical human and Veterinary specimens ▪ Environmental samples ▪ Suspect bioterrorism (BT) isolates ▪ Bacterial and viral foodborne pathogens. | Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No |
| A ready supply of the reagents, not supplied by CDC, required for rapid testing of biological threat agents at the reference level is maintained by LRN Reference laboratories. | Yes/No |
| Adequate amounts of required test reagents and materials are maintained by and immediately available to LRN Reference and LRN Chemical laboratories during an emergency event. | Yes/No |
| Materials for chemical methods are available through commercial vendors and are stocked by chemical laboratories for use in an emergency. | Yes/No |
| LRN Sentinel and LRN Clinical Chemistry laboratories have been trained in the use of standardized procedures for collecting and shipping clinical specimens. Training must include: <ul style="list-style-type: none"> ▪ International Air Transport Association (IATA) ▪ US Department of Transportation (DOT) packaging and shipping of infectious agents regulations. | Yes/No Yes/No Yes/No |
| Laboratory has a system in place to receive and triage specimens and samples. | Yes/No |
| An all-hazards team exists which includes: <ul style="list-style-type: none"> ▪ Chemical terrorism (CT) laboratory coordinator (chemist or medical technologist) ▪ Assistant CT laboratory coordinator ▪ Bioterrorism laboratory coordinator ▪ Biologic sentinel network liaison) who are available | Yes/No Yes/No Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| 24/7/365 to advise public health agencies, hospitals, private Laboratories, first responders, HazMat teams, local, state, and Federal law enforcement, the Army National Guard (WMD-CST), and poison control. | Yes/No |
| The team has the capability to perform the following functions: | Yes/No |
| <ul style="list-style-type: none"> ▪ Proper triage screening ▪ Collection, packaging, labeling, and shipping of clinical specimens and environmental and food samples taken from persons/sites potentially exposed to agents used in biological, chemical, and radiological terrorism. | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Time from <i>high-level</i> threat credibility assessment of suspicious agent to specimen/sample receipt at the public health laboratory. | Within 6 hours |
| The time from receiving a specimen/sample in the LRN Reference laboratory to presumptive identification of agent by rapid biological assays. | Within 8 hours |
| Time from presumptive identification of potential bioterrorism agent or communication that signals a high index of suspicion to sending notification to key Federal, State, and local health partners (e.g., CDC, FBI) | Within 3 hours |
| Time from distribution of health alert by agency epidemiologist, environmental health, or relevant partner via HAN to distribution of laboratory health alert detailing laboratory related information including specimen collection, packaging, and shipping guidelines. | Within 12 hours |
| Time from presumptive identification to 1.) shipment to an LRN Reference laboratory with relevant confirmatory capabilities or 2.) confirmatory identification of agent by LRN Reference laboratory. | Within 2 hours Within 48 hours for laboratories that have appropriate confirmatory capabilities |
| Time from confirmatory identification (positive and negative) to initiate notification of appropriate federal, state, and local officials, also including the specimen/sample submitter. | Within 1 hour |
| Percent of LRN Reference laboratories that provide technical | 100% |

| Performance Measure | Performance Metric |
|---|--|
| assistance <i>to submitters</i> on errors within 3 business days of receipt of mis-labeled, mis-packaged- and mis-shipped packages. | |
| Percent of calls/inquiries received by the CDC LRN Coordinating Office for which a response is initiated within 24 hours on a routine basis. | 100% |
| Percent of calls/inquiries received by the CDC LRN Coordinating Office for which a response is initiated within 2 hours during an emergency. | 100% |
| <p>Proportion of isolates for which PFGE testing and analysis of data is completed within 3 working days of receipt in the laboratory (or within 3 working days of organism isolated in pure culture, if lab processes clinical specimen).</p> <p>A) <i>E. coli</i> O157:H7 <i>Listeria monocytogenes</i></p> | <p>100%</p> <p>(# of isolates that have PFGE patterns analyzed within 3 working days of identification/denominator = # of isolates identified in lab)</p> <p>Start time: Date and time isolate identified in lab</p> <p>Stop time: Date and time PFGE sub-typing/pattern analysis complete</p> |
| <p>Proportion of PFGE patterns submitted to the National PulseNet Server (or to the PulseNet Database Team at CDC) that are designated with an official PulseNet pattern name within 3 working days of submission.</p> <p><i>E. coli</i> O157:H7 <i>Listeria monocytogenes</i></p> | <p>100%</p> <p># of isolate patterns in the National PulseNet Database that are given an official PulseNet pattern name within 3 working days of submission/# of isolate patterns submitted to the National PulseNet Server/database team</p> <p>Start time: Date and time PFGE isolate pattern submitted to National PulseNet Server/database team</p> <p>Stop time: Date and time official PulseNet name assigned to the submitted isolate pattern</p> |
| Proportion of PFGE patterns and associated data submitted to the National PulseNet Server (or to the PulseNet Database Team at CDC) within one (1) working day of PFGE pattern analysis. | <p>100%</p> <p>(numerator = # of patterns submitted to PulseNet within 1 working day)</p> |

| Performance Measure | Performance Metric |
|---|--|
| A) <i>E. coli</i> O157:H7 <i>Listeria monocytogenes</i> | (denominator = # of isolates PFGE pattern-analyzed) Start time: Date and time PFGE sub-type/pattern-analysis complete Stop time: Date and time PFGE sub-type/pattern submitted to PulseNet server/team |
| For CDC Chemical laboratory, time to conduct Rapid Toxic Screen on initial 20-40 specimens analyzed for 150 chemical agents (including 40 samples for nerve agents) | Within 36 hours of receipt of specimens (surge). |
| For designated State <u>LRN Level-1</u> Chemical laboratories, time to accept clinical specimens and begin analysis. | Within 24 hours of receiving the call for assistance from CDC. |
| Time from <u>high-level</u> threat credibility assessment of suspicious agent to notification of public health department and other state and federal partners | Within 2 hours |

Capability Elements

Personnel

- Centers for Disease Control and Prevention (CDC)
- Laboratory Response Network (LRN) National level laboratories for specialized characterization testing
- State and Local public health laboratories
- State environmental, food, agriculture and veterinary laboratories
- LRN Sentinel and Clinical Chemistry laboratories to conduct rule-out or referral tests
- CDC LRN laboratory managers
- CDC Scientific Resources Program
- CDC Bioterrorism Rapid Response and Advanced Technology Laboratory
- CDC/NCEH Chemical Terrorism Laboratory
- Laboratorians for short-term biological response
- Association of Public Health Laboratories (APHL) LRN managers
- Special Studies Team to undertake focused scientific investigations of interest
- Personnel for sample receipt, data entry and reporting of results

Organization and leadership

- CDC DEOC to coordinate CDC response
- LRN Coordinating Office at CDC

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- State/local EOC to coordinate state response to incident
 - Public Health Laboratory Director
 - LRN Partners
 - APHL Coordinating Function for state public health labs

Planning

LRN Credentials:

- Select Agent Registration
- USDA/APHIS Regulations
- CLIA (Clinical Laboratory Inspection Standards)
- Accreditation from AAVLD (American Association Veterinary Laboratorian Diagnosticians)

Equipment and Systems

- Computers and communication equipment (Laptops, Blackberries, cell phones, 800MHz radios, satellite phones)
- Personal protective equipment (PPE)
- PHIN compliant Laboratory Information Management System (LIMS)
- Biological Laboratories (only):
 - Polymerase chain reaction (PCR) equipment
 - Time-resolved fluorometer (TRF) (e.g., VICTOR)
 - Reagents in PCR and TRF kits
- Chemical Laboratories (only):
 - Mass spectrometers and related instruments

Training

- All-hazards Biosafety Training, including compliance with the Select Agent Rule
- LRN and Biosafety Training including PCR and TRF training
- Bioterrorism Training, including classic, rapid, and molecular methods
- LRN Chemical Training Program

Planning Assumptions

Public Health Laboratory Testing (Chemical Nerve Agent):

- Assume 10,000 worried well; assume that 2,500 worried well population will require testing. Scenario does not state exact number of worried well. Difficult to determine exactly what proportion of the downwind population would fall in this category but assumed 80 percent for purposes of this assignment. Of these, assume 25 percent will require/request testing for exposure to nerve agents.
- 40 analyses per day per instrument.
- 13 instruments within Centers for Disease Control (CDC) and seven instruments within States can perform analysis of nerve agent metabolites.

- CDC stockpiles enough standards/materials to analyze 5000 samples. Each of seven States stockpiles enough standards/materials to analyze 500 samples. Total for CDC and states are 8500 samples. Conducting additional analyses requires additional materials/standards.
- Depending on how urgently results are needed, along with involving the states, additional instruments in CDC's laboratory can be ramped up quickly.
- Currently, analytic resources are located at CDC (Atlanta) and 7 State health departments (California, Florida, Michigan, Minnesota, New Mexico, New York and Virginia). Given the nature of the need and this resource, a centralized/regionalized approach is acceptable.

Public Health Laboratory Testing (Biological)

- Estimates address needs for communities to respond to this emergency once identified. Estimate does not include needs for baseline resources needed for timely initial detection.
- *B. anthracis* spores added directly to product without aerosolization
- Ground beef was sent San Diego, Seattle, and Phoenix
- Orange juice was sent to Albuquerque, Las Vegas and Palm Springs
- Patient presentations involved gastrointestinal, oropharyngeal and cutaneous forms of anthrax.
- Laboratory confirmation by the Laboratory Response Network (LRN) occurred between days 2 and 5 after index case presentation
- Production facilities and distribution system mechanisms will be contaminated until formally decontaminated
- Cases will continue sporadically following public health intervention due to consumers and retailers failing to discard/return/destroy contaminated product
- No simultaneous disasters are occurring during the same time
- Assume multi-agency coordination is adequately being addressed at Federal (CDC, Food and Drug Administration [FDA], USDA/APHIS [United States Department of Agriculture/Animal and Plant Health Inspection Service), State, and local levels and the agencies are coordinating as expected. Overall assumptions for LRN testing of specimens/samples: 1. All Reference LRN laboratories in the affected jurisdictions have the testing capability for the agent. 2. For planning purposes, throughput for four types of equipment available in the LRN Reference laboratory 3 was provided. There are a sufficient number of trained personnel to operate the equipment. 4. There is sufficient availability of reagents.
- Factors that could affect the number of specimens/samples calculated assuming laboratorians perform three runs in each shift include time involved to set up the assay, machine capacity, personnel shift duration, condition specimen/sample arrived in, physical working space, individual pace of laboratorian.
- For LRN Sentinel laboratories, the first 1,000 patients are distributed evenly among the six affected cities resulting in an even distribution of laboratory rule-out tests (approximately 167 per city), which would result in approximately 16 tests per Emergency Room. The burden on the LRN Sentinel laboratories for foodborne anthrax is inconsequential.
- Case definition by epidemiologists will be created within the first 10 days resulting in no further rule-out testing at the LRN Sentinel laboratories following the first 1,000 patients.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Capability Element | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|---|
| Public Health Laboratory Testing (Chem Lab) | | | |
| CDC | <ul style="list-style-type: none"> Days 1-5: 80 samples/day using 2 instruments (1 instrument can process 40 samples/day). Days 6-10: 320 samples/day using an additional 6 instruments (8 instruments total, so $8 \times 40 = 320$). 520 samples/day using all instruments available (13 instruments total, so $13 \times 40 = 520$). | <ul style="list-style-type: none"> Testing for 350 injured people (assume testing 2 samples per person) = 700. 2500 tests performed for worried well. Total = 3200. | <p>1 resource organization (either CDC alone or CDC and affiliated State chemical laboratories) Based on urgency:</p> <ul style="list-style-type: none"> Approximately 4 weeks if only CDC is involved. With involvement of State public health laboratories, priority analysis of the first 350 samples (one sample from each of the injured people) could be completed in a matter of days. |
| State public health laboratories | <ul style="list-style-type: none"> 40 samples/day/State. 5 States currently capable to perform nerve agent analysis = 200 samples/day. | See above. | Depends on how quickly analyses need to be completed. See above. |
| Bio Lab: Laboratory Response Network (LRN) National | 3 National laboratories (CDC, DOD), 15 CDC laboratorians . | CDC would accept specimens/samples for susceptibility testing and genotyping. | |
| LRN Reference laboratories | 152 Reference laboratories for biological agents (105 public health, 15 military, 9 veterinary, 12 food, 8 international, 5 other federal | LRN reference laboratories in the affected cities would handle test volume (for planning purposes 8235 | <p>For this scenario, we assume a 12-hour shift and a 30-day time period.</p> <ul style="list-style-type: none"> If Victor equipment |

| Capability Element | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|--|
| | laboratories) . | specimens). | <p>= 14 pieces of equipment needed</p> <ul style="list-style-type: none"> ▪ If ABI 7000 = 3 machines needed ▪ If Light Cyclor = 11 machines needed ▪ If Smart Cyclor = 23 instruments needed |
| LRN Sentinel | 4,500 laboratories that can perform rule out or refer testing (majority are in-hospital laboratories). | <p>LRN Sentinel laboratories will perform rule-out or referral tests for all cases cases.</p> <p>LRN Reference laboratories will perform rapid tests and traditional confirmatory tests.</p> | Existing Sentinel lab personnel will support the required testing. |
| CDC (e.g., Subject matter Expert [SME], Scientific Resources Program / Biologics Branch, Coordinating Office for LRN) | <ul style="list-style-type: none"> ▪ Coordinating Office for LRN = 1 LRN Coordinator, 1 Program Manager, 1 Help Desk Support, 1 Technical Officer, 1 Communication Officer (technical writing, interface with CDC Office of Emergency Communication). ▪ Scientific Resources Program/Biologics Branch = 6 – production, 2 – shipping, 6 inventory management. ▪ CDC SMEs = < 1 per agent. ▪ Bioterrorism Rapid Response and Advanced Technology Laboratory = (Existing) 9 CDC | | <ul style="list-style-type: none"> ▪ Coordinating Office for LRN = 1 LRN Coordinator, 3 Program Managers, 4 Help Desk Support on 12-hour shifts, 2 Technical Officers, 1 Communication Officer (technical writing, interface with CDC Office of Emergency Communication). ▪ Scientific Resources Program/Biologics Branch = 12 – production, 4 – shipping, 12 inventory management |

| Capability Element | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|--|---|
| | laboratorians for short-term biological response. | | <ul style="list-style-type: none"> ▪ CDC SMEs = 2 per agent. ▪ Bioterrorism Rapid Response and Advanced Technology Laboratory = 15 CDC laboratorians. |
| LRN Partner Organizations (e.g., APHL, DOD, ASM, FBI, EPA, FDA, USDA/APHIS, DHS) | <ul style="list-style-type: none"> ▪ 1 APHL Gatekeeper, 1 DOD Gatekeeper, and 1 FDA Gatekeeper. ▪ All other organization involvement is scenario specific. | | |
| Reagents (CDC) | <ul style="list-style-type: none"> ▪ (Foodborne / Plague) -- One specimen per suspected case will be sent to the LRN for testing. An additional 15% of tests will be conducted for quality control. Polymerase Chain Reaction (PCR) kits can complete 500 tests per kit using smart cycler or light cycler. PCR kits can complete 1,000 tests per kit using ABI 7000 equipment. TRF kits can complete 60 tests per kit using Victor equipment. | <ul style="list-style-type: none"> ▪ (Aerosolized Anthrax) Cannot determine lab requirements b/c scenario involves undetermined environmental exposure which will require extensive sampling for source identification and decontamination efforts. ▪ (Foodborne) Approximately 7000 suspected cases will result in 7000 specimens and 1235 controls for a total of approximately 8235 tests. This number does not | <ul style="list-style-type: none"> ▪ (Aerosolized Anthrax) In Anthrax event of 2001, 125,000 .environmental samples for less than 10 victims. ▪ (Pandemic Flu) Cannot determine because assays under development. ▪ (Foodborne) Assuming all tests are conducted at one LRN, the lab would need 16 PCR kits if at same LRN using smart cycler or light cycler equipment. 9 PCR kits if at same LRN using ABI7000 equipment. 138 TRF kits if at same LRN using TRF equipment. This number does not include reagents |

| Capability Element | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|----------------------------|--|--|---|
| | | <p>include food samples that would also be tested at LRN laboratory in response to this event.</p> <ul style="list-style-type: none"> (Plague) Dependent on Epi calculations, not yet complete. | <p>needed for food samples that would also be tested at LRN laboratory in response to this event.</p> <ul style="list-style-type: none"> (Plague) Dependent on Epi calculations, not yet complete. |
| Laboratory Equipment | <p>Polymerase chain reaction (PCR) = Smart Cycler, Light Cycler, or ABI 7000.</p> <p>Time-resolved fluorometer (TRF) = Victor.</p> | | |
| LRN and Biosafety Training | <p>TRF Training – 2 day course provided by CDC (Atlanta).</p> <p>Conventional Microbiology train-the-trainer one week course provided by CDC (location varies).</p> <p>PCR Training.</p> | | |
| LRN Lab Credentials | <p>Select Agent Registration and staff security risk assessment approval.</p> <p>USDA/APHIS Regulations.</p> <p>CLIA (Clinical Laboratory Inspection Standards) .</p> <p>Accreditation from AAVLD (American Association Veterinary Laboratorian Diagnosticians).</p> | | |

Approaches for Large-Scale Events

Pandemic Flu – For all teams, the work force will be diminished by one-third. The need for epidemiologic investigation will be far reduced relative to surveillance needs. Resource needs for pandemic flu are orders of magnitude greater.

National Targets and Assigned Levels

None identified

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health and Vector Control
- Epidemiological Surveillance and Investigation
- Fatality Management
- Food and Agriculture Safety and Defense
- Isolation and Quarantine
- Law Enforcement Investigation and Operations
- Mass Care
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge
- Planning
- Responder Safety and Health
- Risk Management
- Triage and Pre-Hospital Treatment
- WMD/Hazardous Materials Response and Decontamination

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Respond Mission Area

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ONSITE INCIDENT MANAGEMENT

Capability Definition

Onsite incident management is the capability to effectively direct and control incident management activities by using the incident command system (ICS) consistent with the National Incident Management System (NIMS).

Outcome

The incident is managed effectively and efficiently through the integration of facilities, resources (personnel, equipment, supplies, and communications) and procedures using a common organizational structure that is incident command system (ICS).

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

All Emergency Support Functions (ESFs) are coordination (resource providing) functions, thus ESFs are not involved in onscene command. ESFs work through coordination centers to provide the incident management organization with the resources it needs. Command is generally a local/county or State responsibility.

Capability Description

| Activity | Description |
|---------------------|--|
| Command operations | <ul style="list-style-type: none"> ▪ Establish incident command/unified command. ▪ Establish measurable incident objectives. ▪ Direct efforts to meet objectives. ▪ Monitor/measure performance of assigned resources. ▪ Evaluate and revise command and control processes in response to incident developments. ▪ Command is a local or State responsibility. |
| Command facilities | Establish an incident command post and bases, camps, staging areas, and other incident facilities as required. |
| Planning | Develop an incident action plan (IAP) to achieve incident management outcomes. |
| Resource management | Establish processes to order, track, assign, and release incident resources. |
| Command staffing | <ul style="list-style-type: none"> ▪ Establish the command and general staff organization and positions needed to manage the incident and meet its objectives. ▪ Command staff include public information officer, liaison officer, and safety officer. ▪ General staff include the section chiefs for operations, planning, logistics, and finance. ▪ Determine appropriate placement of the intelligence function. |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Res.B.1 3 | Activate the Incident Command System (ICS) by first responders throughout the incident management period. |
| Res.B.1 5.3.1.3 | Provide incident health and safety plan input to the incident action plan (IAP). |
| Res.B.1 5.3.1.8 | Implement incident health and safety plan, including after-action care as needed for on-scene personnel. |
| Res.B.1 5.5.3 | Support incident response operations according to Incident Management Team (IMT) assignments in the incident action plan (IAP). |
| Res.B.1 5.6.1 | Develop an incident action plan (IAP) to establish the priorities, procedures, and actions required to meet incident objectives. |
| Res.B.1 5.7.1.2 | Support incident response operations by providing resources ordered by the Incident Management Team (IMT) through the Emergency Operations Center/Multiagency Coordination Group (EOC/MAC). |
| Res.B.1 5.7.1.3 | Execute mutual aid agreements through the Emergency Operations Center (EOC) and Multiagency Coordination (MAC) Group ordering process to provide resources to the onsite Incident Management Team (IMT). |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Percent of command staff (police, fire EMS, public health) trained and exercised in National Incident Management System (NIMS) | > 90% |
| Percent of command staff (police, fire, EMS, public health) with local ICS training | > 90% |
| Personnel are trained and exercised on incident command and management protocols and procedures in compliance with NIMS | Yes/No |
| Command Post is equipped with ability to track deployed resources using GPS (large cities only) | Yes/No |
| Command Post is equipped with ability to display real-time video feed of incident site (large cities only) | Yes/No |
| Standard Operating Procedure (SOP) is in place to provide Incident Commander with observation trips to provide aerial view of incident (large cities only) | Yes/No |
| Department Operations Center (DOC) is in place for all public safety agencies (police, fire, EMS) to manage recall, deployment, relief, and accountability (large cities only) | Yes/No |

| | |
|---|--------|
| Electronic personnel tracking system is in place with ability to transmit personnel information to Department Operations Center (large cities only) | Yes/No |
|---|--------|

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--------------------|
| The Incident Action Plan (IAP) incorporates Incident Command System (ICS) management structures in accordance with the National Incident Management System (NIMS)/National Response Plan (NRP) | Yes/No |
| The IAP clearly states measurable objectives and communicates the tactics and strategies required to fulfill the incident management goals throughout the entire incident management organization | Yes/No |
| The Incident Management Team (IMT) is structured to meet incident objectives and to be in accordance with NIMS | Yes/No |
| Incident and/or unified command is established | Yes/No |
| Command is successfully transferred to an incident command organization that is able to manage the level of complexity and achieves the incident objectives | Yes/No |
| All incident management activities are coordinated through the command and general staff organization | Yes/No |

Capability Elements

Personnel (personnel and teams including applicable equipment and training as defined by NIMS response typing system)

- Type III Incident Management Team at the local level
- Type II Incident Management Team at the State or regional level
- Type I Incident Management Team at the regional or national level

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the “Toxic Industrial Chemical” scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets
- Any scenario might require the combined efforts of responders from various local, State, regional, private sector, and Federal entities to carry out sustained support for emergency operations and expand the incident command system (ICS) to an interjurisdictional and national focus. The coordination of the ICS will be critical in this regard to avoid duplication of effort and to manage strained resources. While the focus would be on response, it is important to note that some scenarios can impact a large geographical area in a relatively short period of time (e.g., when hazards are fast moving).

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- Establishment of an intelligence/investigation function will be required if the event is terrorist initiated and, as such, is a criminal act that will require coordinated intelligence gathering and analysis and extensive criminal investigation.
 - Type I Incident Management Teams (IMTs) can be maintained at the national level and staffed by nationally certified individuals from local, State, and Federal agencies (interagency IMTs). Such IMTs are available nationally to respond to complex incidents or to transition into an incident(s) that is initially managed by a Type II or III IMT.
 - Type II IMTs can be maintained at the State or regional level and staffed by qualified individuals from local, State, and Federal agencies (interagency IMTs). Such IMTs are readily available at the State or regional level to respond quickly to establish incident command or to transition into a Type III incident that exceeds the capabilities of a Type III IMT or incident that becomes moderately complex.
 - Type III IMTs can be maintained at the local level (city, county, and State) and staffed by qualified individuals from first-responder agencies (interagency IMTs). Such IMTs are readily available for a quick response and can rapidly establish incident command on expanding incidents.
 - Complex incident management-unified incident command will have to be established immediately. Multiagency coordination will be required.
 - Resource management processes will have to be established immediately.
 - An inadequate number of first responder resources will be available to manage the entire incident scene as it grows due to the wind transportation of toxic chemicals.
 - An incident command post, base camps, staging areas, and decontamination sites will have to be established.
 - The multiagency coordinating group and incident communications management required to supplement dispatch centers and Emergency Operations Centers (EOCs) will be overwhelmed from the onset.
 - Responder care issues will have an immediate impact on the emergency response system.
 - All incidents will be managed using the National Incident Management System/incident command system (NIMS/ICS) at the local level. Expanding or complex incidents may require transitioning incident management to a Type II or Type I Incident Management Team (IMT).
 - Based on a scenario and planning assumptions where there has been a fire and toxic industrial chemical release from a petroleum refinery caused by terrorist attack using rocket-propelled grenades and explosive devices. There are 350 fatalities, 1,000 hospitalized victims, 10,000 evacuated, 1,000 seeking shelter, 25,000 sheltering in place, and 100,000 self-evacuating. One-half of the structures at the refinery are damaged from explosions.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Toxic Industrial Chemical)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|---------------------------------------|--|---|
| Type III IMT | Incident management | <ul style="list-style-type: none"> All-risk incident Single or unified command | 1 IMT; if incident is a long-duration incident, it may require a transition of a new IMT. |
| Type II IMT | Moderate: complex incident management | <ul style="list-style-type: none"> All-risk incident Single or unified command | 1 IMT; if incident is a long-duration incident, it may require a transition of a new IMT. |
| Type I IMT | Complex incident management | <ul style="list-style-type: none"> All-risk incident Single or unified command | 1 IMT; if incident is a long-duration incident, it may require a transition of a new IMT. |

Approaches for Large-Scale Events

- National ICS positions and qualification standards need to be established by the NIMS Integration Center (NIC). Use existing standards established for IMTs by the National Fire Protection Association (NFPA), National Wildfire Coordinating Group (NWCG), U.S. Department of Agriculture (USDA), and U.S. Coast Guard (USCG).
- Increase the local-level ICS Type III IMT training. Use subject matter experts (SMEs) from local, State, and Federal agencies certified/qualified in ICS to accomplish national training needs.
- The NIMS Integration Center (NIMS) needs to establish training and exercise requirements; use those established by NWCG, USDA, and USCG.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--------------|--|
| Type III IMT | Local: 1 each in or near large cities or counties |
| Type II IMT | State: 1 each in States with high occurrence or regional area available to multiple States |
| Type I IMT | Federal: 6 each strategically placed; NIMO report |

Linked Capabilities

- Animal Health Emergency Support
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation

- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Explosive Device Response Operations
- Fatality Management
- Firefighting Operations/Support
- Medical Supplies Management and Distribution
- Planning
- Public Safety and Security Response
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Urban Search and Rescue
- Triage and Pre-Hospital Treatment
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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EMERGENCY OPERATIONS CENTER MANAGEMENT

Capability Definition

Emergency Operations Center (EOC) management is the capability to provide multiagency coordination (MAC) for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, State, and Federal EOCs; coordination public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities.

Outcome

The event is effectively managed through multiagency coordination for a pre-planned or no-notice event.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function (ESF) #5: Emergency Management.

Capability Description

| Activity | Description |
|--|--|
| EOC activation, notification, staffing, and deactivation | <ul style="list-style-type: none"> ▪ Activate the EOC. ▪ Make notifications regarding the activation. ▪ Staff the EOC with personnel from all appropriate functions who are capable of making and implementing decisions. ▪ Remain operational and life supporting for an extended period of time (habitability requirements). ▪ Designate primary and alternate facilities capable of supporting continuity, response, and recovery operations that are fully equipped, periodically tested, and maintained. ▪ Deactivate the EOC at the appropriate time. |
| Operation, management, and coordination | <ul style="list-style-type: none"> ▪ Manage and coordinate interagency activities. ▪ Direct, control, and coordinate response and recovery operations. ▪ Implement relevant portions of the all-hazards plan in the context of EOC operations. ▪ Implement command relationships within the program and with external organizations, which enable the chief executive and other key officials to direct, control, and coordinate both internal and external resources efficiently and effectively during response and recovery operations. ▪ Coordinate mutual aid requests with external organizations. ▪ Produce an incident action plan and a situation report for each operational period. |

| Activity | Description |
|---------------------------------|---|
| | <ul style="list-style-type: none"> ▪ Coordinate damage and needs assessment activities. |
| Notification and communications | <ul style="list-style-type: none"> ▪ Maintain and augment primary and alternate communications systems. ▪ Maintain information status displays to enhance situational awareness. ▪ Develop and maintain a reliable capability to notify officials, alert emergency response personnel and coordinate with other EOCs both horizontally and vertically. ▪ Coordinate dissemination to government officials, other EOCs, and the public timely forecasts of all hazards requiring protective and emergency response actions. ▪ Develop, periodically test, and use emergency communications and warning protocols, processes, and procedures to alert the populations, including the special needs population, potentially affected by an actual or impending emergency. |

Critical Tasks

| UTL# | Task |
|---------------|---|
| Com.A.3 1.7.1 | Establish and implement an order of command succession or continuity consistent with NIMS. |
| Com.A.3 6 | Coordinate legal and regulatory issues with support of general counsel. |
| Res.B.1 4.2 | Activate, alert, and notify MACS personnel. |
| Res.B.1 4.2.1 | Direct all support organizations to participate in MACS. |
| Res.B.1 4.3.1 | Verify that all critical communication links/circuits have been identified and tested; redundant and diverse links exist in case of single point of failure; and all emergency circuits are protected with telecommunications service priority for prompt restoration/provisioning. |
| Res.B.1 4.3.3 | Verify that all participating public safety related Communication Centers—serving the EOC directly or indirectly—are secure and functional, have established communication links with the EOC, have appropriate supplemental resources and other outlets to provide prompt, accurate public information and effective, timely notifications, and maintain a valid common operating picture for all responders/participants. |
| Res.B.1 4.3.8 | Verify that all serving Public Safety Communication Centers have clear and standard operating procedures (SOPs), consistent with the potential needs specifically related to the event. |
| Res.B.1 4.3.9 | Verify that primary and secondary means to establish and maintain communication services through the event timeline are in place, can be activated promptly, and can continue to operate at acceptable levels. |
| Res.B.1 5.2.1 | Coordinate emergency management efforts among local, county, regional, State, and Federal EOCs. |

| UTL# | Task |
|-----------------|---|
| ResB.1 6.1 | Coordinate jurisdictional emergency management operations. |
| ResB.1 6.1.2.3 | Coordinate with organizations outside MACS. |
| Res.B.1 6.3.2 | Support identification and determination of potential hazards and threats including mapping, modeling, and forecasting. |
| Res.B.2 12 | Develop and activate transition plan from response to recovery. |
| Res.B.5 4.3.1 | Provide periodic information releases to the media and the public via all media: television, radio, and so forth. |
| Res.B.6 4.1.1.1 | Activate mutual aid agreements to obtain resources. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| The chief executive and other key officials of the jurisdiction have been briefed in the jurisdiction’s command and control plans for large-scale emergencies and participates in annual training and exercises | Yes/No |
| Standard operating procedures (SOPs) for activation, operation, and deactivation of EOCs/MACs are available | Yes/No |
| The jurisdiction has received and reviewed the specific standard operating procedures (SOPs) sections related to the role of each entity; verifying that each is appropriate | Yes/No |
| EOC personnel (primary and backup) have been trained to perform EOC tasks and on their assigned roles and responsibilities as part of the EOC team | Yes/No |
| The jurisdiction has a plan to exchange data and voice in real time | Yes/No |
| The frequency with which all critical communication links/circuits are identified and tested | Quarterly |
| Redundant and diverse links exist in case of single point of failure for all critical communications | Yes/No |
| The jurisdiction, in cooperation with providers of telecommunication services, reviews all design, construction, and repair reports to identify and resolve any single failure point | Yes/No |
| The jurisdiction has identified all critical circuits and sought to contract with a provider for telecommunication service priority | Yes/No |
| The jurisdiction has created, tested, and deployed alternate processes for sharing public information | Yes/No |

| | |
|---|--------|
| The jurisdiction has reviewed the policy/procedure, appropriate equipment, and capability to relocate safely, if necessary, and without loss of operational integrity | Yes/No |
|---|--------|

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|---|
| Time for emergency operations center (EOC) activation and operation upon notification of the incident | Less than 2 hours (ideal is 1 hour or less) |
| Time for the emergency operations center (EOC) to become fully staffed and ready to commence operations | Less than 2 hours after activation |
| Time for the jurisdiction to recognize the need to implement mutual aid agreements | Less than 2 hours after EOC is operational |
| Time for the jurisdiction to produce an incident action plan (IAP) | Less than 2 hours after EOC is operational |
| Time for the jurisdiction to set a schedule for incident action plan (IAP) activities and define operational period. | Less than 2 hours after EOC is operational |
| Time for the jurisdiction to produce a situation report | Less than 2 hours after EOC is operational |
| Frequency with which the jurisdiction will provide situation reports | At least one per operational period. |
| Request state/Federal resources as needed during incident base on availability of resources. | Yes/No |
| Time to successful implementation of continuity of operations plans (COOPs) and continuity of government plans (COGs) | Less than 6 hours after the incident |
| Primary and secondary means to establish and maintain communication services through the event timeline are in place; services can be activated promptly and have the capacity to continue to operate at acceptable levels. | Yes/No |
| The jurisdiction has an effective process for assessing the status of any/all public safety communication centers throughout the lifetime of event. | Yes/No |

Capability Elements

Personnel

Basic EOC functional requirements, including:

- Chief executive and key officials

- Command staff
- Incident commander
- Public information officer
- Safety officer
- Liaison officer
- Operations section
- Logistics section
- Planning section
- Administration/financial section
- Needed ESF areas (up to 15)
- Information technology (IT) specialist

Equipment

- Level 1 mobile central processor
- Communications equipment (e.g., telephones, satellites, television, radio)
- Computers and software (e.g., a geographic information system (GIS))
- Sensitive compartmented information facilities (SCIF) (selected EOCs only)
- Unclassified capability equipment, including the National Alert Warning System (NAWAS) and the Washington Area Warning System (WAWAS)
- Secret capability equipment, including: (selected EOCs only)
 - Homeland Security Information Network (HSIN)/Joint Regional Information Exchange System (JRIES)
 - Other classified systems connectivity
 - Secure telephone and VTC equipment
- Top Secret/Sensitive Compartmented Information (TS/SCI) capable equipment, including: (selected EOCs only)
 - Automatic Digital Network (AUTODIN)/Defense Message System (DMS)
 - Other classified systems
 - Secure telephone equipment (STE)
 - National Secure Telephone System (NSTS)
 - Top Secret/Sensitive Compartmented Information (TS/SCI) secure VTC equipment
 - Top Secret/Sensitive Compartmented Information (TS/SCI) secure facsimile equipment

Training

- FEMA Independent Study Program: IS 700-NIMS, An Introduction
- FEMA Independent Study Program: IS 800-National Response Plan, An Introduction
- FEMA Independent Study Program: IS 275-EOC Management and Operations
- FEMA Independent Study Program: IS 100-Introduction to Incident Command System
- FEMA Independent Study Program: IS 200-ICS for Single Resources and Initial Action Incidents

Exercises, Evaluations and Corrective Actions

- Conduct exercises to evaluate the effectiveness of emergency operations center (EOC)

incident management processes.

- Exercise emergency operations plans, policies and procedures.
- Exercise continuity of operations/continuity of government (COOP/COG) Plans.

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Improvised Nuclear Device (IND) scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability is applicable to all scenarios in which the incident is a large-scale event requiring the establishment of a command center away from the incident site.
- The capability targets for a single incident are based primarily on the “improvised nuclear device” (IND) scenario because it was considered the most encompassing for an Emergency Operations Center (EOC) standup and response to minimize the impact and to manage the incident. An earthquake was considered the next most encompassing. The 15 possible scenarios were rated from most to least encompassing.
- One central and backup EOC for each of 3,142 counties. One central and backup State EOC are available for each State and 6 territorial governments (56+). Individual municipalities (19,429) and towns and townships (16,504) may need an EOC depending on population, legislation, and identified requirements.
- Type III Incident Management Teams (IMTs) can be maintained at the local level (city, county, and State) and staffed by qualified individuals from first-responder agencies (interagency IMTs). Such IMTs are readily available for a quick response and rapidly establish incident command on expanding incidents.
- One central and backup EOC are available for each of the signatory departments and agencies listed in the *National Response Plan* (40+).
- All jurisdictions have identified the need to carry out minimum emergency functions for effective control of any emergency through their own EOC or a shared EOC that has been identified under National Incident Management System (NIMS) operations.
- The primary or alternate EOC facility is operational and habitable.
- Sufficient personnel, ranging from 2 to 3 shifts, 24/7, are available to staff the EOC and manage all tasks.
- Sufficient personnel and equipment are available to conduct EOC operations.
- Trained personnel are available to perform EOC tasks. Personnel know their assigned roles and responsibilities as part of the EOC team.
- Primary and/or alternate communications capabilities are still functional to coordinate response and incident management.
 - Governments within the United States:
 - 19,429 municipalities
 - 16,504 towns or townships
 - 3,142 counties
 - 50 State governments

- 6 territorial governments
 - 1 national government
 - Total of more than 39,000 jurisdictions
- Cities with populations greater than 50,000 should identify a need for an EOC. The numbers of cities with levels of populations above 50,000 follow:
 - 364 cities with populations of 50,000–100,000
 - 173 cities with populations of 100,000–250,000
 - 36 cities with populations of 250,000–500,000
 - 29 cities with populations of 500,000+

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Improvised Nuclear Device)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--|-----------------------------|--|
| Communication | Level 1 mobile central processor (CP) | | 2 total; 1 to be used to restore “normal” public safety communications services to some level during the duration of recovery effort |
| Equipment needs | The capabilities/capacities are requirements for implementation to meet goals and objectives of integration and configuration of operations centers. | Applicable to all scenarios | Communications equipment, computers, satellite, AM-FM radio, and sensitive compartmented information facilities (SCIF) areas Unclassified capabilities: <ul style="list-style-type: none"> ▪ Internet ▪ Local area network (wired and/or secure wireless) ▪ Geographic information system (GIS) ▪ Geospatial imagery ▪ Interoperable software ▪ EOC operation software ▪ Sensitive-but-unclassified network ▪ Common operational picture ▪ Video wall/plasma screen ▪ Telephone ▪ Facsimile ▪ Video conferencing (VTC) ▪ Cable TV ▪ Satellite TV ▪ VHS/UHF/HF |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|-----------------------------|---|
| | | | <p>communications</p> <ul style="list-style-type: none"> ▪ National Alert Warning System (NAWAS) ▪ Washington Area Warning System (WAWAS) ▪ State-of-the-art computer blade technology ▪ Special lighting ▪ Room acoustics ▪ Architectural noise and vibration control ▪ Environmental acoustics ▪ Sound reinforcement systems <p>Secret Capabilities:</p> <ul style="list-style-type: none"> ▪ Homeland Security Information Network (HSIN)/Joint Regional Information Exchange System (JRIES) ▪ Other classified systems connectivity ▪ Secure telephone equipment ▪ Secret/secure VTC equipment ▪ VHF/UHF/HF communications ▪ Common operational picture <p>Top Secret/Sensitive Compartmented Information-capable equipment:</p> <ul style="list-style-type: none"> ▪ Common operational picture ▪ Automatic Digital Network (AUTODIN)/Defense Message System (DMS) ▪ Other classified systems ▪ Secure telephone equipment ▪ (STE) ▪ National Secure Telephone System (NSTS) ▪ TS/SCI secure VTC equipment ▪ TS/SCI secure facsimile |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--|-----------------------------|---|
| | | | equipment <ul style="list-style-type: none"> ▪ Connectivity to other emergency operation centers (EOCs) |
| Personnel | Locally determined by size of emergency operating center (EOC) | Applicable to all scenarios | Capability to meet basic EOC functional requirements: <ul style="list-style-type: none"> ▪ Policy/incident command ▪ Safety/security ▪ Public information officer (PIO) ▪ Operations ▪ Logistics ▪ Planning ▪ Administration/finance ▪ 15 Emergency Support Functions (ESF) (if required to activate) ▪ 2 Federal agriculture employees/U.S. Department of Agriculture (USDA) per operational period for 24/7 staffing |

Approaches for Large-Scale Events

During an emergency caused by an improvised nuclear device, when both the local and alternate EOC are not operational, it would be beneficial to know neighboring counties’ vital information (e.g., population, local hazards, infrastructure complexity, urban versus rural).

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|------------|--|
| City EOC | <ul style="list-style-type: none"> ▪ 1204 EOCs: Cities with populations greater than 50,000 may identify a need for an EOC. ▪ Cities with less than 50,000 in population can coordinate efforts to create a combined EOC and backup EOC for the area may use a county EOC. |
| County EOC | 6,284 EOCs: one central and backup EOC for each of 3,142 counties (Note: Neighboring counties share alternate EOCs; the number required is based on population density and local hazards.) |
| State EOC | 112 EOCs: one central and backup State EOC for each State and 6 |

| Resource | Assigned Level and Quantity |
|--|--|
| | territorial governments |
| Federal EOC | 80 EOCs: one central and backup EOC for each of the signatory departments and agencies of the <i>National Response Plan (NRP)</i> |
| U.S. Department of Homeland Security (DHS) EOC | 20 EOCs: one central and backup EOC for each of the DHS/FEMA regional offices and components |
| EOC personnel | <p>EOC must be staffed to meet basic EOC functional requirements; functions include:</p> <ul style="list-style-type: none"> ▪ Incident commander ▪ Public Information Officer (PIO) ▪ Safety officer (SO) ▪ Liaison officer (LO) ▪ Operations section ▪ Logistics section ▪ Planning section ▪ Administration/financial section ▪ Needed Emergency Support Function areas (up to 15), 1 per shift (at least) who, when appropriate, must have security clearances as required to operate during activations |
| Training for EOC personnel | <ul style="list-style-type: none"> ▪ IS 700: NIMS ▪ IS 800: NRP ▪ Incident command system (ICS) 100/200 ▪ EOC management and operations ▪ IES/EOC interface |
| Training per EOC function | Specified/standardized training requirements for each EOC function assignment |
| Security policy | Federally developed policy to identify classified information handling requirements for Federal, State, and local EOCs. |

Linked Capabilities

- Animal Health Emergency Support
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Public Information and Warning
- Environmental Health
- Explosive Device Response Operations
- Fatality Management
- Firefighting Operations/Support
- Food and Agriculture Safety and Defense

- Intelligence/Information Sharing and Dissemination
- Isolation and Quarantine
- Law Enforcement Investigations and Operations
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge
- Onsite Incident Management
- Planning
- Public Safety and Security Response
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Structural Damage and Mitigation Assessment
- Triage and Pre-Hospital Treatment
- Urban Search and Rescue
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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CRITICAL RESOURCE LOGISTICS AND DISTRIBUTION

Capability Definition

Critical Resource Logistics and Distribution is the capability to identify, dispatch, mobilize, and demobilize and to accurately track and record available human and material critical resources throughout all incident management phases. Critical resources are those necessary to preserve life, property, safety, and security.

Outcome

Critical resources are available to incident managers and emergency responders upon request for proper distribution and to aid disaster victims in a cost-effective and timely manner.

Relationship to National Response Plan Emergency Support Function/Annex [L1]

The capability supports the following Emergency Support Functions (ESFs):

- ESF #1: Transportation
- ESF #2: Communications
- ESF #3: Public Works and Engineering
- ESF #4: Firefighting
- ESF #5: Emergency Management
- ESF #6: Mass Care, Housing, and Human Services
- ESF #7: Resource Support
- ESF #8: Public Health and Medical Services
- ESF #9: Urban Search and Rescue
- ESF #10: Oil and Hazardous Materials Response
- ESF #11: Agriculture and Natural Resources
- ESF #12: Energy
- ESF #13: Public Safety and Security
- ESF #14: Long-Term Community Recovery and Mitigation
- ESF #15: External Affairs

Capability Description

| Activity | Description |
|----------------------|---|
| Needs Assessment | Identify the human and material resources needed during an incident. |
| Resource acquisition | <ul style="list-style-type: none"> ▪ Provide support to incident command (IC) with the human and material resources needed during an incident. ▪ Mobilize, dispatch, and demobilize human and material resources needed during an incident. |
| Logistical support | <ul style="list-style-type: none"> ▪ Meet all support needs for the incident, including ordering resources through appropriate procurement authorities from off-incident locations. ▪ Provide facilities, transportation, supplies, equipment maintenance and |

| Activity | Description |
|----------|--|
| | fueling, food service, communications, and medical services. <ul style="list-style-type: none"> ▪ Account for all resources through proper documentation. |

Critical Tasks

| UTL# | Task |
|-------------------|--|
| Res.B.1 1.2 | Develop plans, procedures, and protocols for resource management in accordance with the National Incident Management System (NIMS). |
| Res.B.1 1.3 | Identify, type, and inventory resources by material or services provided. |
| Res.B.1 1.3.4 | Inventory and categorize, by material or services provided, facilities, equipment, personnel, and systems available to support emergency operations. |
| Res.B.1 1.3.4.2.1 | Determine the availability of (and provide) supplies stocked in distribution facilities, national stockpiles, and customer supply centers. |
| Res.B.1 5.5.3 | Support incident response operations according to the Incident Management Team (IMT) assignments in the incident action plan (IAP). |
| Res.B.1 5.7.1.2 | Support incident response operations by providing resources ordered by the IMT through the Emergency Operations Center/Multiagency Coordination Group (EOC/MAC). |
| Res.B.1 6.4.2 | Allocate, mobilize, and manage resources. |
| Res.B.1 6.4.2.1.3 | Prioritize use of supplies. |
| Res.B.1 6.4.2.1.6 | Coordinate distribution of stockpile assets. |
| Res.B.1 6.4.2.3 | Provide logistical support. |
| Res.B.3 3.1.4 | Coordinate the handling and transporting of affected persons. |
| Res.C.1 1.2.3.2.2 | Develop plans for establishing staging areas for internal and external response personnel, equipment, and supplies. |
| Rec.C.3 5.1.1.5 | Provide and coordinate the use of emergency power generators at critical facilities. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Tracking and recording system has been developed and tested | Yes/No |
| Resource and vendor list has been developed | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Frequency of updating resource lists | Within 1 hour |
| Tracking and recording system is exercised | Annually |
| Vendor contracts for critical resources and essential services are established and maintained | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Resource and logistics plans, policies, and procedures in accordance with NIMS, the National Response Plan (NRP), and jurisdictional response plans are in place | Yes/No |
| Time between the requests for critical resources needed for the incident and the activation of the multi-agency coordination system | Within 2 hours |
| Time to process and approve requests for critical resources | Within 1 hour |
| Time from approval of requests for State critical resources and delivery of critical resources | Within 12 hours |
| Time from approval of requests for Federal critical resources and delivery of critical resources | Within 24 hours |
| Critical resources are accurately tracked and recorded | Yes/No |
| Critical resources are maintained and/or resupplied to ensure sustained operations | Yes/No |
| Requests for State and Federal reimbursement are processed | Yes/No |
| Percent a percentage of approved resource requests are met and filled accurately during the incident | 100% |
| Assistance from outside jurisdictions negotiated through mutual aid agreements, including EMAC, are tracked to certify performance | Yes/No |

Capability Elements

Personnel (personnel and teams including applicable equipment and training as defined by NIMS response typing system)

- Type I logistics planning manager to take the lead or support the planning process at all levels
- Type II logistics planning manager to lead/aid and to assist the Type I logistics planning manager/lead in the multijurisdictional or interagency planning process
- Type III logistics planning manager for multijurisdictional or interagency logistics planning
- Type IV logistics planning manager for jurisdictional logistics planning
- Rapid Needs Assessment Team to determine requirements for critical resources
- Transportation coordinator in the emergency operations center (EOC) to coordinate overarching critical resource transportation needs (intra- and inter- state)
- Evacuation Liaison Team to provide liaison during evacuation
- Evacuation Coordination Team to coordinate evacuation
- Electrical Power Restoration Management Team
- Water Supply Restoration Management Team
- Security Escort Team

Planning

- Federal mobilization base camp to house Federal assets prior to delivering them to state staging areas
- State staging area for receiving Federal assets sent to aid in disaster
- Interagency warehouse to manage critical resources at the local/incident level
- Evacuation terminal location where people will gather to be evacuated

Training

- Logistics training for incident command staff and EOC staff

Equipment and Systems

- National tracking system to track all resources available throughout the country
- Logistics response system to allocate, mobilize and demobilize, and manage resources
- Transportation vehicles with accompanying personnel to move critical resources

Exercises, Evaluations, and Corrective Actions

- Conduct exercises to evaluate the effectiveness of resource tracking and recording system
- Exercise logistics plan, policies, and procedures

Planning Assumptions

- The capability is constant across all 15 National Planning Scenarios; however, hazardous materials (HazMat) response incidents will require specialized, already established teams to assist with the incident. Regardless, this capability functions across all scenarios, adjusting to the needs of the incident.
- Jurisdictions will identify where and how to replenish the depleted resources needed to further manage the incident.
- Based on scenario conditions, a 7.2-magnitude earthquake with a subsequent 8.0 earthquake following occurs along a fault zone in a major metropolitan area of a city, greatly affecting a 6-county region with a population of approximately 10 million people. Approximately

150,000 buildings are destroyed, and 1 million buildings are damaged. All typed personnel are based on Federal Emergency Management Agency (FEMA) Typed Resource Definitions.

- Assume 300,000 people will need to evacuate area, of this, 50 percent lack the capability to self-evacuate.
- Development of plans, procedures, and protocols for resource management in accordance with the National Incident Management System (NIMS) will be outlined within the planning capability.
- Assistance from private contractors and voluntary agencies will be forthcoming to help the community during the incident. Precontracted services may be necessary and are encouraged through public- and private-sector organizations and partnerships.
- Resources are categorized by material or service provided.
- Inter- and intrastate mutual aid agreements will be utilized (State, tribal, and local).
- An Emergency Management Assistance Compact (EMAC) will be implemented based on Federal declarations.
- Jurisdictions' emergency response plans should include precontracted services with public and private entities.
- Most capability elements will be needed quickly: They must be available to respond in less than 1 hour from the initial incident to manage the scene. However, because this capability deals with critical resource logistics and distribution, the timeframe may be slightly longer (1–3 hours, depending on the resource) but still required locally.
- Warehouses will securely store and handle all stockpiled materials under appropriate conditions that will maintain their stability, integrity, and effectiveness while providing appropriate levels of physical security for all materials and facilities.
- Jurisdiction:
 - Local: city or county, depending on populations and government makeup
 - Regional: area that covers multiple agencies and jurisdictions and counties with large populations (e.g., six fire mutual-aid regions in California, Los Angeles County, intrastate).
 - State: 50 States and six Territorial governments and the District of Columbia
 - National: 1 resource per several States (e.g., search and rescue teams)

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------------|--|---|--|
| Logistics planning manager | Develop plans for logistics management | 1 plan per jurisdiction affected | 1 Type III Planning Manager to create plans for area to assist operations during incident |
| National tracking system | Capture all resources available | Find resources to support multicounty/region earthquake response operations | <ul style="list-style-type: none"> ▪ 1 national tracking system ▪ Local tracking systems would be created to manage at local level (State, local, private, and public) to feed into larger tracking system |
| Rapid needs assessment team | Provide a rapid assessment immediately following a major disaster or emergency; provide and collect information to determine requirements for critical resources needed to support emergency response activities | Assess 6-county affected area | 2 teams (1 in affected region; 1 as backup) |
| Logistics response system | NIMS-compliant system (utilized within the incident command system (ICS) logistics branch) | Incident will require full activation of logistics branch to manage critical resource logistics and distribution | 1 logistics response system |
| Transportation coordinator | Coordinate critical resource transportation needs between Federal, State, local, and private | Scenario will require resources from multiple jurisdictions to help support the incident, therefore the coordinator will need to have | 1 to sit in Emergency Operations Center (EOC); can be component Emergency Support Function (ESF) #1 |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|--|---|
| | agencies and organizations | overarching capability to monitor and troubleshoot movement of resources | |
| Cargo transportation vehicles and personnel | Move large amounts of critical resources (e.g., trucks, planes, boats, trains) | Scenario will require at least: <ul style="list-style-type: none"> ▪ 550,000 gallons of water per day (1 gallon/person/day) for displaced persons ▪ 2,750,000 pounds of ice per day (1 5-pound bag/person/day) Other critical resource incident specific | Total volume of resources divided by the volume capacity of vehicle multiplied by amount of resource needed |
| Evacuation transportation vehicles and personnel | Ability to provide transportation to evacuees (e.g., trucks, buses, planes, boats, trains) | 150,000 people will require assistance with transportation for evacuation; transportation assets can be recycled and used multiple times during an evacuation | Total number of evacuees divided by passenger capacity of vehicle |
| Federal mobilization base camp | House Federal assets | Scenario will require large amounts of critical resources immediately | 2 base camps to receive Federal assets |
| State staging area | House Federal assets that have been transferred to the State | 2 staging areas per base camp | 4 staging areas |
| Interagency warehouse | House critical resources transferred from the State and donated by nongovernmental organizations (NGOs) and the public | Incident will require one location for critical resources to be delivered and will include appropriate material-handling equipment (e.g. fork lifts, pallet jacks) | 1 warehouse |
| Evacuation terminal | Provide for evacuation | As designated in jurisdictional response | A number should be outlined in emergency |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|--|---|
| | locations for affected persons | plans | response plans |
| Evacuation liaison team | Assist evacuees | 300,000+ people will be evacuated | 1 Type I Team |
| Evacuation coordination team | Assist evacuees | 300,000+ people will be evacuated | 1 Type II Team |
| Electrical power restoration management team | Quickly restore electrical power to affected areas | 1 million buildings affected; 6-county region | One management team to coordinate with affected utilities |
| Water Supply Restoration Management Team | Quickly restore water supply to affected areas | At least 550,000 people are without water services | One management team to coordinate with affected utilities |

Approaches for Large-Scale Events

The capability is not dependent on specification of an incident and will remain constant among the 15 National Planning Scenarios.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|------------------------------|---|
| Logistics planning manager | <ul style="list-style-type: none"> ▪ Federal: 1 per FEMA Region. ▪ 56 Nationally – one for each State and Territory ▪ Local: 1 Type IV logistic planning manager per jurisdiction |
| Emergency logistics training | <ul style="list-style-type: none"> ▪ Federal: develop training in emergency logistics for federal, state, local, private, NGO emergency responders, that incorporates linkages among damage/needs assessment, logistics management and volunteer/donations management. |
| National tracking system | <ul style="list-style-type: none"> ▪ One national system ▪ State/Local: 1 within organizations that handle resources for emergency incidents. |
| Rapid needs assessment team | <ul style="list-style-type: none"> ▪ 10 Nationally – one in each of the 10 FEMA Regions. |
| Logistics response system | <p>Federal: 1 State: 56 Local: 1 per jurisdiction</p> |

| Resource | Assigned Level and Quantity |
|--|---|
| Transportation coordinator | Federal/State/Local: 1 per emergency operations center (EOC) (as designated within EOC management capability for city, county, State, Federal, and DHS EOC) |
| Cargo transportation vehicles and personnel | Local: scaleable depending on incident need |
| Federal mobilization base camp | National: not specified (base camps are activated at time of incident) |
| State staging area | 112 Nationally – 2 in each State and Territory |
| Interagency warehouse | Local: 1 per incident |
| Warehouse system for stockpiled resources | Federal: 1 State: 1 Non-Governmental Organization (NGO): 1 per organization |
| Evacuation terminal | Local: at least 1 per evacuation plan |
| Evacuation liaison team (ELT) | Local: 1 per emergency operations center (EOC) |
| Evacuation coordination team | Local: 1 per emergency operations center (EOC) |
| Evacuation vehicles and personnel | Local: vehicles sufficient to evacuate 100% of those unable to self-evacuate |
| Electrical power restoration management team | Local: at least 1 per public works and engineering jurisdiction (these jurisdictions will have the necessary personnel to perform these tasks) |
| Water Supply Restoration Management Team | Local: at least 1 per public works and engineering jurisdiction (these jurisdictions will have the necessary personnel to perform these tasks) |

Linked Capabilities

- Animal Health Emergency Support
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Emergency Operations Center Management
- Food and Agricultural Safety and Defense
- Mass Care (Sheltering, Feeding, and Related Services)
- Medical Supplies Management and Distribution

-
- Onsite Incident Management
 - Planning
 - Public Safety and Security Response
 - Restoration of Lifelines
 - Risk Management
 - Structural Damage and Mitigation Assessment
 - Volunteer Management and Donations

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VOLUNTEER MANAGEMENT AND DONATIONS

Capability Definition

Volunteer Management and Donations is the capability to effectively manage and deploy unaffiliated volunteers and unsolicited donations in support of domestic incident management, including identifying and determining needs and priorities for effectively managing and deploying volunteer support and donations before, during, and after an incident.

Outcome

The value of volunteers and charitable donations is maximized and does not hinder response and recovery activities.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

The capability supports the Volunteer and Donations Management Support Annex

Capability Description

| Activity | Description |
|---|--|
| Manage undesignated cash donations | Coordinate a system to manage cash donations for disaster victims that have not been designated to a specific recipient. |
| Manage unaffiliated volunteers | Coordinate a system to manage spontaneous or emergent volunteers during an emergency who are not affiliated with a volunteer organization. |
| Manage unsolicited donations | Coordinate a system to manage the donations of goods for disaster victims that have not been requested by government, voluntary disaster-relief organizations, or other donations-related personnel. |
| Manage media and other external relations | Coordinate with emergency public information officials to provide guidance to citizens for donations and volunteering. |
| Establish systems and plans for identifying needs in affected communities | <ul style="list-style-type: none"> ▪ Develop capabilities to map populations at risk and identify vulnerabilities and optional needs for volunteerism, before, during or after an incident. ▪ Establish appropriate mechanisms to gather, collate, assess and prioritize needs. ▪ Develop standards, norms and parameters for defining proper “support basket” of volunteer aid/donations to the needing persons/communities. ▪ Teach and train volunteers to perform the tasks that they will be asked to complete. |
| Integrate volunteered technical capabilities | Coordinate a system for soliciting, receiving, and utilizing equipment and technical solutions for incident management, mass casualty care, communications, logistics, situational awareness, and other capabilities. |

Critical Tasks

| UTL# | Task |
|-----------------------|--|
| Com.B 2.3.1 | Coordinate the use of assigned Volunteer Organizations Active in Disasters (VOAD). |
| Com.B 2.3.4 | Develop plans, policies, and protocols for managing volunteers for medical tasks. |
| Com.B 2.3.5 | Develop plans, policies, and protocols for managing volunteers for non-medical tasks. |
| Res.B.1 1.3.4.3.1 | Designate and advertise point of contacts for soliciting and receiving equipment and technical (i.e., communications, logistics, housing, medical) solutions from the private sector, outside jurisdictions, non-governmental organizations, and volunteers. |
| Res.B.1 6.4.2.2.1 | Activate preassigned toll-free numbers. |
| Res.B.1 6.4.2.2.2 | Work closely with a public information officer to disseminate critical information about appropriate ways to donate and volunteer. |
| Res.B.1 6.4.2.2.3 | Brief senior leadership and elected officials (government, Federal coordinating officer (FCO), congressional staff). |
| Res.B.1 6.4.2.2.4 | Work with other Federal agencies and functions. |
| Res.B.1 6.4.2.2.5 | Review and activate State and local plans for unsolicited donations and unaffiliated volunteers. |
| Res.B.1 6.4.2.2.6 | Activate donations/volunteer coordination teams (DVCT). |
| Res.B.1 6.4.2.2.7 | Develop a strategic facilities management plan (multiagency warehouse, emergency distribution centers). |
| Res.B.1 6.4.2.2.8 | Establish a liaison with media outlets and other stakeholders (e.g., Congress, Federal agencies) to provide information about volunteers and donations. |
| Res.B.1 6.4.2.2.10 | Establish a donations and volunteer coordination center. |
| Res.B.1 6.4.2.2.11 | Gather donations intelligence from the field. |
| Res.B.1 6.4.2.2.12 | Facilitate the transportation of goods in coordination with State tracking associations, State and Federal Departments of Transportation, State police, and other related agencies. |
| Res.B.1 6.4.2.2.14 | Manage cash donations (suggest to the public that cash is preferred by way of press releases and briefings). |

| UTL# | Task |
|-----------------------|--|
| Res.B.1 6.4.2.2.13 | Locate and establish warehouses and material handling equipment. |
| Res.B.1 6.4.2.2.15 | Coordinate voluntary support/activities with community/tribal leadership and liaise with local agencies. |
| Res.B.1 6.4.2.2.16 | Develop just-in-time training program for volunteers to perform required tasks. |
| Rec.A.3 3.4 | Provide volunteer services. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|--|
| A volunteer management and donations plan is in place that: <ul style="list-style-type: none"> ▪ Defines needs for and deployment of volunteers ▪ Provides protective measures and essential equipment ▪ Manages unsolicited donations ▪ Provides for education and training of volunteers ▪ Address logistics, including housing and feeding of volunteers arriving from outside the area ▪ Address fatality management | Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No |
| Plans, policies and protocols for managing volunteers for different types of incidents before, during and after an incident have been developed | Yes/No |
| National and State Volunteer Organizations Active in Disasters (VOAD) have been established and are consulted during disaster planning | Yes/No |
| Cooperative agreements and memorandums of understanding (MOUs) with volunteer management organizations have been developed | Yes/No |
| Mutual aid agreements with non-profit relief organizations (e.g. Red Cross, etc.) or local government citizen participation programs (e.g. Citizen Corps) have been created | Yes/No |
| Provisions have been made for insurance coverage for volunteers assigned to perform tasks | Yes/No |

| | |
|--|--------|
| Norms and standards have been set regarding appropriate, fair and equal allocation of volunteers, aid and donations | Yes/No |
| Volunteer management and donations plans have been exercised | Yes/No |
| Point of contacts for donations are advertised to outside jurisdictions, the private sector, non-governmental organizations, and the media | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|---|
| Time to establish a staging area, including technology and communications equipment | 48 hours after an incident or disaster |
| Time to implement strategic facility management plan | 24 hours after notification of a disaster or impending disaster |
| Time to establish a warehouse(s) with professional and volunteer staff | 24 hours following the location of a warehouse |
| Time to communicate with media outlets | 1 hour after an incident or disaster |
| Time to communicate information about volunteer and donation needs and how to help | Within 24 hours after the end of a disaster or incident |
| Time to deploy volunteer/donation coordinators | 6 hours after the end of a disaster or incident |
| Time to arrange trucks to pick up goods from the warehouse and deliver them to distribution centers | 48 hours after the end of a disaster or incident |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Donations Volunteer Call Center (DVCC) staff and equipment needed to manage volunteers and donations
- Donations/volunteers coordinator
- Donation Coordination Team
- Volunteer Coordination Team
- Transportation drivers
- Warehouse managers and staff

Equipment and Systems

- Transportation equipment to pick up and deliver donated goods
- Warehouses and equipment for storage of donated goods

- Tracking system for goods and personnel
- Process for processing vouchers or payment for volunteer expenses

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the major earthquake scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- Three million are affected, 2.5 million are displaced, 30,000 are killed, and 150,000 are injured.
- Seasonal considerations include the dead of winter instead of summer.
- Infrastructure failure is pervasive in communications, energy, and water and sewer sectors.
- Offers of assistance will come from other countries.
- The need for resources is 12–48 hours, which can be located regionally. The optimal location should be 15–20 miles from the event site (ground zero). However, damage to infrastructure may dictate otherwise. The call center should generally be located close to the State’s Emergency Operation Center (EOC) for coordination purposes.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Earthquake)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|---|
| Donation and volunteer call center (DVCC) | Handles 5,000 calls/day 60 operators for 14 hours/day | An average of 2,500 calls come in a day resulting from media blitz; each call averages 10 minutes. | <ul style="list-style-type: none"> ▪ 60 operators per shift ▪ 2 shifts = 120 operators ▪ 6 supervisors per shift. ▪ 1 manager |
| Transportation | 1 26-ft. container holds 4 tons | 1,000,000 persons are displaced; need 10 pounds of clothing and personal goods per day. | 1,250 trucks and drivers to pick up and deliver goods |
| Warehousing | 1 warehouse manager and associated equipment and personnel | 1,000,000 persons are displaced; need 10 pounds of clothing and personal goods per day. | 100,000 tons of material for each warehouse; one warehouse worker per 25,000 tons = 4 |
| Donations/volunteer coordinator | Manage centers and media relations. | | |

Approaches for Large-Scale Events

Due to the possibility of severely damaged roads, alternative methods of transportation (e.g., helicopters) will need to be considered.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| Donations and volunteer call center (DVCC) | <p>1 per State located close to the State EOC; capability established preincident and activated as needed</p> <ul style="list-style-type: none"> ▪ 20–60 operators (calltakers) with computer terminals networked ▪ Access to high-speed Internet ▪ Call center database on secure Web site with logon, passwords, and varying levels of access ▪ 1 donation coordination team of 8–10 people with clerical support ▪ 1 volunteer coordination team of 8–10 people to qualify offers of services and develop links to agencies needing volunteers ▪ An 800 telephone number with 20–60 line capability ▪ 20+ additional lines for coordination teams ▪ Computers for coordination teams ▪ Hours: 8 a.m.–10 p.m.; 2 shifts |
| Transportation | State/local/private: for large-scale incidents, may need up to 1,200 vehicles (as described above) that would be acquired through private rentals, donations, or National Guard. A plan should be developed for this resource |
| Warehousing | Public/private partnership: 1–6 |
| Donations coordinators | Regional: 4 per region |

Linked Capabilities

- Citizen Protection: Evacuation and/or In-place Protection
- Communications
- Community Preparedness and Participation
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Isolation and Quarantine
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge
- Onsite Incident Management
- Planning
- Public Safety and Security Response
- Responder Safety and Health

-
- Risk Management
 - Urban Search & Rescue

References

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RESPONDER SAFETY AND HEALTH

Capability Definition

Responder Safety and Health is the capability that ensures adequate personnel and resources are available at the time of an incident to protect the safety and health of onscene first responders, hospital/medical facility personnel (first receivers), skilled support personnel, and, if necessary, their families through the creation and maintenance of an effective safety and health program. This program needs to comply with the Occupational Safety and Health Administration's (OSHA) "HAZWOPER" standard (29 CFR 1910.120, as implemented by EPA or State authorities) and any other applicable Federal and State regulations. The program also needs to be integrated into the Incident Command System (ICS) and include training, personal protective equipment, health and safety planning, risk management practices, medical care, decontamination procedures, infection control, vaccinations for preventable diseases, adequate work- schedule relief, psychological support, and followup assessments.

This capability identifies the critical personnel, equipment, training, and other resources needed to ensure that all workers are protected from all hazards, including fire (heat), CBRNE (chemical, biological, radiological, nuclear, or explosive) materials, electrical hazards, collapsed structures, debris, acts of violence, and others.

The Responder Safety and Health capability is a critical component of overall emergency management. First responders include police, fire, emergency medical services (EMS), and other emergency personnel, as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators). This extended definition includes a very broad set of workers and a wide range of likely response-related activities, resulting in an increased number of potential hazards and exposures. Building the ability to protect all responders from all hazards is a substantial undertaking that involves prevention, preparedness, response, and recovery efforts.

This capability supports both the safety officer position identified in the National Incident Management System (NIMS)/incident command system (ICS) and the Worker Safety and Health Support Annex to the National Response Plan (NRP). The Type 1 safety officer described in this capability has yet to be fully defined (to include managing all of the hazards that first responders are likely to face), but the concept used is the same as the "disaster safety manager" described in *Protecting Emergency Responders: Safety Management in Disaster and Terrorism Response* (NIOSH, 2004). In addition, the list of services that are critical for this capability is consistent with the actions specified under the Worker Safety and Health Support Annex and in the *Guidelines for Haz Mat/WMD Response, Planning and Prevention Training* (FEMA, 2003).

During the response to any incident, employers are responsible primarily for the safety and health of their employees. However, the ICS creates a unified safety and health organization under the safety officer. In large-scale incidents, because of the number and varieties of hazards and workers, the safety officer would be used more as a safety manager. This technical capability therefore does not prescribe a certain level of preparedness for any particular organization, rather it specifies the need for personal protective equipment (PPE), safety officers, and so forth and allows local entities to determine the best way to obtain the needed resources (e.g., through mutual aid, State resources, Federal resources) for the first 72 hours of the response operations.

Outcome

No illnesses or injury to any first responder, first receiver, medical facility staff member, or other skilled support personnel result from a preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical and emotional stress after the initial incident or during decontamination and incident follow-up.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs) and Annex:

- ESF #3: Public Works and Engineering
- ESF #5: Emergency Management
- ESF #6: Mass Care, Housing, and Human Services
- ESF #8: Public Health and Medical Services
- ESF #9: Urban Search and Rescue
- ESF #10: Oil and Hazardous Materials Response
- ESF #11: Agricultural and Natural Resources
- ESF # 12: Energy
- Worker Safety and Health Support Annex

Capability Description

| Activity | Description |
|-----------------------|--|
| Planning | <ul style="list-style-type: none"> ▪ Anticipate all emergencies and associated hazards to responders and address both in emergency response plans. ▪ Develop a comprehensive health and safety program that protects responders during emergencies and from exposure to the hazards anticipated. ▪ Anticipate the need to protect personnel responsible for the distribution of critical supplies (i.e., biological/chemical countermeasures) and enforcement of isolation or quarantine protocols. ▪ Obtain needed chemical, biological, radiological, and other monitoring equipment and ensure that equipment is maintained at a ready state. ▪ Work with local and regional counterparts to identify and coordinate health- and safety-related resources and practices. Maintain working relationships with local officials in areas of responsibility. |
| Training | <ul style="list-style-type: none"> ▪ Provide required inservice safety and health training, as well as incident- and site-specific training as needed. ▪ Ensure that all responders have at least the minimum training required to perform their assigned roles (operations, technician, specialist, safety officer) safely during an incident. |
| Operations management | <ul style="list-style-type: none"> ▪ Manage activities related to responder health and safety for all incident personnel. ▪ Coordinate safety and health assets from individual response agencies/organizations to ensure the consistent protection of all incident personnel. |

| Activity | Description |
|--------------------------|--|
| | <ul style="list-style-type: none"> ▪ Manage assistant safety officers (including specialized assistant safety officers). |
| Incident response action | <ul style="list-style-type: none"> ▪ Identify and assess health and safety hazards and characterize the incident environment, to include continued monitoring of incident safety on a 24/7 basis. ▪ Develop incident-specific health and safety plans for all incident personnel. Ensure that the plans are coordinated and consistent among multiple response organizations and sites (as appropriate). ▪ Implement the health and safety plan, monitoring the responders' compliance with the plan. ▪ Update the health and safety plan as needed. ▪ Ensure compliance with the plan and applicable regulations, accepted procedures, and protocols through comprehensive monitoring of incident activities. ▪ Stop unsafe actions or potential imminent hazards. ▪ Monitor responder exposure, on a 24/7 basis, and take appropriate action based on the data. This includes task- and operation-specific personal and area exposure monitoring. ▪ Assess resource needs related to the safety and health of responders and identify sources for those resources. ▪ Provide for responder medical surveillance and monitoring, and evaluate the need for longer term epidemiological medical monitoring and surveillance. ▪ Develop, implement, and monitor an incident personal protective equipment (PPE) program, including the selection, use, and decontamination of personal protective equipment (PPE); implementation of a respiratory protection fit-testing program; and distribution of personal protective equipment (PPE). ▪ Decontaminate responders and their equipment. ▪ Collect and manage worker data (e.g., exposure data, accident/injury documentation), and facilitate consistent data formatting and data sharing among response organizations. ▪ Communicate with other response organizations/employers, contractors, and labor unions regarding responder safety and health. ▪ Coordinate and provide incident-specific responder training. ▪ Provide psychological first aid during and after incident response and recovery activities. ▪ Identify appropriate immunization and prophylaxis for responders and recovery workers. |
| Post-incident action | <ul style="list-style-type: none"> ▪ Investigate responder near misses, injuries, illnesses, and fatalities. ▪ Identify responder health- and safety-related lessons learned and incorporate these into existing policies, procedures, and programs. Share these with other response organizations involved in the incident as appropriate. |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Res.B.1 5.3.1.1 | Perform an incident safety analysis. |
| Res.B.1 5.3.1.2 | Identify the operations, hazards, and exposures of greatest risk to site personnel and coordinate with the Incident Command (IC) to develop specific actions to address them and protect site personnel. |
| Res.B.1 5.3.1.3 | Assist the incident commander (IC) in developing an incident safety and control plan to respond within the capabilities of available response personnel, taking into account available resources such as personal protective equipment (PPE), monitoring equipment, and control equipment. |
| Res.B.1 5.3.1.4 | Ensure that the exposure monitoring (personnel and environment) specified in the health and safety plan and related standard operating procedures (SOPs) is performed. |
| Res.B.1 5.3.3.1 | Assume responsibility for the supervision and management of safety assistants based on the severity and complexity of the incident. |
| Res.B.1 5.3.3.2 | Observe the scene and review/evaluate hazard and response information as it pertains to the safety of all persons on the scene and responding. |
| Res.B.1 5.3.3.5 | Assist the Incident Command (IC) and Incident Command System (ICS) staff in implementing exposure monitoring and enforcing safety considerations. |
| Res.B.1 5.3.4.2 | Implement all corrective actions necessary to ensure the safety and health of all site personnel. |
| Res.B.1 5.3.4.3 | Alter, suspend, or terminate any activity judged to be an imminent danger or immediately dangerous to life and health. |
| Res.B.1 5.3.5.1 | Monitor routine and emergency communications within the incident command structure at all times. |
| Res.B.1 5.3.5.2 | Maintain routine and emergency communications within the incident command structure at all times during the incident. |
| Res.B.1 5.3.5.3 | Provide the Incident Command (IC) and Incident Command System (ICS) staff with observation-based recommendations for the safety of onsite personnel. |
| Res.B.1 5.3.5.4 | Contact and work with subject matter experts (SMEs) from public/private agencies and academia who may be able to assist with safety issues at the incident. |
| Res.B.1 5.3.6.2 | Debrief hazardous materials branch/group personnel on site-specific occupational safety and health issues involving hazardous materials/WMD |

| UTL# | Task |
|-----------------|---|
| | releases. |
| Res.B.1 5.3.6.3 | Participate in the incident critique process and identify critical safety and health-related observations of incident activities. |
| Res.B.1 5.3.3.4 | Monitor hazardous site operations and ensure that personnel perform their tasks in a safe manner and follow the safety-related requirements identified in the incident action plan (IAP). |
| Res.B.1 5.6.1 | Assist in the development of an incident action plan (IAP). |
| Rec.A.1 3.1.1.4 | Provide worker crisis counseling, substance abuse services, and mental and behavioral health support. |
| Rec.A.1 3.2 | Provide comprehensive stress management strategies, programs, and crisis response teams. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---|
| <p>Health and safety program is in place that addresses the following:</p> <ul style="list-style-type: none"> ▪ A personal protective equipment (PPE) component that addresses respiratory protection, chemical exposure, and so forth ▪ Ensures that responders are equipped with properly maintained personal protective equipment (PPE) that is in adequate supply (with access to backup/cache equipment when necessary) ▪ Ensure that responders are adequately trained to respond to anticipated emergencies and capable of using PPE (e.g., responders are fitted, medically cleared to use necessary PPE) ▪ Evaluates the health and safety program through emergency response exercises ▪ If appropriate, includes the following elements: vaccinations/immunizations, physical exams to include establishing baselines for medical monitoring/surveillance, heat stress management procedures, hazard-specific standard operating procedures (SOPs) | <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> |
| Percentage of emergency workers who received required training prior to the incident | 100% |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--|
| Number of injuries/illnesses in response to the incident | Zero |
| Percentage of hazards detected/identified and characterized | 100% |
| Time until medical unit was successfully opened and operated within an ICS structure | Less than 30 minutes from arrival onsite |
| Time until the safety officer was designated within ICS structure. (Separate from the IC, who may hold this role for a period of time) | Less than 60 minutes |
| Percentage of personnel wearing the required PPE for site entry and work | 100% |
| Percentage of workers who have had their representative exposure to hazardous substances quantified and recorded | 100% |
| Percentage of affected personnel treated for injuries and illnesses through a medical unit | 100% |
| Percentage of personnel who have been adequately decontaminated | 100% |
| Percent of responder households that receive prophylaxis | 100% |
| Percent of workers that are treated for mental health or stress-related symptoms secondary to the incident. Behavioral hazards are identified and mitigated (e.g., human/animal remains are covered) | 100% |
| Number of emergency workers who develop physical symptoms or illness secondary to the incident | Zero |
| Time to provide onsite training for emergency workers responding to an incident | Within 2 days |
| An incident safety analysis was performed. | Yes/No |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Type 1 safety officer to review/evaluate hazard and response information
- Specialized safety officer
- Specialized Subject Matter Expert (SME) (e.g. CIH, PHS, radiological, biological, engineer, etc.)
- Medical Units/Teams to provide monitoring and surveillance

Equipment and Systems

- Analytical laboratories to provide supplement field instruments for hazard detection/characterization
- Equipment caches (e.g., PPE, monitoring/detection equipment)
- Respiratory fit-test mobile units
- Training centers (including mobile units) to train (and maintain proficiency of) all responders up to minimum training requirements prior to an incident

Training

- Proper use of personal protective equipment (PPE), detection, and emergency medical equipment, as well as related protocols.

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability factors were developed from an in-depth analysis of the aerosolized anthrax scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- The jurisdiction may have limited safety officers with high-level expertise and experience in a specialized subject area, such as radiation, hazardous materials (HazMat), building/structure collapse, biohazard, and so forth.
- Standards, training, and certification are limited for high-level (national-State) safety officers.
- Various Federal and State safety and health laws and regulations and related national consensus standards may overlap with one another, conflict in their requirements, and have gaps in their requirements or coverage. This program assumes compliance with the Occupational Safety and Health Administration's (OSHA) "HAZWOPER" standard (29 CFR 1910.120, as implemented by EPA or State authorities) and any other applicable Federal and State regulations.
- The jurisdiction will have limited, inappropriate, expired, or unserviceable personal protective equipment (PPE).
- Respirator-fit test documentation, fit tests with the variety of equipment available at the time of the incident, and the capability to conduct fit testing during a disaster will be limited. Even if persons are fit tested at their home agency, proof may not be available onsite at a disaster requiring additional fit testing.
- Cross-training in the use of dissimilar PPEs is limited. Responders may not have appropriate training for the additional equipment available at the time of and issued at the scene of a major disaster to supplement their initial response cache; it may differ from their home agency equipment.
- Immediate response organizations will be required to support the incident in its entirety until Federal-State safety assets become available.
- Local, regional, and State response agencies will have access to specialized resources from public- and private-sector agencies and academia.
- Data enabling the recognition/characterization of hazards associated with the incident may not be immediately available. Field instrumentation and laboratory analysis may be necessary to fully characterize hazards.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Aerosol Anthrax)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|---|---|
| Type 1 safety officer | 1 per shift | 3 shifts | 3 |
| Specialized safety officer (specialization needs determined by each Urban Area Security Initiative (UASI) region and county) | 1 per team deployed | 20 teams | 20 |
| Specialized subject matter expert (SME) (e.g. certified industrial hygienist (CIH), public health service (PHS), radiological, biological, engineer) | 1 biological expert | | 1 biological expert |
| Analytical laboratories | 500 samples per day. | 100 samples per day per laboratory | 5 analytical labs |
| Equipment caches ¹ | 1 SCBA, PAPR or P100 respirator/shift per responders | 3 shifts/day 3 days 50 Responders @SCBA 500 Responders @PAPR 450 Responders @P100 | 450 SCBAs 4,500 PAPRs 4,050 P100s |
| Medical | 1 medical unit/5 teams | 20 teams | 4 medical units |

¹ While the respirators listed may be appropriate for anthrax attacks (depending upon specific concentrations of the agent and other site specific characteristics), planners are cautioned that these respirators may not be appropriate for other types of terrorism agents. Planners are advised that respirators for use in other scenarios may need to be NIOSH “CBRN” certified respirators for protection against a full set of agents.

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------------------|--------------------|-----------------------------|------------------------------|
| Respiratory fit-test mobile units | 1 per team | 20 teams | 20 respiratory units |

Approaches for Large-Scale Events

All response organizations would need to be included in a single incident command system (ICS). A single “all-hazards” safety officer is designated by the incident commander (IC) to manage all safety operations associated with the incident. Assistants (e.g., specialized safety officers, subject matter experts, employer representatives, employee representatives) to the safety officer are designated and made part of response teams. All employers whose personnel are involved in the response are represented in the safety management structure. Equipment caches are based on local quantities, regional quantities (through mutual aid), State caches (interstate mutual aid), and national caches (e.g., prepositioned equipment program). Sources of equipment and notification/transportation of equipment have been addressed in advance. All responders need the specified training (e.g., technicians, operations, specialists) prior to the incident. Federal responders would follow the *National Response Plan* (NRP), including the Worker Safety and Health Support Annex. State and local response plans include worker safety and health coordination that is consistent with the actions specified under the Worker Safety and Health Support Annex.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Type 1 Safety Officer | Need a national protocol that defines training and qualifications for an “all-hazards” Type 1 Safety Officer; 300 nationwide (local placed within 2-hour fly/drive of localities (may be Federal, State and local in employment). Each will have specialized awareness for their area (e.g., ports, terrain). |
| Specialized safety officer (specialization needs determined by each UASI region and county) | 400 available to States and local agencies from public and private agencies and academia |
| Specialized Subject Matter Expert (e.g., Public Health Service, radiological, biological, engineer) | 800 available to States and local agencies from public and private agencies and academia |
| Analytical laboratories | Need to analyze 1,000 samples of any CBRNE agent per day (specific lab capacity may vary) |
| Training centers | Preparation measurement: Train (and maintain proficiency) all responders to minimum training requirements prior to the incident. This would also include respiratory fit-testing requirements. Training |

| Resource | Assigned Level and Quantity |
|------------------|--|
| | facilities, including mobile units, should be identified and prearranged for quick response to ensure adequate regional capacity. |
| Equipment caches | Personal protective equipment (PPE), monitoring/detection equipment, and so forth: Equipment caches are based on local and regional quantities (through mutual aid), State caches (interstate mutual aid), national caches (e.g., prepositioned equipment program), and manufacturers. Identify a system to obtain/distribute equipment for the first 72 hours; after 72 hours, equipment can be obtained through manufacturers. |
| Medical | 1 medical unit per 5 teams, minimum; need to be included as a necessary component/need with public medical assistance |

Linked Capabilities

- Animal Health Emergency Support
- Communications
 - Community Preparedness and Participation
 - Emergency Operations Center Management
 - Environmental Health
 - Explosive Device Response Operations
 - Fatality Management
 - Firefighting Operations/Support
 - Food and Agriculture Safety and Defense
 - Isolation and Quarantine
 - Mass Care (Sheltering, Feeding, and Related Services)
 - Mass Prophylaxis
 - Medical Supplies Management and Distribution
 - Medical Surge
 - Onsite Incident Management
 - Planning
 - Public Health Epidemiology Investigation
 - Public Health Laboratory Testing
 - Public Safety and Security Response
 - Restoration of Lifelines
 - Risk Management
 - Structural Damage and Mitigation Assessment
 - Triage and Pre-Hospital Treatment
 - Urban Search and Rescue
 - Volunteer Management and Donations
 - WMD/Hazardous Materials Response and Decontamination

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PUBLIC SAFETY AND SECURITY RESPONSE

Capability Definition

Public Safety and Security Response is the capability to reduce the impact and consequences of an incident or major event by securing the affected area, safely diverting the public from hazards, providing security support to other response operations and properties, and sustaining operations from response through recovery. Public Safety and Security Response requires coordination among officials from law enforcement, fire, and emergency medical services (EMS).

Outcome

The incident scene is assessed and secured, access is controlled, security support is provided to other response operations (and related critical locations, facilities, and resources), and emergency public information is provided, while protecting first responders and mitigating any further effect to the public at risk.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function (ESF) #13: Public Safety and Security.

Capability Description

| Activity | Description |
|-----------------------------------|---|
| Secure incident site | Secure the incident site, coordinate with other onsite capabilities, support the assessment of secondary threats, and protect key facilities or resources (e.g., hospitals and other medical facilities, distribution sites for logistics or mass prophylaxis). |
| Control access to incident sites | Establish force protection and perimeter zones to protect first responders and response operations and to mitigate any further risk to the public. Assess the incident and coordinate needed resources to ensure maximum effectiveness of uniformed and volunteer personnel. |
| Control traffic and crowds | Direct/redirect traffic to guide the public out of affected areas, including pre-incident crowd and traffic control if the public panics in anticipation of a pending event (ie terrorist threat, hurricane), and provide direction and guidance for emergency traffic routes to critical facilities and resources. |
| Secure and protect critical sites | Identify priorities for heightened security (pharmacies, gun stores, hospitals, shelters, etc.) and establish and maintain visible and effective security presence to deter looting and/or violence. |
| Conduct searches | Use tactical operations teams to conduct searches of high- |

| Activity | Description |
|--|--|
| | priority unsecured sites to establish security and detain lawbreakers as necessary. |
| Protect rescue personnel | Provide force protection for search and rescue personnel to allow them to operate safely. |
| Pursue and apprehend suspects and accomplices. | Interview witnesses/bystanders and establish process to identify perpetrators and accomplices at incident scene before they can elude arrest. |
| Maintain a tactical response reserve. | Develop and maintain a reserve corps of tactical officers at the command post to respond to unexpected occurrences. |
| Process and document arrests. | Arrest lawbreakers, document arrests, detain those arrested (in improvised holding cells if needed), and transport to secure lock-up facility. |
| Manage and coordinate public safety needs. | Coordinate public safety needs and demands through on-site incident manager and request needed assistance through emergency operations center. |

Critical Tasks

| UTL# | Task |
|----------------|---|
| Res.A.1 4.1.3 | Interview witnesses/bystanders and establish process to identify perpetrators and accomplices at incident scene before they can elude arrest. |
| Res.A.1 4.1.6 | Develop and maintain a reserve corps of tactical officers at the command post to respond to unexpected occurrences. |
| Res.A.1 4.1.8 | Process those arrested (photos, fingerprinting) and document arrests. |
| Res.A.1 4.1.9 | Detain those arrested (in improvised holding cells). |
| Res.A.1 4.1.12 | Transport detainees to secure lock-up facility. |
| Res.B.2 | Identify security zone requirements. |
| Res.B.2 3.3.6 | Arrange for proper sheltering, care and feeding of detainees. |
| Res.B.2 3.3.7 | Set up improvised holding cells to manage detainees. |
| Res.B.2 3.3.8 | Arrange for shelter, housing and feeding for law enforcement responders. |
| Res.B.2 6 | Conduct a public safety and security response. |
| Res.B.2 6.1.8 | Provide force protection for search and rescue personnel to allow them to operate safely. |
| Res.B.2 6.1.9 | Secure critical sites such as hospitals and medical supply distribution points. |
| Res.B.2 6.1.12 | Use tactical operations teams to conduct searches of high-priority unsecured sites to establish security and detain lawbreakers as necessary. |
| Res.B.2 6.2.2 | Identify and establish an incident perimeter and zones. |

| UTL# | Task |
|-----------------|--|
| Res.B.2 6.2.2.2 | Implement and maintain an on-scene personal identity management system |
| Res.B.2 6.2.3 | Establish force protection. |
| Res.B.2 6.2.4 | Provide and plan for access to the site for emergency workers and other necessary and appropriate personnel. |
| Res.B.2 6.2.6 | Plan and provide protection and security for abandoned properties within and around the incident site. |
| Res.B.2 6.3 | Control traffic and crowds. |
| Res.B.2 10.2.2 | Secure animals during an animal health emergency. |
| Res.B.5 4 | Direct and control emergency public information activities. |
| Res.B.5 4.2.1 | Activate critical information and warning systems. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Jurisdiction has established multi-disciplinary law enforcement and public safety agency planning teams | Yes/No |
| Plans are in place for providing security for the public and properties on and around an incident site | Yes/No |
| Plans are in place for supporting public safety in and around an incident site | Yes/No |
| Plans are in place for providing temporary prisoner holding facilities and arrest processing documentation | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Summon and deploy sufficient personnel to perform public safety and security duties (using on-duty and mutual aid personnel for small local incident; for large-scale incident target should be equal to 50 percent of total uniformed (patrol) staffing of jurisdiction having primary responsibility for incident – all responding public safety personnel should be self-sufficient (bring their own sleeping/eating/restocking supplies) for up to seven day deployment). | Small local incident (IED, nerve or chemical attack at a single site) = < 30 minutes Large local incident (dirty bomb) = < 3 hours Large-scale incident (hurricane, tornado, flood) = < 12 hours |
| Summon and deploy sufficient relief personnel to maintain public safety operations throughout duration of long-term incident (relief needed is estimated at 50 percent of total uniformed (patrol) staffing of jurisdiction having primary responsibility for incident) | Large-scale incident (hurricane, tornado, flood) = provide relief equal to initial staffing target |
| Safety and security plans and procedures were successfully | Yes/No |

| Performance Measure | Performance Metric |
|--|--------------------|
| implemented | |
| New or secondary injuries were prevented | Yes/No |
| The incident site was secured | Yes/No |
| The site safety plan was communicated to all first responders at the incident site | Yes/No |
| Hot, warm, and cold zones were identified and segregated | Yes/No. |
| All traffic control and alternate ingress/egress routes were identified and staffed | Yes/No |
| All incident site control zones/points were clearly identified and staffed | Yes/No |
| Damaged buildings and debris blocking emergency response ingress/egress were removed | Yes/No |
| Perimeter zones were coordinated jointly by hazardous materials personnel, fire/rescue, and law enforcement | Yes/No |
| Personnel established a command system (National Incident Management System (NIMS)/incident command system (ICS)) for response | Yes/No |
| An on-scene personnel accountability system was established | Yes/No |

Capability Elements

Personnel

- Law enforcement for crowd and traffic control
- National Guard to augment law enforcement personnel for crowd control, traffic control, and hard target security
- Private security for limited traffic control and hard target security
- Civil Support Teams

Planning

- Establishment of multi-disciplinary law enforcement and public safety agency planning teams.
- Planning for providing security for the public and properties on and around incident site.
- Planning for supporting public safety in and around the incident site.

Training

- Specialized training for preparedness over and above daily operations

Equipment

- Traffic control equipment and means
- Transportation resources
- Protective and safety equipment
- Portable inmate detention cells
- Prison transport buses
- Prisoner detainee and documentation equipment (handcuffs, photographic equipment, fingerprinting equipment, paper, documentation equipment, audio/video taping equipment)

- Aircraft equipped with real-time video feed capabilities
- Marine units (boats and shallow-draft boats), equipped with global positioning system (GPS)
- Horses trained for public safety and crowd control
- All-terrain vehicles
- Refueling vehicles
- Generators, tents and equipment to maintain public safety base camps
- Dive gear

Exercises

- Establishment of designated professional multi-disciplinary exercise preparation and management body.
- Preparation of a periodic exercise cycle.
- Preparation and conduct of integrated HQs and Public Safety and Security control units' exercise.
- Preparation and conduct of public exercise.

Evaluation and Corrective Actions

- Setting norms for performance measures and competence.
- Establishment of evaluation procedures and teams.
- Assuming and monitoring corrective actions.

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Radiological dispersal Device scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability applies to a wide range of incidents and emergencies, including accidental or deliberate disease outbreaks, natural disasters, and nuclear and conventional events.
- Police will be needed to direct traffic away from the contaminated area, prevent access to the contaminated area, and support movement of the population out of the contaminated area.
- Looting and/or damaging to unattended properties, especially shops and stores by armed hooligans and criminals should be considered.
- Public safety personnel will need to support the evacuation, sheltering, and protection of downwind populations.
- Public safety personnel will support the movement of approximately 35,000 people to shelters. Temporary housing will be needed.
- A decontamination process must be set up. Public safety personnel will be needed to support movement of the population in and out of the decontamination area.
- The use of a radiological dispersion device (RDD) would have local implications on the public safety and security response teams. The assumption is that an RDD would be dispersed within a downtown or highly populated areas. With Washington, D.C., as an example, there are approximately 200–250 people in a single block. If this RDD were to affect an area of 36

blocks or more, 7,500–9,000 people would be affected. It is likely that local, State, and Federal law enforcement agencies would share resources to help contain the area and aid in crowd control for a high population such as this. Yet the States would have to balance the resources between preventing affected personnel from entering into other portions of the State by leaving the site.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---------------------------------------|---|--|---|
| Law enforcement (for crowd control) | Capacity to control a large crowd within a downtown area | Sufficient numbers to regulate approximately 200 people per 36 blocks | Sufficient uniformed/sworn, reserve, volunteer, and in-training officers to accomplish the task |
| Law enforcement (for traffic control) | Capacity to control traffic from both entering and leaving the affected areas | Sufficient numbers to regulate approximately 7,000 people, depending on automobile traffic or mass transit numbers | Sufficient uniformed/sworn, reserve, volunteer, and in-training officers to accomplish the task |
| National Guard | Capacity to supplement local and regional law enforcement agencies | Sufficient to allow local law enforcement to perform law enforcement duties | Appropriate guards to augment law enforcement personnel for crowd control, traffic control, and hard target security (At the World Trade Center, 8,500 were deployed within 24 hours of the attacks.) |
| Private security companies | Capacity to supplement local and regional law enforcement agencies | Sufficient to allow local law enforcement to perform law enforcement duties | Appropriate numbers to supplement law enforcement personnel for limited traffic control and provide target security for private sector sites |

Approaches for Large-Scale Events

To avoid duplication of resources, chemical, biological, radiological, nuclear, or explosive (CBRNE) and law enforcement resource organizations should cross-train with other capabilities and foster cross-border cooperation.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---------------------------------------|--|
| Law enforcement (for crowd control) | Sufficient personnel to provide coverage for 100% of the affected area (estimate 40% will be provided by local public safety agency having jurisdiction; 40% through local law enforcement mutual aid; and 20% by State law enforcement) |
| Law enforcement (for traffic control) | Sufficient personnel to provide traffic control coverage. |
| National Guard Civil support teams | Federal/State: 1 per State and territory = 54 total |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Citizen Protection: Evacuation and/or In-Place Protection
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Explosive Device Response Operations
- Firefighting Operations/Support
- Food and Agriculture Safety and Defense
- Isolation and Quarantine
- Law Enforcement Investigation and Operations
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- On-site Incident Management
- Planning
- Responder Safety and Health
- Risk Management
- Structural Damage and Mitigation Assessment
- Urban Search and Rescue
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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ANIMAL HEALTH EMERGENCY SUPPORT

Capability Definition

Animal Health Emergency Support is the capability to protect, prevent, detect, respond to, and recover from threats and incidents that would result in the disruption of industries related to U.S. livestock, other domestic animals (including companion animals) and wildlife and/or endanger the food supply, public health, and domestic and international trade. It includes the ability to respond to large-scale national and regional emergencies as well as to smaller scale incidents through rapid determination of the nature of the event, initiation of the appropriate response, containment of the disrupting effects, and facilitation of recovery.

Outcome

Foreign animal disease is prevented from entering the U.S. by protecting the related critical infrastructure and key assets. In the event of an incident, animal disease is detected as early as possible, exposure of livestock to foreign diseases is reduced, immediate and humane actions to eradicate the outbreak are implemented, continuity of agriculture and related business is maintained, economic damage is limited, and public and animal health and the environment are protected. Trade in agriculture products and domestic and international confidence in the U.S. food supply are maintained and/or restored. Agricultural industries are returned to their prior productivity, to include replenishment of the domestic livestock and other domesticated animals.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs) and Annexes:

- ESF #3: Public Works (debris removal)
- ESF #6: Mass Care (animal housing)
- ESF #8: Public Health and Medical Services
- ESF #10: Environmental Protection
- ESF #11: Agriculture and Natural Resources
- Biological Incident Annex
- Terrorism Incident Law Enforcement and Investigation Annex
- Interim/Draft: Food and Agriculture Incident Annex

Capability Description

| Activity | Description |
|--------------|--|
| Mitigation | Deter and prevent the intentional and unintentional introduction of a foreign animal disease by collecting information, determining potential hazard areas, enforcing laws at ports of entry, and providing intelligence to key stakeholders. |
| Preparedness | <ul style="list-style-type: none"> ▪ Reduce the likelihood of an attack via a foreign animal disease. ▪ Limit the impact should an attack occur by implementing detection measures and developing plans, procedures, and protocols for action in the event of an attack. |

| Activity | Description |
|--------------------------|--|
| Planning | Use collection and analysis of information and the development of plans, options, and strategies to effectively respond to and recover from animal health emergencies and to advise on the appropriate content of official communication. |
| Management | Use the incident command system (ICS) to mobilize and coordinate finance, logistics, operations, and planning in the event of an incident; this service includes the overall management and coordination of task force operations and laboratory and field activities as well as the ability to set up field hospitals. |
| Training | Convey scientific and operational information about foreign animal disease to responders and stakeholders in advance of and during an outbreak through just-in-time and on-the-job training. Provide skill-based training for persons who will serve in incident command system (ICS), personnel protection, and biosecurity positions in the event of an incident. |
| Research and development | Coordinate basic, applied, and developmental research on therapeutics, vaccines, advanced diagnostic tools, and epidemiological assessment to enhance foreign animal disease prevention, protection, response, and recovery. This service includes validation and deployment of deliverables. |
| Communication | <ul style="list-style-type: none"> ▪ Use communication networks and work with national, State, tribal, and local entities to inform stakeholders and owners of susceptible livestock of the current risk. ▪ Provide timely, accurate, clear information and education to the public and medical communities. ▪ Work with national and local veterinary communities, colleges, agricultural extension officers, intelligence and law enforcement communities, nongovernmental organizations (NGOs), and volunteer organizations, including animal care and control. ▪ Facilitate communication between all involved entities, including the Agriculture Sector Coordinating Council. ▪ Issue biosecurity information through the Animal and Plant Health Inspection Service (APHIS). |
| Epidemiology | <ul style="list-style-type: none"> ▪ Establish a case definition. ▪ Understand characteristics of disease and outbreak. ▪ Design, implement, evaluate, and recommend adjustments to disease control measures. ▪ Support epidemiology through appropriate veterinary, laboratory, and diagnostic abilities. This may include using a geographic information system (GIS) to track the progress of the outbreak and to simulate or |

| Activity | Description |
|-------------------------|---|
| | predict the impact of various management strategies. |
| Surveillance | <ul style="list-style-type: none"> ▪ Determine the extent of an outbreak and detect new cases quickly using visual and laboratory techniques. ▪ Continue surveillance activities until the area is declared disease free. Early disease surveillance is important to be able to estimate future resource needs for the response. |
| Tracing | Use trace-back and trace-forward to identify all contact premises and to determine index premises. |
| Intelligence | Differentiate between intentional and accidental introduction of a foreign animal disease agent. |
| Operations | Take direct action to eradicate the disease and address the animal health emergency. This includes identifying affected animals and premises and implementing quarantine and movement control, euthanasia, carcass disposal, cleaning and disinfection, biosecurity plans, strategic vaccinations and/or treatments, wildlife management, and vector control. |
| Logistical support | Coordinate with Federal, State, and private-sector partners for logistical support and supplies in all types of disasters. This includes but is not limited to food and travel arrangements, supply chain management, information technology, accounting, and human resources. |
| Human safety and health | Provide education and personal protective equipment (PPE) to all personnel. Special considerations include the possibility of immunization or antiviral agents that may be needed in the event of a zoonotic outbreak. |
| Animal welfare | Ensure the well-being of animals throughout the operation, including but not limited to euthanasia, husbandry, triage, and treatment. |
| Animal sheltering | Ensure the well-being of animals by providing a safe environment with, shelter, food, and water. Coordinate with the Mass Care capability for companion animal well-being. |
| Valuation | Provide value assessment and indemnity payment to owners of animals and materials requiring destruction; these funds will assist in recovery and repopulation after an outbreak. |
| Risk assessment | <ul style="list-style-type: none"> ▪ Establish qualitative or quantitative risk using multidisciplinary teams. ▪ Develop and defend a zoning plan to describe disease-free and controlled zones with applications to international trade. |
| Restoration | <ul style="list-style-type: none"> ▪ Develop, coordinate, and execute service- and site-restoration plans and reconstitute government operations and services by assisting with |

| Activity | Description |
|-----------------------------------|--|
| | economic stabilization and risk reduction, conducting site cleanup, disposing of materials, and assessing program effectiveness. |
| Laboratory and diagnostic support | <ul style="list-style-type: none"> ▪ Perform sample processing, testing, and reporting. ▪ Provide scientific and support expertise, outbreak needs-driven research for surveillance, rapid detection, quarantine release, and disease status certification. ▪ Protect laboratory personnel. |

Critical Tasks

| UTL# | Critical Task |
|-----------|--|
| Com.A.5 | Develop community recovery, mitigation, and economic stabilization plans, programs, and procedures. |
| Com.C 3 | Establish and maintain information systems across response entities. |
| Com.C 5 | Establish and maintain response communications systems. |
| Pre.A.2 5 | Collect information about threats to the Nation's food supply. |
| Pre.A.3 2 | Evaluate intelligence and surveillance activities. |
| Pre.A.4 1 | Conduct surveillance and information collection and produce intelligence. |
| Pre.A.4 3 | Prioritize threats. |
| Pre.B.1 1 | Facilitate the development of processes to improve security at key points and at access points of critical infrastructure. |
| Pre.B.1 2 | Facilitate the development of processes to improve cargo security and screening capabilities. |
| Pre.B.1 4 | Inspect materials for potential CBRNE weapons or precursors. |
| Pre.B.2 1 | Conduct border control operations. |
| Pre.B.2 5 | Use advance information, targeting, and technology on the ground, on the water, and in the air to prevent the entry of terrorists, terrorist weapons, and high-risk people and goods between and among States, tribes, and international trade partners. |
| Pre.C.2 2 | Search for materials. |
| Pre.C.2 5 | Dispose of materials suspected of being, or known to be, dangerous. |
| Pro.A.1 1 | Identify critical infrastructure and key assets within the Nation, region, State, or |

| UTL# | Critical Task |
|---------------|---|
| | local area. |
| Pro.A.1 2 | Map threat analysis against critical infrastructure to identify and analyze infrastructure asset vulnerabilities and critical risk. |
| Pro.A.2 1 | Conduct vulnerability assessments of critical assets and key resources. |
| Pro.A.2 2 | Conduct consequence analysis of critical assets and key resources. |
| Pro.A.4 2 | Respond to specific threat information. |
| Pro.B.1 1 | Develop guidelines for physical protection of infrastructure. |
| Pro.B.2 1 | Implement detection measures such as inspections, surveillance, employee monitoring, and security counterintelligence. |
| Pro.B.2 2 | Implement deterrence and defense protection measures. |
| Pro.C.1 1.3 | Plan and prepare to safeguard animal health. |
| Pro.C.1 3.3.2 | Provide coordination and support for animal health care through the incident command system (ICS). |
| Pro.C.1 4.2 | Provide food safety and security response support. |
| Pro.C.2 2.1.1 | Develop and implement training and procedures to enable local first responders to recognize the presence of CBRNE materials, and to use tools and equipment to detect the presence of CBRNE materials during emergency responses. |
| Pro.C.2 2.1.2 | Develop and implement training and procedures to enable local veterinary communities to recognize exposure to CBRNE materials, and to use tools and equipment to detect the presence of CBRNE materials. |
| Pro.C3 3.2 | Train the public to be aware of and to report suspicious items and behavior. |
| Res.A.1 3.4.6 | Develop animal safety and security plans, programs, and agreements. |
| Res.A.1 3.4.7 | Coordinate an animal safety and biosecurity response. |
| Res.A.1 4.5.9 | Conduct response-related activities for agricultural support. |
| Res.B.1 6.1.3 | Coordinate transportation response. |
| Res.B.1 6.4.2 | Allocate, mobilize, and manage resources. |
| Res.B.1 6.4.3 | Track and report resources. |
| Res.B.2 1 | Develop plans, procedures, and equipment guidelines to support response operations. |
| Res.B.2 | Develop plans to collect and dispose of infected material to reduce the spread of |

| UTL# | Critical Task |
|--------------------|--|
| 1.7.2.9 | animal disease. |
| Res.B.2 2 | Develop and implement a training and exercise program to support response operations. |
| Res.B.2 3 | Coordinate emergency response operations. |
| Res.B.2 3.6 | Coordinate food response and recovery. |
| Res.B.2 3.6.7 | Coordinate and provide food and agricultural response support. |
| Res.B.2 5 | Conduct hazardous materials response. |
| Res.B.2 10.2.1 | Conduct an animal safety and biosecurity response. |
| Res.B.2 10.3 | Implement programs to safeguard animal health. |
| Res.B.3 1 | Develop plans, protocols, and systems for implementing protective actions. |
| Res.B.3 3 | Coordinate and support implementation of protective actions. |
| Res.B.5 1 | Implement plans, procedures, and policies for coordinating, managing, and disseminating public information. |
| Res.B.5 3 | Coordinate emergency public information through the Joint Information System (JIS). |
| Res.C.1 4.3.6.2 | Provide animal health and veterinary medical services support including mental health services for owners, service providers, and the general public as it relates to the loss of animal life. |
| Res.C.1 4.3.6 | Implement plans and procedures to provide animal health care. |
| Res.C.2 1 | Develop plans, procedures, protocols, and systems for distribution of prophylaxis. |
| Res.C.2 2 | Conduct training and exercise programs for distribution of prophylaxis. |
| Res.C.2 3 | Provide coordination and support for implementation of a local, regional, or national distribution system for mass therapeutics and vaccination program. |
| Res.C.2 4.6 | Implement plans, procedures, protocols, and systems for distribution of prophylaxis for animal health and safety. |
| Res.C.3 1.5 | Develop plans, procedures, protocols, and systems for providing mass animal care. |
| Rec.A.1 1.6 | Develop plans, procedures, and protocols for long-term animal health care. |
| Rec.A.3 3 | Manage community assistance programs. |

| UTL# | Critical Task |
|---------------|--|
| Rec.B.1 1 | Coordinate and conduct environmental decontamination. |
| Rec.B.2 1 | Develop protocols for disposing of infectious agricultural waste. |
| Rec.B.2 2 | Collect and dispose of materials. |
| Rec.B.2 2.4.4 | Implement protocols for disposing of infectious agricultural waste. |
| Rec.B.3 1 | Conduct long-term environmental impact assessments. |
| Rec.B.3 2 | Coordinate establishment of long-term monitoring of the environment. |
| Rec.B.4 1 | Determine wildlife exposure and disposition. |
| Rec.C.1 2 | Coordinate recovery operations. |
| Rec.C.2 3 | Provide engineering and other support for structures, public works, and infrastructure systems. |
| Rec.C.4 2 | Provide economic stabilization, community recovery, and mitigation support and financial restitution to agriculture. |
| Rec.C.4 3.2 | Provide financial management and reimbursement to affected agriculture entities. |
| Rec.C.4 4 | Coordinate economic stabilization. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---|
| <p>The capability and authority of the State veterinary service to:</p> <ul style="list-style-type: none"> ▪ Record biological, physical, and chemical agents that can adversely affect animals and their related products ▪ Rapidly respond to unexpected pest or disease incursion or other situations that put at immediate risk the sanitary status of the animal populations ▪ Prevent the entrance and spread of unwanted pests and diseases in the State ▪ Determine, monitor, and verify the sanitary status of the populations covered under its mandate ▪ Identify in advance those sanitary problems covered under its mandate, including animal and public health, the environment, or the trade of animals or their related products ▪ Update overall service in accordance with the latest scientific advances and based on the sanitary norms and measures of USDA-APHIS, OIE, Codex Alimentarius and the WTO/SPS agreement ▪ Inform, in an effective and timely fashion, its users of activities, programs, and sanitary developments ▪ Ensure that users are in compliance with the regulatory norms covered under its mandate ▪ Formulate and adopt regulatory norms for processes and products covered under its mandate ▪ Ensure that the national regulatory norms covered under its mandate are in line with national and international norms, guidelines, and recommendations ▪ Negotiate, implement, and maintain equivalency agreements with other States and USDA on veterinary norms and processes under its mandate ▪ Track the history, location, and distribution of animals and their related products covered under its mandate ▪ Notify USDA of its State regulations and sanitary status, in accordance with the procedures established by USDA | <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> |
| <p>National Veterinary Services Laboratory (NVSL), all National Animal Health Laboratory Network (NAHLN) laboratories, and all State veterinary diagnostic laboratories have the capacity to process diagnostic samples as described in the Performance Objectives</p> | <p>Yes/No</p> |
| <p>Personnel are proficient in delivering just-in-time training at the Federal, State, and local levels</p> | <p>Yes/No</p> |

| | |
|---|------------------------------------|
| The National Veterinary Services Laboratory (NVSL), all National Animal Health Laboratory Network (NAHLN) laboratories, and all State veterinary diagnostic laboratories are able to process and test diagnostic samples | Yes/No |
| A plan has been developed for the following supplies and/or equipment to be available for an FMD outbreak in order to: <ul style="list-style-type: none"> ▪ Enter, store, and retrieve information from the field and at the coordination center ▪ Euthanize animals while meeting optimal humane standards to level described in Performance Objectives ▪ Move live animals, carcasses, people, pharmaceuticals, and equipment within, between, and among quarantine zones while ensuring biosecurity | Yes/No Yes/No Yes/No |
| Supplies distribution plan is developed before an incident | Yes/No |
| A mechanism is in place for ensuring an early report on suspicious cases (as economic incentives) | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|---|
| Time to eradicate a foreign animal disease during the event or exercise (assuming a single-point introduction, under optimal response conditions) | Within 100 days from first diagnosis |
| Time to eradicate a foreign animal disease during the event or exercise (assuming a multiple-point introduction, under optimal response conditions) | Within 1 year of first diagnosis |
| Time to confirm absence of diseases through monitoring and surveillance | 3-6 months after last diagnosis |
| Time after diagnosis of last case quarantined is released | 3-6 months depending on circumstances and methods used |
| Time after diagnosis of last case until trade restrictions no longer apply | 3-12 months depending on circumstances and methods used (Office International des Epizooties (OIE) standards) |
| Time for deployment of sufficient veterinary medical field staff and other resources (veterinarians, animal health technicians, disease specialists, and veterinary diagnostic labs) | Within 24 hours (and for 3 weeks at a time) of confirmed diagnosis |
| Time for a single laboratory sample to be analyzed | Within 12–72 hours (depending on type of analysis) |

| Performance Measure | Performance Metric |
|---|---|
| Number of animals vaccinated for disease control (assuming 670 cloven-hoofed animals per herd) | 400 herds per day |
| Number of animals euthanized and disposed of for disease control using a 10-person team | One herd per day |
| Time to implementation of a plan for euthanasia and disposal of infected and susceptible animals | Within 24 hours of a premises being classified as an infected or contact remises |
| Time for disposal of infected animals | Within 24 hours of destruction (whenever possible) |
| Number of humans who contract the disease | Zero during the epidemic [Rare cases of localized infections resulting from direct contact with foot and mouth disease (FMD)-infected animals have been reported in humans. In the event of a zoonotic foreign animal disease, the number of those who would contract the disease will depend on the disease.] |
| Number per day of laboratory samples that can be processed by 90 people and 30 high-throughput PCR machines | 10,000 samples |
| Number per day of laboratory samples that can be processed by 15 people with 1 liquid handling robotic system | 15,000 serum samples |
| Number per day of laboratory serology samples that can be processed by one technician (nonrobotics) | 450 serum samples |
| Time to complete trace-forwards and trace-backs to determine primary and secondary animal exposure to disease and additional contact premises | 48 hours from time of confirmed diagnosis in laboratory |
| Rate (number of animals per day) at which surveys for trace-out and epidemiology reporting can be conducted at potentially affected premises | 400 herds per day (at 670 animals per herd) |
| Rate (number of animals per day) at which appraisal, euthanasia, and/or disposal are carried out at affected locations | 20 herds per day (at 670 animals per herd) sustained for 100 days |
| Rate (number of animals per day) at which vaccinations are carried out in at-risk animals | 400 herds per day (at 670 animals per herd) |

| Performance Measure | Performance Metric |
|---|--|
| On site education for producers, farmers, and responders is provided at the time of diagnosis and/or euthanasia. | Yes/No |
| Time to implementation of plans in accordance with the National Response Plan (NRP)/NIMS | Within 24 hours of establishing an incident command |
| Time to implementation of security at processing facilities | Within 24 hours of confirmation of diagnosis |
| Number of remaining animals affected by the foreign animal disease upon resumption of normal trade | Zero |
| Communications messages and methods and a plan for dissemination were developed before the outbreak | Yes/No |
| Time to implementation of communications plan | Within 24 hours of presumptive diagnosis |
| Market demand for commodities remains stable throughout outbreak. | Yes/No |
| Time to identify need for logistical support to aid the operation | Within 48 hours of presumptive diagnosis |
| Time to delivery of logistical support to aid the operation | Within 72 hours of arriving at the laboratory |
| Time to initiate a foreign animal disease investigation | Within 8 hours of receiving the initial report, the veterinarian in charge (AVIC) will ensure that the investigation is initiated. |
| Time to complete an emergency ring-vaccination program (assuming vaccination is the selected strategy) | Within 1 week of confirmation of diagnosis |
| Time for establishing a control area to ensure effective implementation of quarantine and movement control.(Federal quarantine is maintained until the disease is either eradicated or a smaller control area is implemented) | Within 12 hours of a presumptive positive or confirmed positive premises |
| Time for case definition using effective epidemiology | Within 24 hours of presumptive or confirmed diagnosis |
| Time to characterization of the disease, identification of risk factors, and development of mitigation strategies | Within 96 hours of confirmed diagnosis |
| Time to assign status and priority of investigation to premises | Within 6 hours of identifying them through traces |
| Frequency of inspection for surveillance of susceptible animals at Contact Premises and Suspect Premises | Minimum of three times per average incubation period of foot |

| Performance Measure | Performance Metric |
|---|--|
| | and mouth disease (FMD) |
| Frequency of inspection for surveillance of susceptible animals at At-risk Premises | Minimum two times per average incubation period |
| Period for which trace-back analysis is conducted | Minimum of two average incubation periods before the onset of clinical signs of infected animals |
| Period for which trace-forward analysis is conducted | Up to the time that quarantine is imposed |
| Time to implementation of a surveillance plan to define the present extent of outbreak and detect new cases | Within 48 hours of confirmed diagnosis |
| Time to identification of disease-free zones using a surveillance plan | Within 7 days of a confirmed diagnosis |
| Time to investigation of suspected wildlife cases by a qualified veterinarian | Within 24 hours of a confirmed diagnosis |
| Time to development of wildlife management plan | Within 48 hours of the identification of the first presumptive positive premises |
| Time to conducting an assessment of the risk wildlife poses to the transmission of a foreign animal disease | Within 7 days of confirmation of the first positive premises |
| Time to provide a fair market value indemnity to owners of destroyed animals and materials | Within 72 hours of destruction |
| Time to carry out cleaning and disinfection on premises on which FMD is presumed or confirmed to exist | Within 48 hours of being so identified |
| Time to implementation of Bio-security measures | Within 24 hours of the identification of the first presumptive positive premise |
| Time to implementation of zoning plan | During the first week of the outbreak (7 days) |
| Time to set up communications network outside the incident command system (ICS). | During the first weeks of the outbreak (7 days) |
| All entities shared and acted upon intelligence information to protective measures | Yes/No |
| Time to initiate joint USDA-DOJ investigation into source of introduction | With 24 hours of confirmed diagnosis |
| Time to initiate research into alternative disease control strategies. | Within 7 days of confirmed diagnosis |
| All appropriate personnel were issued personal protective equipment (PPE) | Yes/No |

| Performance Measure | Performance Metric |
|---|--------------------|
| All Responders were monitored for exposure to hazardous materials | Yes/No |
| Contamination source and affected areas were secured | Yes/No |
| Decontamination sites were established | Yes/No |
| Decontamination is conducted in accordance with local protocol for all contaminated personnel, equipment, and animals | Yes/No |
| Screening of affected personnel was conducted | Yes/No |

Capability Elements

Organization and Leadership

- National incident coordination to ensure that policies are implemented in the national interest
- Regional incident coordination to mobilize and use Federal resources in USDA regions
- Area command to coordinate multijurisdictional policy implementation via incident command
- Incident Management Team for the tactical aspects of a response
- Multiagency Coordination (MAC) Group for situation analysis, resource management, and public information support

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Technical specialist personnel
- Veterinary Medical Assistance Teams (VMATs) to respond to the needs of injured animals (other functions apply to other target capabilities)
- Animal Rescue Team for animal handling and capture and management
- Animal health technician to assist veterinarians in animal healthcare duties
- Animal Sheltering Team for setup, management, and staffing of temporary animal shelters
- Animal Treatment Team for medical treatment of companion animals affected by disasters
- Veterinary epidemiologist for expertise in diseases among humans and animals
- USDA-accredited veterinarians, including private practitioners
- Laboratory personnel
- Public relations personnel
- Law enforcement personnel at ports of entry

Planning

- Foreign animal disease emergency response plans in ESF #11: Agriculture and Natural Resources, continuity of operations plans (CONOPs) and Standard Operating Procedure (SOP) Agriculture Incident Annex
- Strategies for continuing trade

- Plans for quarantine and restriction of movement of animals and related products
- Biosecurity program
- Procedures that limit the introduction and spread of diseases
- State emergency plans written by individual States
- Private industry plans including business continuity and reputation management plans
- Euthanasia and disposal plans
- Recovery plans including indemnity and repopulation measures
- Chain-of-custody plans

Equipment and Systems

- Vaccination supplies
- Transportation means
- Eradication-related means
- Computers and communication equipment (Laptops, Blackberry/Cell phones)
- Personal Protective Equipment (PPE)
- Equipment cache
- Euthanasia supplies

Training

- Just in time training and on-the-job training on Scientific and operational information about Foreign Animal Disease to responders and stakeholders in advance of, and during, an outbreak
- Skill-based training for persons to act in ICS positions, personnel protection, and biosecurity

Exercises and Lessons Learned

- Integration in Incident Command and HQs staff and operational exercises at the various levels
- State/Local EOCs to coordinate response to incidents
- Multi-Agency exercises and drills at the State, Federal, and Local levels

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the “foreign animal disease” scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability applies to a wide range of incidents and emergencies, including accidental or deliberate disease outbreaks, natural disasters, and nuclear and conventional events.
- Herd size, rate of spread, and risk factors for an epidemic are based on a median herd size of 670 susceptible animals derived from research models of the spread of FMD.
- In the event of a single point of introduction and immediate response, 2,000 herds are expected to be infected over a 100-day period.
- In the event of three points of intentional introduction, up to 60 percent of States may be affected within 10 days of the attack. This would result in most of the States being quarantined within 2 weeks.

- Forty-five percent of the cattle inventory (beef and dairy) is affected = 45 million animals.
- Fifty percent of the swine population is affected = 60 million animals.
- Twenty percent of small ruminants are affected = 1.8 million animals.
- A decision whether to vaccinate will be made and implemented at the beginning of the outbreak.
- Quarantine/movement control strategies will have a negative impact on the marketability of nonsusceptible species (e.g., poultry).
- Annual losses will include \$20 billion in meat exports and \$20 billion in domestic meat production, plus a 50-percent decline in milk production, with a prolonged period of depression due to lack of replacement stock and the time it takes to reach lactation age. Income will be lost from hunting restrictions and concerns over the disease in wildlife.
- Wildlife: All cloven-hoofed wildlife species, including zoological collections, are at risk of exposure, infection, and spread of disease, including deer, feral swine, wild sheep, and goats. This includes 200,000 farmed elk, 65,000 deer, and 350,000 farmed bison.
- Distribution will be widespread due to extensive livestock transportation.
- Extensive labor costs for animal removal will accrue.
- Increased human morbidity and mortality would occur, including adverse impacts on mental health.
- High unemployment will occur due to both direct and indirect economic losses of the outbreak, as well as lost opportunity costs, leading to a prolonged economic depression.
- Consumer confidence in meat and meat products will plummet and will take time to be restored.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Foreign Animal Disease)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------------------|--------------------|--|--|
| Emergency Operations Center (EOC) | Fully staffed | Sufficient numbers to euthanize 2,000 herds and vaccinate 40,000 herds over a 100-day period Geographic distribution of herds will determine the number of incident command posts (ICPs). | <ul style="list-style-type: none"> ▪ Homeland Security Operations Center (HSOC) ▪ U.S. Department of Agriculture (USDA) Emergency Operations Center (EOC) ▪ Animal and Plant Health Inspection Service (APHIS) Headquarters Operations Center ▪ 2 regional APHIS emergency operation |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-------------------------------|--|---|--|
| | | | <p>centers (EOCs)</p> <ul style="list-style-type: none"> ▪ 100 Agriculture emergency operation centers (EOCs) ▪ 50 State emergency operation centers (EOCs) ▪ County emergency operation centers (EOCs) as needed |
| Incident Command | Fully expanded incident command posts (ICPs) | Sufficient numbers to work on 2,000 herds to be euthanized and 40,000 herds to be vaccinated over 100-day period; geographic distribution of herds will determine the number of ICPs. | <ul style="list-style-type: none"> ▪ 20 incident command posts (ICPs) for herds to be euthanized ▪ 400 incident command posts (ICPs) for herds to be vaccinated ▪ 1 National Response Coordination Center (NRCC): 9 persons ▪ 2 Regional Response Coordination Center (RRCC): 18 persons ▪ 50 Emergency Response Team (ERT)-A: 150 persons ▪ 50 Multiple Area Commands (MACs): 150 persons |
| Technical specialist position | Federal, State, tribal, local, or private resource | Estimates for a single incident are based on requirements for a 3-month period. | Technical specialists could be assigned in their areas of expertise on an as-needed basis and could be tasked for the entire duration of the incident. |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|------------------------------------|---|---|--|
| Veterinary medical assistance team | 60 people plus equipment can be dispatched on 2-week assignments. | Estimates for a single incident are based on requirements for a 3-month period. | 3 teams deployed for 2 weeks on and 4 weeks off. |
| Animal health technician | Perform a variety of animal healthcare duties to assist veterinarians in settings. | Estimates for a single incident are based on requirements for a 3-month period. | Animal health technicians could be assigned in their areas of expertise on an as-needed basis and could be tasked for the entire duration of the incident. The number required depends on required tasks (see below). |
| Veterinary epidemiologist | Analyze factors influencing the existence and spread of diseases among humans and animals, particularly those diseases transmissible from animals to humans (required to hold degree of Doctor of Veterinary Medicine). | Estimates for a single incident are based on requirements for a 3-month period. | 500 veterinary epidemiologists could be assigned in their areas of expertise on an as-needed basis and could be tasked for the entire duration of the incident. |
| USDA EOC staff | Manage the USDA EOC facility. | Estimates for a single incident are based on requirements for a 3-month period. | 21 persons |
| APHIS EOC staff | Manage the APHIS facility. | Estimates for a single incident are based on requirements for a 3-month period. | 21 persons |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|---|--|
| Communications technicians | Interoperable communications coordinated among local, State, national, private, and international stakeholders | Estimates for a single incident are based on requirements for a 3-month period. | 100 people to manage communications for 3-week periods |
| Trade support personnel | Reporting to OIE and information trade partners | Single incident | APHIS Veterinary Services and International Services; U.S. Department of State will be available as needed |
| Quarantine and restriction of movement of animals and related products personnel | Issuance and release of quarantine | Estimates for a single incident are based on requirements for a 3-month period. | <ul style="list-style-type: none"> ▪ APHIS and State personnel required for issues related to quarantine will be available on an as-needed basis. ▪ To enforce quarantine, 6,000 people are needed |
| Biosecurity personnel | Limit the introduction and spread of diseases. | Estimates for a single incident are based on requirements for a 3-month period. | <p>Biosecurity specialists could be assigned in their areas of expertise on an as-needed basis and could be tasked for the entire duration of the incident:</p> <ul style="list-style-type: none"> ▪ 500 on-farm personnel ▪ 50 outreach personnel |
| Decontamination personnel | Render an environment free of diseases and with no adverse impact on the environment. | Sufficient numbers to work on 2,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 120 supervisors ▪ 1,200 staff |
| Euthanasia personnel | Euthanize livestock. | Sufficient numbers to work on 2,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 60 supervisors for animal care ▪ 600 animal handlers |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|--|--|
| Animal welfare specialist | Oversee animal welfare during quarantine, housing, euthanasia, and treatment of animals. | Sufficient numbers to work on 42,000 herds during a 100-day period | 420 specialists: 1 in every incident command posts (ICPs). |
| Disposal personnel | Dispose of euthanized livestock. | Sufficient numbers to work on 2,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 60 supervisors ▪ 600 staff |
| Livestock appraisal personnel | Appraise livestock prior to euthanasia. | Sufficient numbers to work on 2,000-herds during a 100-day period | 840 persons |
| Surveillance personnel | Conduct surveillance activities to find exposed and susceptible animals: <ul style="list-style-type: none"> ▪ Numerators (phone contact) ▪ Examiners (ranch visitors) | Sufficient numbers to work on 40,000 herds during a 100-day period | 500 persons |
| Personnel to assess and address zoonotic and chemical, biological, radiological, nuclear, or explosive (CBRNE) issues | Capacity to identify risk factors for the spread and prevent the spread of zoonotic disease | Sufficient numbers to work on 2,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 50 specialists, including State public health veterinarians ▪ 100 technicians |
| Personnel with the training to diagnose relevant foreign animal diseases | Identify foreign animal diseases. | Sufficient numbers to work on 40,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 500 foreign animal disease diagnosticians ▪ 500 accredited veterinarians |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|---|---|
| Laboratory personnel | Process samples. | Sufficient numbers to work on 40,000 herds during a 100-day period; up to 82,000 serum samples and 24,000 PCR samples per day | <ul style="list-style-type: none"> ▪ 300 specialty technician ▪ 300 highly skilled technicians ▪ 200 administrative and laboratory support located in National Animal Health Laboratory Network (NAHLN) laboratories, and State animal diagnostic laboratories |
| Personnel trained in risk communication | Communicate risk options. | Sufficient numbers to work on 42,000 herds during a 100-day period | 100 persons nationwide or 2 per State |
| Data entry | Emergency Management Reporting System (EMRS) | Sufficient numbers to work on 42,000 herds during a 100-day period | 500 technicians |
| Equipment for trace-back investigations | Enter, store, and retrieve information from field and coordination center; includes cellular phones, barcoding, and global positioning system (GPS)/geospatial information system (GIS). | Sufficient numbers to work on 42,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 5,000 personal digital assistant (PDAs) ▪ Computer and Internet capability |
| Animal Identification systems | Identify infected, susceptible, exposed, and at-risk herds and animals. | Sufficient numbers to work on 42,000 herds during a 100-day period | 27,000,000 tags and/or microchips, paint sticks, brandings, and associated equipment |
| Identification officer (recorder) | Document and record infected, susceptible, exposed, and at-risk herds and animals. | Sufficient numbers to work on 42,000 herds during a 100-day period | 600 officers |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--------------------------------------|--|--|--|
| Support for local ICPs | Logistical capacity | Sufficient numbers to work on 42,000 herds during a 100-day period | Office space and administrative equipment for 420 ICPs |
| Euthanasia systems | Euthanize animals while meeting optimal humane standards. | Sufficient numbers to work on 2,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ Euthanasia solution base ▪ Tranquilizers ▪ Other methods |
| Therapeutics | Treat animals under quarantine. | Sufficient numbers to work on 40,000 herds during a 100-day period | |
| Dispensing personnel | Dispense therapeutics. | Sufficient numbers to work on 2,000 herds during a 100-day period | 10 supervisors |
| Vaccines | Vaccinate animals at risk. | Sufficient numbers to work on 40,000 herds during a 100-day period | 27 million doses of vaccine |
| Vaccinators | Vaccinate animals. | Sufficient numbers to work on 40,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 100 supervisors ▪ 2,000 vaccinators |
| Warehousing and distribution systems | Store and distribute pharmaceuticals and related supplies. | Sufficient numbers to work on 42,000 herds during a 100-day period | |
| Transportation systems and methods | Move live animals, carcasses, people, pharmaceuticals, and equipment within, between, and among quarantine zones while ensuring biosecurity. | Sufficient numbers to work on 2,000 herds during a 100-day period | <ul style="list-style-type: none"> ▪ 200 trucks ▪ 100 buses ▪ 100 minivans |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|--|--|
| Law enforcement | Enforce quarantine, incident security, and personal safety for field personnel. | Sufficient numbers to work on 2,000 herds during a 100-day period | 600 persons |
| Wildlife | Trained personnel with the ability and equipment to prevent, survey, identify, diagnose, and control disease in wildlife | Sufficient numbers to work on 2,000 herds and their surrounding environs during a 100-day period | <ul style="list-style-type: none"> ▪ 500 survey design ▪ 3,000 sample collectors |
| Veterinary response team—livestock | State-credentialed personnel with the ability and equipment to respond to the needs of livestock in all-hazards incidents | Sufficient numbers to work on 2,000 herds during a 100-day period | 60 persons |
| Veterinary response team—companion animals | State-credentialed personnel with the ability and equipment to respond to the needs of companion animals in response to all-hazards incidents | Sufficient numbers to work on 2,000 herds during a 100-day period | 60 persons |
| Information technology support staff | Personnel, equipment, and supplies to support ICPs | 1 person per ICP | 420 persons |
| Technical specialist position | Federal, State, tribal, local, or private resource | Estimates for a single incident are based on requirements for a 3-month period. | Technical specialists could be assigned in their areas of expertise on an as-needed basis and could be tasked for the entire duration of the incident. |

Approaches for Large-Scale Events

- To avoid duplication of resources, CBRNE weapons or devices and hazardous materials (HazMat) resource organizations should cross-train with other capabilities.
- To increase throughput in handling samples, laboratory resource organizations should develop new diagnostic technologies and pursue technology enhancements.
- For efficient use of national resources in emergencies with finite geographic distribution, animal treatment teams (livestock) should pursue cross-State border cooperation.
- For efficient use of personal and economic support to affected communities, personal resource organizations should use on-farm labor and develop just-in-time training.
- To simplify the indemnity process and provide a cost-effective alternative to euthanasia and disposal, indemnity plan resource organizations should pursue the final indemnity rule and consider the sale of vaccinated animals for slaughter.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| Incident command | <ul style="list-style-type: none"> ▪ 120 incident command posts (ICPs) for herds to be euthanized nationally ▪ 1,200 ICPs for herds to be vaccinated nationally ▪ 15 multiple area commands (MACs) nationally ▪ Federal: 30% of ICP staff provided ▪ State: 60% of ICP staff provided ▪ Local/private: 10% of ICP staff provided |
| USDA EOC staff | <ul style="list-style-type: none"> ▪ Federal: 63 support staff total ▪ 7 persons per shift; 3 shifts per 24-hour period for up to 1 year |
| APHIS EOC staff | <ul style="list-style-type: none"> ▪ Federal: 63 support staff total ▪ 7 persons per shift; 3 shifts per 24-hour period for up to 1 year |
| APHIS regional EOC staff | <ul style="list-style-type: none"> ▪ Federal: 126 support staff total ▪ 7 persons per shift; 3 shifts per 24-hour period for up to 1 year |
| National Response Coordination Center (NRCC) support staff | <ul style="list-style-type: none"> ▪ Federal: 27 support staff total ▪ 3 persons per shift; 3 shifts per 24-hour period for up to 1 year |
| Regional Response Coordination Center (RRCC) support staff | <ul style="list-style-type: none"> ▪ Federal: 48 support staff total ▪ 3 persons per shift; 3 shifts per 24-hour period for up to 1 year |
| Multi-agency coordinating group | <ul style="list-style-type: none"> ▪ Federal-State: 450 liaisons total ▪ 3 persons per shift; 3 shifts per 24-hour period up to 1 year |

| Resource | Assigned Level and Quantity |
|---|--|
| (MAC) | |
| Emergency Response Team (ERT-A) | <ul style="list-style-type: none"> State: 1 team per State = 450 persons total 3 persons per shift; 3 shifts per 24-hour period up to 1 year |
| Agriculture Emergency Operations Center | <ul style="list-style-type: none"> Federal: 12 persons total 3 shifts per 24-hour period up to 1 year State: 78 persons total (3 shifts per 24-hour period up to 1 year) nationally: <ul style="list-style-type: none"> -2 policy administrators -2 State animal health subject matter experts (SMEs) -1 USDA cooperative extension specialist -3 industry representatives -1 market representative -1 grain industry representative -1 crop representative -2 support Personnel |
| State Emergency Operations Center | <p>Federal: 6 persons</p> <ul style="list-style-type: none"> 3 shifts per 24-hour period up to one year <p>State: 12 persons total (3 shifts per 24-hour period up to one year)</p> <ul style="list-style-type: none"> 2 Animal health subject matter experts (SMEs) |
| Technical specialist position | <ul style="list-style-type: none"> Federal: 50% of technical positions Many technical positions have regulatory positions requiring specialized knowledge and skills available in the Federal Government. State: 50% of technical positions provided nationally Many technical positions have regulatory positions requiring specialized knowledge and skills available in State government. |
| Veterinary medical assistance team | Federal: 12 teams deployed for 2 weeks on and 4 weeks off |
| Veterinary epidemiologist | <ul style="list-style-type: none"> Federal: 50% of staff provided = 750 persons total State: 50% of staff provided = 750 persons nationally, including university epidemiologists |
| Communications technicians | <ul style="list-style-type: none"> Federal: 30% of staff provided = 200 persons total State: 30% of staff provided = 200 persons total nationally Private: 30% of staff provided = 200 persons total nationally |

| Resource | Assigned Level and Quantity |
|--|--|
| Trade support personnel | Federal: APHIS Veterinary Services and International Services and the U.S. Department of State will be available as needed. |
| Quarantine and restriction of movement of animals and related products personnel | <ul style="list-style-type: none"> ▪ Federal: 1,320 persons located in incident command posts (ICPs) ▪ State: 3,960 persons located at incident command posts (ICPs) nationally ▪ Local/private: 12,720 persons needed in field nationally |
| Biosecurity personnel | <ul style="list-style-type: none"> ▪ Federal: 2 persons per State to provide outreach (100 persons total) ▪ State: 4 persons per State (200 persons total) ▪ Local/private: 30 persons per State (1,500 total) |
| Decontamination personnel | <ul style="list-style-type: none"> ▪ Federal: 1 person per euthanasia incident command post (ICP) (120 total) ▪ State: 60 persons per State (3,000 persons total) ▪ Local/private: 7,200 personnel total nationally (through just-in-time training) |
| Euthanasia personnel | <ul style="list-style-type: none"> ▪ State: 180 supervisors for animal care nationally ▪ Local/private: 1,800 animal handlers nationally (through just-in-time training) |
| Animal welfare specialist | <ul style="list-style-type: none"> ▪ Federal: 1 person per ICP (1,320 specialists total) |
| Disposal personnel | <ul style="list-style-type: none"> ▪ Federal: 1 per State (50 persons total) ▪ State: 2 persons per State (100 persons total) ▪ Local/private: 90 persons per State (1,800 total) |
| Livestock appraisal personnel | <ul style="list-style-type: none"> ▪ Federal: 3 persons per State (150 persons total) ▪ State: 9 persons per State (450 persons total) |
| Surveillance personnel | <ul style="list-style-type: none"> ▪ Federal: 1 person per ICP (1,320 persons in total) ▪ State: 25 persons per State (1,680 persons total) |
| Personnel to assess and address zoonotic and CBRNE issues | <ul style="list-style-type: none"> ▪ Federal: 1 person per State (50 persons total) ▪ State: 2 persons per State (1 is the State public health veterinarian) (100 persons total) ▪ Local/private: 12 persons per State (600 technicians total) |
| Personnel with the training to diagnose relevant foreign | <ul style="list-style-type: none"> ▪ Federal: 30 persons per State (1,500 total) ▪ State: 30 persons per State (1,500 total) |

| Resource | Assigned Level and Quantity |
|---|---|
| animal diseases | <ul style="list-style-type: none"> Local/private: 60 accredited veterinarians per State (3,000 total) |
| Laboratory personnel | <p>Federal:</p> <ul style="list-style-type: none"> -25 specialty technicians -50 highly skilled technicians -25 administrative and laboratory support <p>State level:</p> <ul style="list-style-type: none"> -900 specialty technicians nationally -900 highly skilled technicians nationally -600 administrative and laboratory support nationally |
| Personnel trained in risk communication | <ul style="list-style-type: none"> Federal: 2 persons per State (100 total) State: 5 persons per State (250 total) Local/private: 5 persons per State (250 total) |
| Data entry | <ul style="list-style-type: none"> Federal: 1 supervisor and 3 technicians per State (200 total) State: 1 supervisor and 3 technicians per State (200 total) Local/private: 43 per State (2,600 total) |
| Equipment for trace-back and trace-forward investigations | Federal/State/local: 30,000 PDAs, computer and Internet capability nationally |
| Animal identification systems | Federal/State/local: 85 million tags and/or microchips, paint sticks, brandings, and associated equipment nationally |
| Identification officer | <ul style="list-style-type: none"> Federal: 1 per State (50 total) State: 1 per ICP (1,320 total) Local/private: 47 per State (2,330 total) |
| Support for local ICPs | Federal/State/local: office space and administrative equipment for 1,320 ICPs nationally |
| Euthanasia systems | Federal/State/local: euthanasia solution base plus tranquilizers |
| Therapeutics | Federal/State/local: cache of therapeutics |
| Dispensing personnel | Federal: 60 supervisors |
| Vaccines | Federal: up to 85 million doses of vaccine |
| Vaccinators | <ul style="list-style-type: none"> Federal: 1 per State (50 total) State: 1 per ICP (1,200 Supervisors total) Local/private: 720 per State (36,000 vaccinators total) |

| Resource | Assigned Level and Quantity |
|--|---|
| Warehousing and distribution systems | Federal/State/local: sufficient space and distribution system to respond to outbreak |
| Transportation systems and methods | <ul style="list-style-type: none"> ▪ Federal/State/local: ▪ 1,200 trucks (nationally) ▪ 600 buses (nationally) ▪ 600 minivans (nationally) |
| Law enforcement | <ul style="list-style-type: none"> ▪ Federal: 1 per State (50 FBI agents total) ▪ State: 1 per ICP (1,200 persons total) ▪ Local: 45 officers per State (2,230 total) |
| Wildlife specialist | <ul style="list-style-type: none"> ▪ Federal: 4 per State (2 each from U.S. Department of Interior (DOI) and USDA) (200 total) ▪ State: 4 per State (200 supervisors total) ▪ Local/private: 180 sample collectors per State (9,000 persons total) |
| Veterinary response team—livestock | <ul style="list-style-type: none"> ▪ State: 1 State team and 5 out-of-State teams per State affected deployed up to 14 days at a time ▪ Local: 1 county team and 5 out-of-county teams per county affected deployed up to 14 days at a time |
| Veterinary response team—companion animals | <ul style="list-style-type: none"> ▪ State: 1 State team and 5 out-of-State teams per State affected deployed up to 14 days at a time ▪ Local/private: 1 county team and 5 out-of-county team per county affected deployed up to 14 days at a time |
| Information technology support | <ul style="list-style-type: none"> ▪ Federal: 50 persons with supervisory and liaison responsibility ▪ State: 4 per State (200 persons total) ▪ Local/Private: 20 per State (1,000 persons total) |
| Administrative Support Personnel (procurement, contracts, logistics) | <ul style="list-style-type: none"> ▪ Federal: 4 per State (200 total) ▪ State: 20 per State (1,000 total) ▪ Local/Private: 50 per State (2,500 total) |
| Trainers | <ul style="list-style-type: none"> ▪ Federal: One per State (50 total) ▪ State: 4 per State (1,000 total) ▪ Local/Private: 20 per State (1,000 total) |

Linked Capabilities

- CBRNE Detection

-
- Communications
 - Community Preparedness and Participation
 - Critical Infrastructure Protection
 - Critical Resource Logistics and Distribution
 - Economic and Community Recovery
 - Emergency Operations Center Management
 - Emergency Public Information and Warning
 - Environmental Health
 - Epidemiological Surveillance and Investigation
 - Food and Agriculture Safety and Defense
 - Information Gathering and Recognition of Indicators and Warning
 - Intelligence Analysis and Production
 - Intelligence/Information Sharing and Dissemination
 - Isolation and Quarantine
 - Law Enforcement Investigation and Operations
 - Mass Care (Sheltering, Feeding, and Related Services)
 - Medical Surge
 - Onsite Incident Management
 - Planning
 - Public Health Laboratory Testing
 - Public Safety and Security Response
 - Responder Safety and Health
 - Risk Management
 - Structural Damage and Mitigation Assessment
 - WMD/HazMat Response and Decontamination

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4. *Catastrophic Incident Supplement to the NRP*; Department of Homeland Security, 2005.
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ENVIRONMENTAL HEALTH

Capability Definition

Environmental Health is the capability to protect the public from environmental hazards and manage the health effects of an environmental health emergency on the public. The capability endeavors to minimize exposures to all-hazards in environmental matrices (i.e., food, air, water, solid waste/debris, hazardous waste, vegetation, and sediments) animal, insect and rodent vectors. The capability provides subject matter experts (SMEs) and support staff to run fate and transport models; design, implement, and interpret the results of environmental field surveys and laboratory sample analyses; develop protective action guides (PAGs) where none exist; and use available data and judgment to recommend appropriate actions for protecting the public and environment. SMEs will identify environmental hazards in the affected area through rapid needs assessments and comprehensive environmental health and risk assessments. Other responsibilities include working closely with the health community and environmental agencies to link exposures with predicted disease outcomes, disseminating physician education for the diagnosis and treatment of victims based on environmental impact, providing guidance on personal protective equipment (PPE), and advising on environmental health guidelines.

The Environmental Health capability exists within several state, local and federal agencies. Under the Federal Response Plan the primary responsibility for environmental characterization and sampling lies within Emergency Support Function (ESF) 10: Hazardous Materials (lead agency Environmental Protection Agency (EPA)). ESF 8 Health and Medical Services (lead agency Health and Human Services (HHS)) assist with environmental sampling data review and interpretation of environmental samples to provide health guidance. In order for an effective response to occur, close coordination of activities is required between all environmental health components of ESF 8 and 10. Additionally, close coordination is required with other support functions, ESF 3 Public Works and Engineering, ESF 5 Information and Planning, and ESF 6 Mass Care.

Outcome

After the primary event, disease and injury are prevented through the quick identification of associated environmental hazards to include exposure to infectious diseases that are secondary to the primary event and secondary transmission modes. The at-risk population (e.g., exposed or potentially exposed) receives the appropriate treatment or protection (countermeasures) in a timely manner. The rebuilding of the public health infrastructure, removal of environmental hazards, and appropriate decontamination of the environment enable the safe re-entry and re-occupancy of the impacted area. Continued monitoring occurs throughout the re-building process to identify hazards and reduce exposure.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following ESFs:

- ESF #1: Transportation
- ESF #3: Public Works and Engineering
- ESF # 5: Information and Planning
- ESF #6: Mass Care, Housing and Human Services
- ESF #8: Public Health and Medical Services

- ESF #10: Oil and Hazardous Materials Response
- ESF #11: Agriculture and Natural Resources
- ESF #14: Long Term Community Recovery and Mitigation
- Worker Safety and Health Support Annex
- Nuclear/Radiological Incident Annex
- Catastrophic Incident Annex
- Oil and Hazardous Materials Incident Annex

Capability Description

| Activity | Description |
|--|---|
| Identify the spread of the hazard and epidemiological needs. | <ul style="list-style-type: none"> ▪ Assess safety of drinking water ▪ Assess damage to community sewer systems ▪ Assess food safety concerns ▪ Assess damages from hazardous materials releases ▪ Assess environmental consequences of solid waste issues (physical damage / debris removal) |
| Implement alternative strategies to alleviate emergency | <ul style="list-style-type: none"> ▪ Provide safe alternate supplies of potable water ▪ Provide safe sewage disposal alternatives ▪ Provide alternate sources of food |
| Implement environmental health countermeasures | Assess need for and implement vector control strategies |
| Disseminate treatment information | Disseminate information on public health practices (ie, handwashing, boiling water) |
| Safeguard the health of those who needed to be evacuated and sheltered | Assess environmental health concerns for population requiring temporary mass shelter and ensure provision of safe environmental health services |
| Assist with stabilizing the incident | <ul style="list-style-type: none"> ▪ Provide input into managing the hazardous materials release, including stabilizing the scene, environmental clean-up and removal of hazard ▪ Monitor HazMat operations to ensure environmental safety |
| Safeguard the public's health during recovery | <ul style="list-style-type: none"> ▪ Provide public health guidance/input into clean-up and debris removal strategies and monitor implementation to ensure environmental quality. ▪ Assess environmental impact on housing, educational facilities, and health care institutions and monitor re-entry and re-occupancy process to ensure environmental safety |

Critical Tasks

| UTL # | Task |
|-----------------|--|
| | Response management and coordination |
| Res.B.1 1.5.1 | Develop a plan to coordinate the various elements of environmental health among Federal, State, and local response. |
| Res.B.1 1.5.2 | Determine lead entity within each state for the coordination of environmental health efforts to include: response work, database management of environmental sample results, interpretation of results, risk communication. |
| Res.B.1 1.5.3 | Determine lead entity within each state and federal agency for which Federal Radiological Monitoring and Assessments (FRMAC) is required to provide coordination for the analysis and database management of environmental samples, and for which other agencies are responsible for the interpretation of results and risk communication. |
| Res.B.1 1.5.4 | Provide environmental public health representation on national advisory teams for environmental health services. |
| Res.B.1 1.5.5 | Identify appropriate expertise needed for all aspects of environmental health response including IND. |
| Res.B.2 3.1.4.2 | Provide input on forecasting and planning aspects as part of the Incident Command System (ICS) for needs in the coming days. |
| Res.B.2 3.5.3.1 | Issue environmental health alerts as appropriate. |
| Res.B.2 3.5.3.4 | Assist epidemiologists and health providers in linking environmental exposures to health risks, prevention strategies, and disease outcomes. |
| Res.B.5 1.2 | Develop crisis communication plan. |
| Res.B.5 3.3.4.1 | Disseminate crisis and emergency risk communication information to media, public, partners and stakeholders. |
| Res.B.5 3.3.4.2 | Clearly identify and communicate environmental health risk issues to the affected population. |
| Res.B.5 3.3.4.3 | Provide advice to law enforcement authorities regarding re-entry for tasks including: personal needs. |
| Rec.C.3 1.3.2 | Create emergency response plan for both larger, regulated systems (systems regulated by the Safe Drinking Water Act [SDWA]), and small unregulated systems (private wells, etc.) |
| | Drinking water safety |
| Res.C.3 1.1.1.3 | Develop Mass Shelter Guidelines that include requirements for provision of safe drinking water from all sources. |
| Rec.C.3 1.3.1 | Develop a geo-coded database of all SDWA drinking water facilities and private systems. |
| Rec.C.3 1.3.4 | Develop Emergency Guidelines and Operation Criteria for Limited Operations (Boil water or do not drink order), and plan for dissemination to public and policyholders in cooperation with water utilities. |

| UTL # | Task |
|-----------------|---|
| Rec.C.3 1.3.5 | Develop communications plan for drinking water safety in emergencies, including meaning of and instructions for scenarios such as boil water order, do not drink order, do not use order, etc. |
| Rec.C.3 1.3.6 | Develop mutual aid agreements with other water providers and relevant health and environment entities for assistance in disaster/emergency events. |
| Rec.C.3 2.3.1 | Develop and conduct emergency response training relevant to drinking water systems to field staff and managers of state/local drinking water programs and drinking water utilities. |
| Rec.C.3 3.1.6.1 | Drinking water personnel participate in overall infrastructure assessment. |
| Rec.C.3 3.4.1 | Provide drinking water technical expertise team for emergency operations, both for SDWA (larger, regulated systems) and non-SDWA (private wells) drinking water systems. |
| Rec.C.3 3.4.2 | Provide technical assistance to private well owners and operators of small, unregulated non-SDWA drinking water systems on recovery. |
| Rec.C.3 3.8.5 | Assess sanitation (including drinking water) at mass care facilities-shelters, feeding centers, sources of ice. |
| Rec.C.3 4.3.1 | Determine potability of all drinking water facilities affected (larger, regulated SDWA systems and non-SDWA systems such as private wells). |
| Rec.C.3 4.3.2 | Conduct initial assessments of SDWA drinking water facilities using Emergency Guidelines and Operation Criteria or applicable code. |
| Rec.C.3 4.3.3 | Conduct initial assessments of non-SDWA drinking water facilities (private wells, etc.) using Emergency Guidelines and Operation Criteria or applicable code. |
| Rec.C.3 4.3.4 | Conduct assessments of portable water purification systems. |
| Rec.C.3 4.3.5 | Conduct assessments of ice making operations, bottled water and bulk water hauling for quality and safety. |
| Rec.C.3 4.3.6 | Conduct follow-up monitoring of drinking water quality and system pressure in SDWA systems. |
| | Wastewater management |
| Rec.C.3 1.1.1.2 | Develop Mass Shelter Guidelines that include requirements for sanitation (toilets, porta-potties, and hand washing facilities). |
| Rec.C.3 1.4.1 | Develop a geo-coded database community wastewater facilities and on-site systems they connect. |
| Rec.C.3 1.4.2 | Develop Emergency Guidelines and Operation Criteria for Limited Operations (such as emergency primary treatment only). |
| Rec.C.3 1.4.3 | Develop communications plan for wastewater issues in emergencies, including instructions for scenarios such as collection systems or treatment plants not operating, operating at limited capacity, or operating in a non-standard manner (e.g., discharge without complete treatment). |

| UTL # | Task |
|-----------------|---|
| Rec.C.3 1.4.4 | Develop mutual aid agreements with other wastewater operations for assistance in disaster/emergency events. |
| Rec.C.3 1.4.5 | Create emergency response plan for both large community sewer systems (in cooperation with utilities) and small onsite systems. |
| Rec.C.3 2.4.1 | Develop and conduct relevant emergency response training for field staff and managers of state/local wastewater programs and utilities. |
| Rec.C.3 3.1.6.2 | Wastewater personnel participate in overall infrastructure assessment. |
| Rec.C.3 3.5.1 | Provide wastewater technical expertise team for questions at emergency operations, both for large centralized community systems and smaller onsite systems. |
| Rec.C.3 3.5.2 | Provide technical assistance to individual owners of onsite systems and operators of small communal onsite systems. |
| Rec.C.3 3.8.6 | Assess wastewater and sanitation (including toilets, on-site systems and hand washing facilities) at mass care facilities. |
| Rec.C.3 4.4.1 | Determine all wastewater facilities affected, including both large community sewer systems and small onsite systems. |
| Rec.C.3 4.4.2 | Conduct initial assessments of community sewer systems using Emergency Guidelines and Operation Criteria or applicable code. |
| Rec.C.3 4.4.3 | Conduct initial assessments of individual or small community onsite systems using Emergency Guidelines and Operation Criteria or applicable code. |
| Rec.C.3 5.4.1.1 | Provide short-term sewage disposal alternatives until infrastructure is restored. |
| Rec.C.3 5.4.2 | Conduct follow-up monitoring of treatment plant effluent and integrity of collection systems. |
| | Food safety |
| Res.A.1 1.3.1 | Develop a geo-coded database of all food operations. |
| Res.A.1 4.5.1.3 | Conduct initial assessments of food facilities using Emergency Guidelines and Operation Criteria or applicable code. |
| Res.A.1 4.5.1.4 | Determine food facilities that are adversely affected. |
| Res.A.1 4.5.6 | Conduct product tracing to determine source, destination, and disposition of adulterated/contaminated products. |
| Res.A.1 4.5.8 | Conduct environmental investigations of disease outbreaks possibly related to food-borne exposures, as needed; work in conjunction with epidemiologist, laboratory and health care providers. |
| Res.B.2 1.6.1 | Create emergency response plan for response to all food operations for retail, food service, mass feeding, and food processing facilities. |
| Res.B.2 1.6.2 | Develop Emergency Guidelines and Operation Criteria for Retail Food, Wholesale, Processing during disasters. |
| Res.B.2 1.6.3 | Develop communications plan for food safety for regulated facilities and the general public. |

| UTL # | Task |
|-----------------|--|
| Res.B.2 2.6.1 | Develop and conduct emergency food safety response training to field staff and managers of state/local food programs having responsibility for food safety response (training should include appropriate job safety training). |
| Res.B.2 2.6.2 | Provide food safety training to responders and volunteers. |
| Res.B.2 3.6.6.2 | Coordinate response to all food related issues. |
| Res.B.2 3.6.6.3 | Address transportation of potentially contaminated food products and their entry into local, interstate, and international commerce. |
| Res.B.2 3.6.6.4 | Provide food safety technical expertise team for questions for emergency operations. |
| Res.B.2 3.6.6.5 | Assist in data review of assessments on affected fish and shellfish populations. |
| Res.B.2 3.6.6.6 | Conduct follow-up monitoring of food. |
| Res.B.2 3.6.6.7 | Conduct follow-up/re-opening assessments. |
| Res.B.2 3.7.2.1 | Provide advice through response partners (USDA, State Agriculture Departments, etc.) to farmers on protecting their animals and crops from contamination. |
| Res.C.3 1.1.1.1 | Develop Mass Care Guidelines that include food safety and sanitation requirements. |
| Res.C.3 1.3.1 | Identify all groups and Non Governmental Organizations (NGOs) involved in mass feeding and food preparation. |
| Res.C.3 3.1.6.3 | Food safety personnel participate in infrastructure assessment. |
| Res.C.3 3.8.1 | Determine location of all mass feeding and food preparation sites and distribution points. |
| Res.C.3 3.8.8 | Conduct safe disposal of damaged or contaminated food. |
| Res.C.3 3.8.2 | Conduct building/facility inspections in advance to identify food/sanitation capability and suitability of structures identified as mass care facilities (housing, shelters, feeding and care facilities). |
| Res.C.3 3.8.4 | Assess food safety/sanitation at mass care facilities-shelters, feeding centers, food/ice distribution centers . |
| | Vector control |
| Rec.C.3 1.4.1 | Develop plan for assessing local vector control infrastructure prior to event and how it has been damaged during the event. |
| Rec.C.3 1.4.2 | Develop plan to work with local vector control to assist while they rebuild capabilities. |
| Res.B.2 1.8.1 | Develop disease specific emergency response plan for vector control including; insect, arthropod and rodent vectors. |
| Res.B.2 1.8.2 | Develop Emergency Vector Control Guidelines that include surveillance and control of insect, arthropod and rodent vectors. |
| Res.B.2 1.8.3 | Develop communications plan for Vector Control to include control measures for the public and public agencies. |

| UTL # | Task |
|-----------------|---|
| Res.B.2 2.7.1 | Develop and conduct emergency vector control response training to field staff and managers of state/local programs having responsibility for vector control. |
| Res.B.2 3.8.1 | Assist in the overall coordination of Vector Control response. |
| Res.B.2 11.1 | Conduct assessment of insect, animal and rodent vectors to include population densities, infectivity rates, and human risk potential. |
| Res.B.2 3.8.2 | Coordinate emergency vector control measures to the extent needed to supplement local capacity and reduce risk to pre-event levels. |
| Res.B.2 1.8.4 | Develop a geo-coded data base of all geographic locations assessed for vectors including locations that were treated, i.e. larvicides, spraying, etc. |
| Res.B.2 11.2 | Implement animal control measures, i.e. for infected animals threatening the public's health (also includes stray pets/domestic animals, commensal wild animals). |
| Res.B.2 3.8.3 | Establish a vector control technical expertise team for surveillance and monitoring of animal infections until population densities and infection rates return to pre-event levels. |
| | Mass care safety |
| Res.C.3 1.1.1 | Develop Mass Care Guidelines that include safety/ food/air/water/wastewater sanitation requirements. Mass Care to include: shelters, housing, ice/food distribution, feeding sites and care facilities. |
| Res.C.3 1.1.2 | Develop plans, procedures, and protocols to ensure individual/gross decontamination of persons and pets prior to admittance to shelters and other mass care facilities, medical and alternate care facilities, reception centers, animal shelters and other places as needed. (relevant to improvised nuclear device scenario). |
| Res.C.3 1.1.3 | Develop plans and guidance on aspects of IND procedures for sheltering in place, evacuation, public education and announcements. |
| Res.C.3 1.2.2 | Develop a geo-coded database of all pre-designated Mass Care Operations. |
| Res.C.3 1.2.3 | Update geo-coded database of all Mass Care Operations. |
| Res.C.3 1.3.2 | Identify sources and pre-arrange for delivery of toilets, porta potties, and hand washing facilities necessary to meet Mass Care Guidelines. |
| Res.C.3 2.2.1 | Develop and conduct emergency response training to field staff and managers of state/local programs having responsibility for safety/food/air/water/wastewater sanitation assessments of mass care operations. |
| Res.C.3 2.2.2 | Develop and conduct environmental health training to pre-designated managers, responders and volunteers of mass care operations. |
| Res.C.3 3.8.3 | Coordinate environmental health assessments of Mass Care Operations and monitor with changing population levels. |
| Res.C.3 3.8.3.1 | Conduct initial comprehensive environmental assessments (safety/food/water/wastewater sanitation) of Mass Care operations to ensure compliance with Mass care Guidelines. |

| UTL # | Task |
|-------------------|---|
| Res.C.3 3.8.3.2 | Conduct comprehensive safety/food/air/water/wastewater/waste/vector control sanitation assessments of pre-selected Mass Care facilities to identify capability of structures to meet Mass Care Guidelines. |
| Res.C.3 3.8.7 | Conduct follow-up environmental health assessments (safety/food/air/water/wastewater sanitation) of mass care operations. |
| | Community, housing, education facilities, institutions, and health care safety |
| Rec.C.2 1.4.1 | Develop a plan for evaluating re-entry and re-occupancy of the community, homes, educational, institution and health care facilities. Plan establishes evaluation process, assessment criteria, and indicators of safe re-occupation. |
| Rec.C.2 1.4.2 | Develop a geo-coded database of facilities that have the potential for affecting surrounding homes and community structures to include facilities that produce, store, use and distribute, treat or dispose of hazardous chemicals, biological, radiological, and explosive hazards. |
| Rec.C.2 1.4.3 | Develop communications plan for safety and environmental related hazards associated with re-entry and re-occupation of community, homes and facilities. |
| Rec.C.2 1.4.4 | Develop and implement a monitoring system to determine status of rehabilitation efforts and health and safety issues associated with re-entry and re-occupancy. |
| Rec.C.2 3.3.1 | Conduct assessments to collect and analyze data needed to determine safe re-entry and re-occupancy of community, homes and facilities. |
| Rec.C.2 3.3.2 | Provide geo-coded status report of community, homes and facilities identified as safe or unsafe to re-enter and re-occupy. |
| Rec.C.2 3.3.3 | Coordinate safe re-entry and re-occupancy of community, homes and facilities. |
| | Hazardous materials and environmental assessment |
| Res.B.2 1.2.1.3 | Assist in conducting community hazard assessments to identify hazards, threats, vulnerabilities and risk of facilities involved in the production, storage or distribution of hazardous materials. |
| Res.B.2 1.2.1.4 | Utilize existing or assist in developing a geo-coded database of facilities involved in the production, storage or distribution of hazardous materials. |
| Res.B.2 1.2.5 | Assist in developing a communications plan for hazardous materials in emergencies, related to specific hazards, health guidance, educational materials, etc. |
| Res.B.2 2.2.2 | Provide appropriate hazardous materials response training to field staff and managers of state/local programs having involvement in hazardous materials response. |
| Res.B.2 3.2.8.1 | Provide assessment of immediate health and environmental consequences. |
| Res.B.2 3.2.8.1.1 | Conduct initial assessments of ambient air and potentially contaminated, recreational waters, floodwaters, community sites, and of facilities involved in the production and and/or distribution of hazardous materials –assessments should include appropriate chemical, biological and radiological sampling. |
| Res.B.2 3.2.8.1.2 | Provide geo-coded hazardous materials sampling reports. |

| UTL # | Task |
|----------------------|--|
| Res.B.2 3.2.8.1.3 | Conduct follow-up monitoring and sampling of ambient air, contaminated recreational waters, floodwaters, community sites, and facilities for chemical, biological and radiological contaminants. |
| Res.B.2 3.2.8.1.4 | Provide health impact assessment of sampling results from various environmental sources to include: water, air, surfaces and soil. |
| Res.B.2 3.2.8.1.5 | Investigate reports of chemical odors, orphaned containers and spills. |
| Res.B.2 3.2.8.2 | Provide assessment long-term health and environmental consequences. |
| Res.B.2 3.2.8.3 | Assist in the coordination of response to Hazardous Materials. |
| Res.B.2 3.2.8.4 | Participate in overall response to Hazardous Materials. |
| Res.B.2 3.2.8.5 | Provide a Hazardous Materials technical expertise team for emergency operations for both industry and public. |
| Res.B.2 3.2.9.1 | Assist police and others to establish contaminated areas requiring access restriction, where necessary. |
| Res.B.2 3.2.9.2 | Provide advisory services regarding practical and effective decontamination of persons and vehicles leaving affected area, if necessary. [New Task] |
| Res.B.2 3.2.9.5 | Provide guidance regarding practical and effective decontamination of essential routes (highways and secondary road surfaces) through affected area. [New Task] |
| Rec.C.3 3.1.6.4 | Infrastructure Assessment – hazardous materials response personnel participate. |
| | Solid waste and debris removal |
| Rec.B.2 1.3.1 | Develop emergency response plan for the safe removal and disposal of solid waste and debris. Includes mutual aid arrangements, recycling plans, selection of storage sites, vector control, etc. |
| Rec.B.2 1.3.2 | Develop Solid Waste and Debris Removal Guidelines. |
| Rec.B.2 1.3.3 | Develop communications plan for solid waste and debris. |
| Res.B.2 2.2.2 | Develop and conduct appropriate hazardous materials response training to field staff and managers of state/local programs having responsibility for hazardous materials response. |
| Rec.B.2 2.5 | Coordinate response to solid waste and debris removal. |
| Rec.B.2 2.5.1 | Safe collection and disposal of solid waste and debris. |
| Rec.B.2 2.5.2 | Conduct assessment of solid waste and debris in affected geographic area, including; accumulation amounts, characterization of solid waste and debris (wood, trees, vehicles, etc.) |
| Rec.B.2 2.5.3 | Solid waste technical expertise team provided for questions both industry and public. |
| Rec.B.2 2.5.4 | Develop a geo-coded database of all geographic locations that debris waste is burned and solid waste disposed. |
| | Radioactive waste and cleaning disposal (IND scenario) |

| UTL # | Task |
|---------------|--|
| Rec.B.2 1.4.1 | Create emergency response plan for managing the type and quantities of waste generated by the event and cleanup efforts. |
| Rec.B.2 1.4.2 | Determine, recommend, and assess appropriate decontamination methods. |
| Rec.B.2 1.4.3 | Develop list of transportation routes for such wastes to intermediate and permanent repositories. |
| Rec.B.2 1.4.4 | Determine qualifications for transportation of waste. |
| Rec.B.2 1.4.5 | Identify suitable repositories by type and their capacities for radioactive waste disposal. |
| Rec.B.2 1.4.6 | Develop plan for long-term environmental monitoring. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|--|
| <p>A comprehensive environmental health emergency response plan is in place that addresses, at a minimum, the following:</p> <ul style="list-style-type: none"> ▪ Drinking water ▪ Wastewater ▪ Food safety ▪ Mass care ▪ Vector control ▪ Housing ▪ Hazardous materials ▪ Solid waste and debris removal ▪ Communication to the public and policyholders ▪ Re-occupancy | Yes/No |
| <p>A geo-coded database that includes, at a minimum, the following:</p> <ul style="list-style-type: none"> ▪ Safe Drinking Water Act (SDWA) drinking facilities ▪ Non-SDWA systems ▪ Community wastewater facilities ▪ On-site wastewater systems ▪ Food operations ▪ Mass care operations (hospitals, shelters, etc.) ▪ Vector control ▪ Educational and institutional facilities (including associated chemical, biological, and radiological hazards) ▪ Commercial facilities involved in the production and distribution of hazardous materials ▪ Debris waste disposal sites ▪ Solid waste landfill sites ▪ Environmental laboratories | Database is updated monthly or as deemed appropriate |

| Preparedness Measure | Preparedness Metric |
|---|---|
| Geo-coded database is distributed to state and local emergency operations. | Database is distributed monthly in association with update |
| A Geo-coded environmental samples database is capable of cataloging results by collection medium (e.g. water, drinking water, soil, air, animal vectors, etc.). | Yes/No |
| A comprehensive environmental health assessment has been completed for pre-selected facilities and structures. | Yes/No |
| Emergency response training is provided to field staff and managers of state and local environmental health programs. | Each employee receives training at least annually |
| Public health education is provided to the general public via media and internet. | Initial situation updates to media within 4 hours with periodic media updates every 12-24 hours |
| Environmental health to provide input on forecasting and planning aspects as part of the Incident Command System (ICS) for needs in the coming days, weeks, and/or months beyond event. | Begin within 24 hours of incident; increasing emphasis by Day 7 |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| For IND incident | |
| Environmental health testing and monitoring was provided. Federal whole body radiation portal monitors were used to detect internal/external contamination. Hand held contamination survey meters were available for primary or additional monitoring | <ul style="list-style-type: none"> ▪ 100% of persons who enter areas in which screening may be conducted are screened ▪ 100% of responders and health care personnel are screened at appropriate intervals ▪ 100% of pets and belongings, as applicable, are screened when the opportunity to screen is available and it does not result in increasing potential harm to humans |
| Drinking water safety | |
| Completed Sanitation Assessment of drinking water at mass care facilities, shelters, and feeding centers to ensure the water quality meets EPA standards | Within 48 hours of onset of shelter operation |
| Affected populations are provided with adequate supply of safe water for drinking, cooking, and bathing | 7.5-15 liters-total need / person/according to SHPERE guidelines (2.5-3 liters - drinking water/person/day) |

| Performance Measure | Performance Metric |
|---|---|
| Infrastructure Assessment - Drinking water personnel participate in overall infrastructure assessment | Within 48 hours of incident |
| Initiate assessment of SDWA drinking water facilities using Emergency Guidelines and Operation Criteria or applicable code such as revised EPA revised Protective Action Guides | Within 72 hours of incident |
| Initiate assessment of non-SDWA drinking water facilities (e.g. private wells) using Emergency Guidelines and Operation Criteria or applicable code | Within 1 week of incident |
| Wastewater | |
| Completed Sanitation Assessment at mass care facilities, shelters, and feeding centers | Within 48 hours of onset of shelter operation |
| Affected populations are provided with adequate temporary sewage disposal alternatives | 1 portable toilet per 20 persons or access to pit latrines provided to all personnel according to SPHERE guidelines |
| Infrastructure Assessment - Wastewater personnel participate in overall infrastructure assessment | Within 48 hours of incident |
| Initiate assessment of community sewer systems (both collection and treatment) using Emergency Guidelines and Operation Criteria or applicable code | Within 72 hours of incident |
| Initiate assessment of individual or small community onsite systems using Emergency Guidelines and Operation Criteria or applicable code | Within 1 week of incident |
| Food Safety | |
| Conduct Food Safety Assessment at mass care facilities, shelters, feeding centers, food preparation sites and food/ice distribution centers | Within 48 hours of shelter operation |
| Initiate Infrastructure Assessment - Food safety personnel participate in overall infrastructure assessment | Within 48 hours of incident |
| Initiate assessment of food facilities using Emergency Guidelines and Operation Criteria or applicable code | Within 72 hours of incident |
| For IND scenario, initiate food safety assessment program to comply with FDA 1998 guidelines | Within 48 hours of incident |
| Mass Care | |

| Performance Measure | Performance Metric |
|--|---|
| Complete Comprehensive Environmental Assessments (water, air, sanitation, food, and safety) at mass care facilities, shelters, feeding centers, and food/ice distribution centers | Within 48 hours of shelter operation, e.g. <ul style="list-style-type: none"> ▪ Safe water – 7.7-15 liters/day ▪ Cot spacing (overcrowding)– 3.5 m² ▪ Minimum 1 toilet/20 persons, etc. |
| Updated Geo-coded database with all mass care operations | Updated every 12 hours |
| <i>For IND scenario</i> , percentage of exposed at-risk population leaving the affected area that is measured for radiological contamination via screening portals | Screening for radiological contamination is offered to 100% of at-risk population at reception centers |
| Vector Control | |
| Initiate assessment of insect, animal and rodent vectors | Within 24 hours of confirmed incident |
| Commence emergency vector control measures. (includes mosquito, fly, flea, tick, and rodents) | For mosquitoes -minimum of 85% reduction in insects based on pre and post treatment surveillance |
| Updated Geo-coded database with all locations assessed or treated for vectors | Updated every 12 hours during incident |
| Animal control measures have commenced | Within 96 hours of incident |
| Community, Housing, Education Facilities, Institutions, and Health Care | |
| Plan is initiated for safe re-entry and re-occupancy of the community, homes, educational, institution and health care facilities | Within 48 hours of incident |
| Community, homes, educational, institution and health care facilities assessed in accordance with established evaluation processes and assessment criteria | Percent of geographical area, homes and facilities assessed within specific timeframe as established in the plan. |
| Analyze data to determine status of safe re-entry and re-occupancy of community, homes and facilities | Analyze every 24 hours |
| Provide geo-coded status report of community, homes and facilities identified as safe or unsafe to re-enter and re-occupy | Updated every 24 hours |
| A monitoring system is implemented to determine status of rehabilitation efforts and health and safety issues associated with re-entry and re-occupancy. Includes a geo-coded status report of community, homes and facilities identified as safe or unsafe to re- | Monitoring system is operational within 72 hours of the incident |

| Performance Measure | Performance Metric |
|--|---|
| enter and re-occupy | |
| Hazardous Materials & Environment Assessment | |
| Coordinate response to hazardous materials. | Within 24 hours of incident |
| Infrastructure Assessment - Hazardous materials response personnel participate in overall infrastructure assessment | Within 48 hours of incident |
| Initiate assessments of ambient soil, vegetation, air and potentially contaminated floodwaters, recreational waters, community sites, and other selected facilities for chemical, biological, and radiological hazards | Assessments started within 72 hours of incident |
| Solid Waste and Debris Removal | |
| Coordinate response of solid waste and debris removal | Within 24 hours of incident |
| Initiate assessment of solid waste and debris in affected geographic area, including accumulation amounts and characterization (e.g. radioactive, chemical, or biological, as well as soil, sediment, wood, trees, vehicles, etc.), suitable repositories with their capacities, authorized transportation routes, acceptable collection/decontamination methods, and permitted transporters | Assessments started within 72 hours of incident |
| Begin the safe collection and disposal of solid waste and debris | Within 4 days of incident |
| Solid waste and debris and disposal workers adequately trained and protected (PPE) | 100% of workers |
| Updated Geo-coded database with all geographic locations that debris waste is burned, buried, processed, or otherwise held for safety reasons | Updated every 24 hours after the collection and disposal process begins |

Capability Elements

Personnel

- Health physicists to advise on a wide range of radiation exposure and relevant actual or potential health effect issues
- Trained radiological monitoring personnel to monitor the exposed population for radiation contamination and assist with decontamination

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- Nuclear medicine technicians to monitor patients for contamination and assist with decontamination
 - Emergency department clinicians familiar with medical effects of localized radiation in moderately high doses
 - Community Resilience Task Force to identify and address issues of concern to the impacted populations
 - Commercial clinical laboratories (hematology) for surge capacity in processing blood samples
 - Local and state field personnel/first responders and analytical laboratories for first assessments of radiological and chemical contamination.
 - Survey teams to measure ambient radiation levels for the potentially impacted area and to guide where to collect samples
 - Federal and state mobile analytical laboratories (radiological and chemical) for analysis of initial field samples.
 - Federal, state, and commercial analytical laboratories (radiological and chemical) for high throughput analysis of priority samples and to clear backlog.
 - Public Health Planning and Forecasting Team to plan for long-term public health needs
 - Environmental Epidemiologists to provide public health assessments of a hazardous area
 - Environmental Health Scientists – Sampling Advisory Workgroup to determine appropriate strategy for chemical sampling. Health physicists to determine appropriate strategy for radiological sampling
 - Environmental health scientists (specifically sanitarians and engineers) to assess extent of damage to water and sewer infrastructure outside impact zone
 - Scientists (health physicists, environmental health, medical doctors, veterinarians, food and agriculture) to staff the Federal Advisory Team for Environment, Food, and Health to develop the Federal Protective Action Recommendations and provide coordinated technical advice and recommendations to the Coordinating Agency (per NRP Nuclear/Radiological Incident Annex).
 - Environmental Health Scientists/health physicists to assess sampling results and establish consensus health guidance values for human and animal exposures
 - Sampling Teams to collect environmental samples of food, water, soil, air, vegetation, and other media
 - Decontamination Teams for exit points and at entrance to reception stations
 - Environmental Health Technicians/health physicists for screening/monitoring of victims and responders
 - Trained mortuary teams to assist in safe handling of contaminated human remains.
 - Registered Sanitarians for all aspects of environmental health services
 - Vector control specialists for vector population monitoring and assessment, and for planning and executing vector control measures
 - Infectious disease epidemiologists for disease surveillance and outbreak investigation
 - Building inspectors, engineers, or others qualified to assess structural safety of buildings in impacted area
 - Public works personnel to develop and execute plans for water, waste management

- Medical Entomologists with experience in trapping, identification and control measures and knowledge of notifications that need to be done before control can commence (ie. Beekeepers, no spray registries etc.)

Planning

- Intergovernmental planning to coordinate the various elements of environmental health among local, state and federal response.
- Local planning that identifies potential shelter locations, determines number of people to be housed in each, and arranges for adequate supplies of water, food, sanitation resources, waste disposal, and provision of health care to support that number of people
- Determine lead entity within each state for the coordination of environmental health efforts to include: response work, database management of environmental sample results, interpretation of results, risk communication.
- For and IND, determine lead entity within each state and federal agency for which FRMAC is required to provide coordination for the analysis and database management of environmental samples, and for which other agencies are responsible for the interpretation of results and risk communication.
- Provide environmental public health representation on national advisory teams for environmental health services. [New Task]
- Identify appropriate expertise needed for all aspects of environmental health response including IND.
- Develop a crisis and emergency risk communication plan that includes all areas of environmental health.

Organization and Leadership

- Designate environmental health leaders at the federal, state and local level that facilitate coordination of environmental health related response across agencies and disciplines.

Equipment and Systems

- Air sampling equipment including Continuous Air Monitors (CAMs)
- Radiation Portal Monitors for monitoring at-risk population for radiological contamination
- Portable radiation survey instruments to address radiation and contamination issues for people, pets, vehicles or other belongings.
- Light traps, CO₂, aspirators, microscopes, dippers, pans, kill jars, containers to ship specimens keeping a cold chain.
- Drinking water sampling and testing: Portable Incubator, Coliform/E. coli Results in 24 Hours; Pocket UV Lamp, Whirlpaks with dechlorinating agent, Chlorine Colorimeter, Total pH, Conductivity, Total Dissolved Solids (TDS), and Temperature meter Free and Total Chlorine Colorimeter.
- Basic food safety assessment: stem thermometers, test strips-chlorine, iodine, quaternary, bimetallic thermometer, alcohol wipes and flash light.

Training

- Department of Energy (DOE) Radiation Emergency Assessment Center/ Training Site (REAC/TS) team to provide expertise in assessment of, response to, and management of acute radiation injuries
- Equivalent of DoD section 11 pesticide applicators license or applicable state's public health pesticide license.

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- Environmental Health Emergency Response Training for general response and assessments of food, water, air, indoor environments, shelters etc. To be provided at a the basic, proficient and mastery level.

Planning Assumptions

For Improvised Nuclear Device Scenario:

- This capability applies to a wide range of incidents and emergencies including accidental or deliberate disease outbreaks, natural disasters, nuclear and conventional events.
- Of the ambulatory victims, 60 percent will self-evacuate and present to hospitals; 40 percent will be evacuated via “formal” EMS resources.
- 450,000 will need screening for external contamination within 72 hours or upon evacuation or rescue. 100,000 will present for external contamination monitoring after self evacuation within 10 days.
- 5,000 blinded, 5,000 deafened, 50,000 burn victims, 50,000 physical trauma. Virtually all will experience psycho-social trauma from the event.
- Evacuation of total population in the blast zone and in the area under the plume. Remediation of surface soil and structures will be required.
- Fishing advisories will need to be issued because stream sediment, shell fish, and bottom feeding fish will be significantly contaminated.
- No safe tap water within the blast zone and other areas served by water distribution system; sewage system also compromised until water system restored. Shelter in place population has increased risk of infectious disease (diarrhea, respiratory).
- Need for large scale disposal, decontamination, and mortuary services.
- Long-term environmental and ecosystem contamination and related concerns regarding locally raised produce and livestock; need for food and water advisories. Downstream drinking water sources maybe compromised.
- Normal deliveries of food, etc. to shelter in place zone will be interrupted; anticipate an increase in childhood thyroid cancer due to consumption of food (especially goat and cow milk) from contaminated geographic area.
- Need to control movement of food items out of contaminated geographic area.
- 300,000 environmental samples will be submitted for analysis within 30 days.
- 3 million total environmental samples will be submitted for analysis in response to the event.
- Shortage of immediately available monitoring equipment.
- Limited immediate risk. If urban area is evacuated, the abandoned region may become overrun with commensal rats for a time. Risk of plague if this occurs in a plague endemic area (western US).

For Hurricane Scenario

- Planning assumptions will be finalized when Hurricane Katrina and Rita After Action Reports become available.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

None specified

Approaches for Large-Scale Events

None specified

National Targets and Assigned Levels

None specified

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Critical Resource Logistics and Distribution
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Fatality Management
- Food and Agriculture Safety and Defense
- Information Gathering and Recognition of Indicators and Warnings
- Isolation and Quarantine
- Mass Care
- Mass Prophylaxis
- Medical Supplies Management Distribution
- On-Site Incident Management
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Structural Damage Assessment and Mitigation
- Triage and Pre-Hospital Treatment
- Urban Search and Rescue
- WMD/Hazardous Materials Response and Decontamination

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EXPLOSIVE DEVICE RESPONSE OPERATIONS

Capability Definition

Explosive Device Response Operations is the capability to coordinate, direct, and conduct improvised explosive device (IED) response after initial alert and notification. Coordinate intelligence fusion and analysis, information collection, and threat recognition, assess the situation and conduct appropriate Render Safe Procedures (RSP). Conduct searches for additional devices and coordinate overall efforts to mitigate chemical, biological, radiological, nuclear, and explosive (CBRNE) threat to the incident site.

Outcome

Threat assessments are conducted and the area is rendered safe. Measures are implemented in the following priority order to safeguard public safety; safeguard the officers on the scene (including the bomb technician), protect and preserve public and private property, collect and preserve evidence, and accommodate the public/restore services.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

Terrorism Incident Law Enforcement and Investigation Annex

Capability Description

| Activity | Description |
|---------------------------|--|
| Establish Site Perimeters | Determine perimeter control (Hot, Warm, Cold Zones) Determine and isolate buffer zones and potential blast area |
| Identify Resource Needs | Determine appropriate teams, resources, personnel |
| Execute Action Plans | Execute IED render safe procedures |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Res.B.2 7.1 | Conduct Improvised Explosives Device (IED) threat analysis. |
| Res.B.2 7.2.1 | Detect Improvised Explosives Device (IED) terrorist weapons. |
| Res.B.2 7.2.2 | Perform Improvised Explosives Device (IED) render safe and/or disposal procedures. |
| Res.B.2 7.2.2.1 | Perform improvised explosives device (IED) threat diagnostics. |
| Res.B.2 7.2.3 | Use tactical operations to stop would-be suicide bombers, using deadly force if necessary. |
| Res.B.2 7.2.3.1 | Intercept/divert Improvised Explosives Device (vehicle or marine-borne IEDs). |

| UTL# | Task |
|---------------|--|
| Res.B.2 7.2.4 | Conduct Improvised Explosives Device (IED) on-site response. |
| Res.B.2 7.3 | Command, control, and coordinate Improvised Explosives Device (IED) response operations. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| All uniformed public safety personnel are trained in explosive device awareness | 100% |
| A bomb squad is accredited by the National Bomb Squad Commanders Advisory Board of a type appropriate to the jurisdiction (type I, II or III) | Yes/No |
| The bomb squad has all required equipment, including robots (mandated by the National Bomb Squad Commanders Advisory Board for all squads to have a robot by 2009) | Yes/No |
| Jurisdiction has a policy on use of deadly force in dealing with suicide bombers | Yes/No |
| Jurisdiction has current mutual aid agreement to permit sharing of personnel and/or equipment as needed | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|---|
| Time for bomb squad to be assembled and dispatched toward the scene | Less than one hour from notification of request for the bomb squad. |
| Diagnostics and render-safe procedure was conducted without delay | Yes/No |
| Search for secondary device(s) was conducted | Yes/No |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Type I National Bomb Squad Commanders Advisory Board (NBSCAB) accredited bomb squad capable of handling multiple/simultaneous incidents.
- Type II NBSCAB accredited bomb squad capable of handling multiple incidents.
- Type III NBSCAB accredited bomb squad capable of a single incident.
- Federal agency support to bomb squads:
 - Federal Bureau of Investigation (FBI) Special Agent Bomb Technicians

- Alcohol, Tobacco, and Firearms (ATF) Explosive Enforcement Officers (bomb technicians)
- Department of Defense (DoD) Explosive Ordnance Disposal Teams

Training

- Bomb squad training and certification requirements are detailed in the *National Guidelines for Bomb Technicians*.
- FBI:
 - Hazardous Devices School (HDS):
 - Basic Certification Course (6 weeks) (350 slots per year needed)
 - Recertification Course (1 week) (500 slots per year needed)
 - Robot Course (1 week) (500 slots per year needed. This represents a large shortfall, however, the requirement is specifically for the HDS Course, which has been established as meeting the needs of bomb squads.)
 - Executive Management Course (100 slots per year needed)
 - Regional Bomb Technician Seminars
 - Electronic Countermeasures Courses.
- Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF)
 - Advanced Explosives Destruct Course (200 slots per year needed)
 - Post Blast Investigation Courses (200 slots per year needed)
- Department of Homeland Security
 - Office of Domestic Preparedness sponsored courses
 - Center for Domestic Preparedness sponsored courses (WMD related)
- Unit level training
 - 16 hours per month minimum practical exercise/training per month within the department
 - 40 hours per year minimum explosives training annually (conferences and seminars)
- Naval School Explosives Ordnance Disposal
- Advanced access and disablement for improvised nuclear devices

Equipment

- Basic equipment requirements are detailed in the *National Guidelines for Bomb Technicians*
 - All bomb squads should have a robot by 2009 in order to remain accredited.
 - A “Fast Remote Attack”, related to vehicle-borne improvised explosive devices (VBIED) capability, as detailed in the *National Strategic Plan for U.S. Bomb Squads*.

Planning

- The Department of Homeland Security’s WMD/Bombing Prevention Unit within the Office of Information Analysis and Infrastructure Protection develops protective policies, programs and strategies to reduce the nation’s vulnerability to explosive devices.

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability factors were developed from an in-depth analysis of the Improvised Explosives Device scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- It is noted that the specific placement of existing bomb squads has been driven by bombing activity levels in the past, and the issue of adding new bomb squads or the rapid expansion of existing bomb squads is currently managed through a “Needs Survey” process by the FBI,

based on standards set by the National Bomb Squad Commanders Advisory Board (NBSCAB) for the purpose of maintaining the optimum levels of qualified and experienced bomb squad personnel. The Needs Survey is further defined in the National Guidelines for Bomb Technicians

- All situations must be assessed by the bomb technician on the scene as to time sensitive considerations. Safety issues take precedence over time considerations. In catastrophic level Vehicle Borne Improvised Explosive Device (VBIED) situation where full remote capabilities are available, it is desired to have the technological potential for diagnostics and execution of the disruption tools within one hour from time of arrival on the scene.
- Effective response times are directly related to threat identification and communicative chain to dispatch.
- Response timelines are dependent on location of event relative to placement of capability.
- A system is in place to ensure the timely receipt of intelligence or device information to assist those responding to the threat
- Bomb Squad – A bomb response organization, consists of at least one bomb response team (see the definition of a “bomb response team”), accredited by the FBI Hazardous Devices School to standards set by the National Bomb Squad Commanders Advisory Board.
- Bomb Response Team - A sub-unit within a bomb squad, consisting of at least two certified bomb technicians and a full set of equipment meeting minimum standards for bomb squad operations.
- Type I - A Type I level NBSCAB accredited bomb squad is capable of handling multiple/simultaneous incidents. Squads must have render safe capabilities including a remote (robotic) vehicle capable of handling a vehicle borne IED. Squads trained and equipped to work in a CBRN environment.
- Type II - A Type II level NBSCAB accredited bomb squad is capable of handling multiple incidents. Squads must have render safe capabilities including a remote (robotic) vehicle which may not be capable of handling a vehicle borne IED. Squads trained and equipped to work in a CBRN environment.
- Type III - A Type III level NBSCAB accredited bomb squad is capable of handling a single incident. Squads must have basic render safe capabilities without a remote (robotic) vehicle. Squads may be trained, but not equipped to work in a CBRN environment.
- Military EOD units are available to respond to incidents in the community either to assist the “accredited” bomb squad, or respond to the incident without State/local bomb squad presence.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Improvised Explosives Device)

| Resource Organization | Estimated Capacity |
|--|--|
| General Guidance | Coverage of High Density Population and critical infrastructure/key resources (CI/KR) locations by Type I level bomb squad teams is being added as a factor in the “Needs Survey” process, detailed in the National Guidelines for Bomb Technicians. Other Locations – Type I, II, or III based on population, population density, critical infrastructure requirements, and additional factors as defined in the “Needs Survey” process. |
| Large Vehicle Bombs | (2) Type I teams minimum |
| Suicide Bomber(s) | (1) Type I team minimum |
| Radio Controlled Improvised Explosive Device (RCIED) | (1) Type II team minimum, plus Electronic Countermeasures (ECM) training and equipment meeting standards set by NBSCAB. |

Approaches for Large-Scale Events

- Equipment development
 - Development of specific requirements, base on emerging threats
 - Research and development of technologies to meet those requirements
- Training
 - Addition of large scale issues into existing programs
 - Conducting special focus group seminars and workshops
- Policy review
- Development of mutual aid agreement
 - Sharing of personnel
 - Sharing of equipment
- Large scale events, whether an incident or a National Special Security Event (NSSE) will always involve the use of DoD/military EOD assets

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|--|
| Bomb Squads (Type I, II, and III) | 457 accredited bomb squad in the U.S. (approximately 2500 certified bomb technicians) have the responsibility, through mutual aid and task force agreements, of taking their training, equipment, and experience beyond the borders of their municipalities and jurisdictional lines to serve the entirety of the U.S. |
| FBI Special Agent Bomb Technician Program | Federal – 140 Special Agent Bomb Technicians assigned to its 56 field offices |
| ATF Explosive Enforcement Officers | Federal – 26 |
| DHS WMD/Bombing | Federal - 1 |

| Resource | Assigned Level and Quantity |
|-------------------------|-----------------------------|
| Prevention Unit | |
| DHS/TSA Explosives Unit | Federal |
| National Guard EOD | Federal |
| DoD/Military EOD | Federal |

Linked Capabilities

- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Firefighting Operations/Support
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence Analysis and Production
- Intelligence Information Sharing and Dissemination
- Law Enforcement Investigation and Operations
- On-site Incident Management
- Planning
- Public Safety and Security Response
- Responder Safety and Health
- Risk Management
- WMD/Hazardous Materials Response and Decontamination

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FIREFIGHTING OPERATIONS/SUPPORT

Capability Definition

Coordinate and conduct fire suppression operations, which include the following tasks: assessing the scene, assigning resources, establishing an incident command system (ICS) consistent with the National Incident Management System (NIMS), communicating the status of the situation, requesting additional resources, establishing a safe perimeter, conducting ventilation, entry and search, rescuing trapped victims, conducting fire suppression, and determining the cause of the fire(s). This capability further includes support necessary to prepare the community and reduce vulnerabilities in the event of a major event.

Outcome

Dispatch of the initial alarm assignment occurs within jurisdictional response time objectives. The initial arriving unit initiates the incident command system (ICS), assesses the incident scene, communicates the situation, and requests appropriate resources. Firefighting activities are conducted safely and fires are contained, controlled, and managed in accordance with emergency response plans and procedures.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

The capability supports Emergency Support Function (ESF) #4: Firefighting.

Capability Description

| Activity | Description |
|-------------------------|--|
| Safety and Prevention | <ul style="list-style-type: none"> ▪ Implement safety procedures to ensure responder and public safety. ▪ Conduct building/vessel fire code inspections using approved standards (applicable building codes, marine vessel plan review, etc.). ▪ Prevent fire outbreak by conducting fire control and containment operations at potential fires involving structures, ships, aircraft, wildland and/or hazardous materials. |
| Control and Containment | Conduct fire control and containment operations at structural, vehicular, ship, aircraft, wildfire, and hazardous materials fires. |
| Planning | <ul style="list-style-type: none"> ▪ Conduct buildings/marine vessel plan reviews for fire and life safety compliance. ▪ Develop prefire plans. ▪ Develop emergency response plans and procedures. |
| Incident response | <ul style="list-style-type: none"> ▪ Develop and implement an incident action plan. ▪ Initiate the ICS and establish command. ▪ Conduct initial command and control functions. |
| Operations management | Ensure operational security. |

| Activity | Description |
|-------------------------|--|
| Resource management | Evaluate and purchase equipment to support and sustain firefighting resources. |
| Communication | Communicate the situation and request additional resources. |
| Response action | <ul style="list-style-type: none"> ▪ Coordinate initial response with other emergency response entities. ▪ Conduct search and rescue operations. ▪ Conduct ventilation operations to improve interior conditions for trapped persons and firefighting personnel. ▪ Extricate victims trapped in structures, vehicles, and spaces to the extent that training, equipment, and circumstances allow. ▪ Provide basic medical care to victims. ▪ Provide operations-level hazardous materials response. ▪ Provide gross decontamination. ▪ Provide Rapid Intervention Teams (RIT) to enhance the safety of operating personnel. ▪ Provide mutual-aid response to mutual aid partners. |
| Logistical support | Assess the situation for resource needs and assignments. |
| Human safety and health | Provide rest and rehabilitation operations. |
| Cause and Origin | Determine cause and origin of fire and investigate fires of suspicious origin. |
| Community outreach | Participate in community emergency response disaster planning through public information and education. |

Critical Tasks

| UTL# | Task |
|---------------|--|
| Pro.B.1 1.2.1 | Conduct fire code inspections and coordinate with appropriate personnel for building/vessel inspections. |
| Pro.C.2 1.1 | Develop public protective actions. |
| Pro.C.2 2.1.1 | Develop and implement training, procedures, tools, and equipment to enable local first responders, including fire rescue and emergency medical services, to recognize the presence of chemical, biological, radiological, nuclear, or explosive (CBRNE) materials. |
| Pro.C.3 1.2 | Develop public education programs and materials in multiple languages. |
| Pro.C.3 2.1 | Plan, conduct, and evaluate public education programs for prevention, preparedness, response, and recovery. |
| Res.A.1 4.7 | Investigate fires. |

| UTL# | Task |
|-------------------|--|
| Res.A.2 1.1 | Establish procedures for an immediate incident scene. |
| Res.A.3 2 | Coordinate incident site communications. |
| Res.A.3 3 | Communicate internal incident response information. |
| Res.B.1 3 | Activate and conduct onsite incident command. |
| Res.B.1 5.3 | Provide for worker health and safety. |
| Res.B.1 5.7.1.3 | Activate mutual aid agreements to obtain resources. |
| Res.B.2 1 | Develop plans, procedures, and equipment guidelines to support response operations. |
| Res.B.2 1.1 | Develop plans, procedures, and equipment guidelines to support firefighting response operations. |
| Res.B.2 1.1.3.3.1 | Conduct building/vessel plan reviews to reduce or eliminate hazards. |
| Res.B.2 2.1 | Develop and implement firefighting training and exercise program. |
| Res.B.2 2.2 | Develop and implement hazardous materials training. |
| Res.B.2 3.1 | Coordinate and provide firefighter support. |
| Res.B.2 4 | Conduct firefighting operations. |
| Res.B.2 4.3.5 | Conduct fire overhaul operations. |
| Res.B.2 4.4 | Assist in removal of affected individuals from the incident site. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Plans include special risk requirements (e.g, alternative water supply) | Yes/No |
| Regional and statewide mutual aid agreements have been established | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|--|
| Department provides annual training in the following: <ul style="list-style-type: none"> ▪ Strategies for large-scale incidents ▪ Flammable liquid/bulk fuel storage firefighting (departments with ports, refineries, storage and shipment facilities for flammable liquids and gases) ▪ High-rise fires (departments with high-rises) ▪ Mass transit fires (jurisdictions with subways and/or commuter rail or light rail) ▪ Shipboard firefighting (departments with deep-water ports) | Yes/No Yes/No Yes/No Yes/No Yes/No |
| Department has specialized equipment needed for high-rise firefighting (e.g., 1-hr. bottles, high-rise packs, litters for evacuating injured, high-rise communication systems) | Yes/No |
| Department has specialized equipment for subway firefighting and search and rescue | Yes/No |
| Department has preplans and maps for subway system and standard operating procedure (SOP) for dispatching companies to subway egress points to assist in search and rescue and evacuation. (departments with subway systems) | Yes/No |
| Department has access to aerial units for deployment to roofs or high-rises (jurisdictions with high-rises) | Yes/No |
| Department has sufficient stocked and garaged spare apparatus to surge total number of companies by 25% over normal first-line staffing (large cities) | Yes/No |
| Department has relief and recovery procedures in place to ensure safety of operating personnel | Yes/No |
| Department has built redundant capabilities (especially for command and control and special teams) and continuity of operations plans to ensure resilience in the event of losses | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|-----------------------------|
| Initial first alarm assignment was assembled in accordance with <i>NFPA 1710 and NFPA 1720</i> (National Fire Protection Association Standards) | Yes/No |
| Time to establish incident command system (ICS) | Within 5 minutes of arrival |

| Performance Measure | Performance Metric |
|--|-----------------------------|
| Time to report size-up, assessment | Within 2 minutes of arrival |
| Personnel accountability system was implemented | On arrival |
| Sufficient volume of alternate water supply in the event of loss of domestic water supply was established | Within 30 minutes |
| Time to request local mutual aid to work and cover | Up to 1 hour |
| Time to initiate tactical operations | Within 2 minutes of arrival |
| Time to assemble regional mutual aid assets: <ul style="list-style-type: none"> ▪ Minimum of one Type II and one Type III Incident Management Team (IMT) or interstate ▪ HazMat Team | Within 2 hours |
| Time to assemble statewide mutual aid assets | Within 12 hours |
| Time to assemble Federal assets onscene: <ul style="list-style-type: none"> ▪ Type I IMT ▪ Urban Search and Rescue (US&R) capabilities | Within 24 hours |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Battalion chiefs/division chiefs to provide command direction for evolving incidents
- Type 1 Truck Strike Teams to assist with delivering foam solution for bulk tank fires or to provide elevated streams to assist in controlling moored shipboard fire
- Type 1 Engine Strike Team to provide aqueous film-forming foam (AFFF) solution for bulk tank fires or cooling water for surrounding tank and water supply
- Type 1 Fire Boat Strike Team to supply ship firefighting capability and augment water supply to land-based units
- Special Operations/Technical Rescue teams
- USCG National Strike Team to initiate water spill and shipboard fire containment and control guidance and response
- Field mobile mechanic
- Field rehab personnel
- Personnel with specialty training (flammable liquids and gases, high-rise firefighting, subway firefighting, management of large-scale incidents)

Equipment

- Personal protective equipment – self contained breathing apparatus (SCBA) bottles (standardized with mutual aid partners), filter masks, eye protection, supplies of gloves and work clothes for large-scale overhaul situations

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- Type 1 foam tender to supply foam concentrate
 - Foam concentrate for flammable liquid fires
 - Type 1 mobile communications unit to assist with onscene communications
 - Type 1 breathing apparatus support
 - Type 1 fuel tender
 - High-rise/subway equipment: 1-hr bottles, communication systems, litters for evacuating large numbers of casualties,
 - Ventilation equipment specific to high-rises, subways, other difficult-to-ventilate occupancies
 - Forcible entry equipment to access subway emergency egress gates
 - Thermal imaging cameras to assist in locating victims
 - Access to cranes for high-rise deployment / rescue
 - All-terrain vehicles for operating in areas with extensive damage to roadways
 - Marine units with high-volume pump capacity for alternate water supply, shipboard firefighting
 - Air units for observation/medevac/deployment and/or rescue in high-rise
 - Command board and electronic personnel tracking system
 - Department operations center with communications/personnel tracking equipment
 - Spare apparatus (engines, trucks, rescue, marine, air) maintained in in-service condition (i.e. equipped (inc. SCBA) and garaged) for surge capacity
 - Relief and recovery sector equipment (shade, cooling equipment, cots, liquid replenishment, etc.)

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Toxic Chemical Event scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- The capability must perform in conjunction with hazardous materials (HazMat) operations, public safety jurisdictions, emergency medical services (EMS), on-scene incident management, search and rescue, and emergency management functions across all 15 scenarios.
- The majority of response assets will be used during the response.
- Fixed fire suppression systems are destroyed by explosions.
- Several operational response areas are in effect at the same time: port, refinery, and downwind.
- Water-based oil release may extend beyond the 96-hour time allotment.
- Victims must be rescued within 4 hours and recovered within 4 days.
- All fires are extinguished within 4 days.
- The response phase is 96 hours.
- Local response time is 0–2 hours.
- Regional response time is 2–12 hours.

- State response time is 12–24 hours.
- Federal response time is 24+ hours.
- “Zero hour” (incident clock) is the time of incident occurrence.
- Domestic water supply is not affected; the water supply is adequate to deliver 50,000 gallons per minute (GPM) in affected areas.
- Fire suppression operations are conducted separately from EMS, HazMat, search and rescue, and so forth.
- Distribution of resources for fire operations and support should be compliant, at a minimum, with the requirements of NFPA 1710, 1720, and 1201.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Toxic Industrial Chemical)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|------------------------------|---|--|---|
| Type 1 Engine Strike Team | 5,000 GPM; 2,500 GPM master stream | 3,800 GPM; 3% aqueous film-forming foam (AFFF) solution for bulk tank fires | 3 type 1 Engine Strike Teams |
| Type 1 Truck Strike Team | 75-foot aerial devices; 2,500 GPM master stream | Assist with delivering foam solution for bulk tank fires | 2 truck strike teams |
| Type 1 foam tender | 500 gallons of 3% AFFF foam concentrate | Supply foam concentrate for 65-minute application (8,000 gallons assuming 2 120-foot diameter tanks) NFPA 11 | 3 foam tender strike teams and one single resource |
| Type 1 Engine Strike Team | 5,000 GPM; 2,500 GPM master stream | Cooling water for surrounding tank and water supply | 1 engine strike team |
| Type 1 Fire Boat Strike Team | 25,000 GPM | Supply ship fire-fighting capability and augment water supply to land-based units | 1 fire boat strike team |
| Type 1 Truck Strike Team | 5,000 GPM; 2500 GPM elevated streams | Provide elevated streams to assist in controlling moored shipboard fire and assist boarding efforts | 1 Type 1 Truck Strike Team for cargo ship; 1 Type 1 Truck Strike Team for delivering foam solution to tanker ship |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|---|--|
| U.S. Coast Guard (USCG) National Strike Team (NST) | See NIMS typing | Initiate water spill and shipboard fire containment and control guidance and response | 1 USCG NST |
| Type 1 Mobile Communications Unit | See NIMS typing | Assist with on-scene communications | 1 type 1 Communication Unit |
| Type 1 breathing apparatus support | Self-contained breathing apparatus (SCBA) filling capability with compressor | Type 1 breathing apparatus support | 4 type 1 breathing apparatus support units |
| Field mobile mechanic | Repair capability | Field mobile mechanic | 3 field mobile mechanics |
| Type 1 Engine Strike Team | | Staging | 3 Type 1 Engine Strike Teams |
| Type 1 Truck Strike Team | | Staging | 2 Type 1 Truck Strike Team |
| Battalion chief/division chief | Division chiefs | Provide command direction for evolving incidents | 15 battalion/division chief officers |
| Type 1 fuel tender | Fuel capacity: 1,000 gallons diesel | Type 1 fuel tender. | 2 type 1 fuel tenders |

Approaches for Large-Scale Events

Strategies listed will accomplish objectives for large-scale events.

National Targets and Assigned Levels

Firefighting operations support for a major event would be addressed with an appropriate combination of existing resources from multiple jurisdictions and levels of government.

Linked Capabilities

- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Explosive Device Response Operations

- Onsite Incident Management
- Planning
- Public Safety and Security Response
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Triage and Pre-Hospital Treatment
- Urban Search and Rescue
- WMD/Hazardous Materials Response and Decontamination

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WMD/HAZARDOUS MATERIALS RESPONSE AND DECONTAMINATION

Capability Definition

Weapons of Mass Destruction (WMD)/Hazardous Materials Response and Decontamination is the capability to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; providing protective clothing and equipment to responders; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical survey searches of suspected sources or contamination spreads and establishing isolation perimeters; containing and fully decontaminating the incident site, victims, responders, and equipment; managing site restoration operations, including collection of all hazardous substances; and notifying law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures.

Outcome

Hazardous materials release is rapidly identified, contained, and mitigated; victims exposed to the hazard are rescued, decontaminated, and treated; the impact of the release is limited; the affected area is restored; and responders and at-risk populations are effectively protected.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function (ESF) #10: Oil and Hazardous Materials Response.

Capability Description

| Activity | Description |
|--|---|
| Hazard and risk evaluation | Evaluate hazards (e.g., toxicity, fire, reactivity, corrosiveness, radioactivity) and risks. |
| Identifying the problem | Survey the incident and identify the hazard (e.g., use of the <i>Emergency Response Guidebook</i>). |
| Site management and control | Establish command, position staging areas, establish isolation perimeters and hazard control zones, and initiate public protective actions, shelter-in-place, and evacuation. |
| Personal protective equipment (PPE) | Provide appropriate levels of PPE to responders. |
| Information management and resource coordination | Manage information in the field and coordinate resources. |
| Implementing response objectives and rescue | Define strategic goals; develop tactical objectives; take rescue and protective actions; control, confine, or contain fires, spills, and leaks; conduct transfer and recovery operations. |

| Activity | Description |
|--|---|
| operations | |
| Decontamination (all types) | Select and manage sites and implement field decontamination procedures and infection control. |
| Crime scene considerations and evidence preservation | Notify law enforcement for investigation, including collection of potentially contaminated evidence, storage protocols and shipping procedures. |
| Terminating the incident and site restoration | Conduct debriefings, post-incident analysis, and critiques and determine liability issues and restoration considerations. |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Res.A.1 4.1.1 | Notify law enforcement for guidance on collection and management of evidence; including notification for guidance prior to the decontamination of potential crime scenes. |
| Res.B.2 1.2.2.1 | Establish criteria for patient decontamination that fully considers the safety of emergency medical services (EMS) personnel and hospital-based first responders, knowing that up to 80% of all victims will self-refer to the nearest hospital. |
| Res.B.2 3.2 | Coordinate HazMat response (HMR). |
| Res.B.2 3.2.1 | Coordinate and direct HazMat detection and assessment activities. |
| Res.B.2 3.2.1.1 | Coordinate ongoing hazard assessments and predictions. |
| Res.B.2 3.2.3.1 | Monitor and track compliance with containment requirements. |
| Res.B.2 3.2.7 | Coordinate and support decontamination activities. |
| Res.B.2 3.2.7.2 | Provide support for decontamination efforts of persons affected by the disaster. |
| Res.B.2 3.7.1 | Coordinate livestock decontamination. |
| Res.B.2 5 | Conduct Hazardous Materials Response. |
| Res.B.2 5.1 | Assess hazardous material situation and assist incident command (IC) and planning section in developing an incident action plan (IAP). |
| Res.B.2 5.1.1 | Identify hazardous materials and the extent/scope of the incident. |
| Res.B.2 5.1.1.4 | Conduct contamination surveys. |
| Res.B.2 5.1.1.5 | Assess haz-mat release situation. |
| Res.B.2 5.1.1.6 | Conduct oil and haz-mat assessment. |
| Res.B.2 5.1.1.7 | Use environmental/agricultural samples to define contaminated zones. |
| Res.B.2 5.1.2 | Characterize consequences and risk. |
| Res.B.2 5.1.2.1 | Collect data for hazard analysis. |

| UTL# | Task |
|-----------------|--|
| Res.B.2 5.1.2.2 | Monitor movement of hazardous releases and formulate predictions on dispersion and characteristics over time. |
| Res.B.2 5.1.2.3 | Analyze weather forecast to conduct hazard zone prediction. |
| Res.B.2 5.1.3 | Prepare and distribute protective action guidelines. |
| Res.B.2 5.1.3.1 | Update protective action guidelines based on updated hazard assessments. |
| Res.B.2 5.1.4.3 | Develop a site safety plan. |
| Res.B.2 5.2 | Establish and implement onscene management for HazMat material response. |
| Res.B.2 5.2.1 | Manage onscene haz-mat response operating within the onscene incident command system. |
| Res.B.2 5.3 | Conduct a haz response (implement plans, programs, agreements, and requirements). |
| Res.B.2 5.3.2 | Identify and establish perimeter and hazardous materials zones (hot, warm, cold). |
| Res.B.2 5.3.3 | Extricate and rescue victims from within the hot zone. |
| Res.B.2 5.3.4 | Coordinate and support containment activities. |
| Res.B.2 5.3.4.1 | Secure the contamination source and affected areas. |
| Res.B.2 5.3.5.1 | Monitor clean areas within the contamination control line. |
| Res.B.2 5.3.5.3 | Monitor exit points for haz-mat contaminate movement outside the isolation zone. |
| Res.B.2 5.4 | Ensure the safety of all onscene responders. |
| Res.B.2 5.4.1 | Provide required PPE. |
| Res.B.2 5.4.2 | Monitor all responders for exposure to hazardous materials. |
| Res.B.2 5.4.4 | Coordinate rescue efforts with law enforcement to ensure safety of rescuers while law enforcement secures the incident site. |
| Res.B.2 5.4.5 | Monitor and control the operating time of rescuers assigned to the hot zone to minimize rescuer exposure. |
| Res.B.2 5.5 | Conduct decontamination. |
| Res.B.2 5.5.1 | Identify assets required for decontamination activities. |
| Res.B.2 5.5.2 | Determine decontamination procedures. |
| Res.B.2 5.5.2.1 | Establish decontamination sites. |
| Res.B.2 5.5.3 | Decontaminate affected facilities and equipment. |
| Res.B.2 5.5.4 | Decontaminate people. |
| Res.B.2 5.5.4.1 | Screen affected persons. |
| Res.B.2 5.5.4.2 | Decontaminate victims exposed to chemical, biological, radiological, nuclear, or explosive (CBRNE) materials. |
| Res.B.2 5.5.5 | Decontaminate the area. |

| UTL# | Task |
|-----------------|--|
| Res.B.2 5.6.1 | Perform cleanup operations. |
| Res.B.2 5.6.2 | Implement haz-mat disposal plan. |
| Res.B.2 6.2.2 | Identify and establish an incident perimeter and zones. |
| Res.B.2 13 | Transition from response to recovery. |
| Res.B.3 3.1.5 | Manage resources to support special needs populations to include non-English speakers. |
| Res.B.3 4.1 | Identify a course of action to resolve the incident/make decisions. |
| Res.B.3 4.1.1 | Assess the situation and needs. |
| Res.B.3 4.1.2 | Identify evacuation sites. |
| Res.B.3 4.2.2 | Recommend the evacuation and/or shelter-in-place of affected populations. |
| Res.C.1 3.5 | Provide communication support for medical care. |
| Res.A.1 4.1.1 | Notify law enforcement for guidance on collection and management of evidence; including notification for guidance prior to the decontamination of potential crime scenes. |
| Res.B.2 1.2.2.1 | Establish criteria for patient decontamination that fully considers the safety of emergency medical services (EMS) personnel and hospital-based first responders, knowing that up to 80% of all victims will self-refer to the nearest hospital. |
| Res.B.2 3.2 | Coordinate HazMat response (HMR). |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|----------------------|
| Risk analysis is completed for potential HazMat vulnerabilities, including fixed facilities and transportation-related emergencies | Yes/No |
| Jurisdiction maintains an Emergency Response Plan | Updated annually |
| Jurisdiction participates in a Local Emergency Planning Commission | Yes/No |
| Jurisdiction pre-plans particular hazards and targets | Updated annually |
| Jurisdiction pre-plans hazards associated with special events | Yes/No |
| Percent of police, fire, emergency medical services (EMS) first responders (other than those assigned to HazMat responses) trained to HazMat awareness level | 100% |
| First responders assigned to HazMat duties are trained to the HazMat operations level (in accordance with CFR 1910.120 (g) or the National Fire Protection Agency’s <i>NFPA 472</i>) | All first responders |
| Percent of first responders assigned to HazMat operations trained to hazardous materials operations level (in accordance with 1910.120 (g) or NFPA 472) | 100% |

| Preparedness Measure | Preparedness Metric |
|---|----------------------|
| Personnel assigned to HazMat technician responsibilities trained to the HazMat Technician level (in accordance with 1910.120 (g) or NFPA 472) | 100% |
| Personnel assigned to HazMat specialist responsibilities trained to the HazMat Specialist level (in accordance with 1910.120 (g) or NFPA 472) | 100% |
| Percent of personnel assigned to manage hazardous materials trained to hazardous materials management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472): <ul style="list-style-type: none"> Detection equipment, including flammability, toxicity, radiations, chemical warfare agents (CWAs) and biologicals Substance identification equipment, for bases and vapors, liquids, solids and biologicals (white powder) | Yes/No Yes/No |
| HazMat personnel are equipped and trained for weather prediction and hazard pluming | Yes/No |
| Jurisdiction has (or has mutual aid agreements to provide) redundant hazardous materials response teams and equipment to provide resiliency in the event of a large-scale incident | Yes/No |
| Jurisdiction's hazardous materials team(s) has current protocol and trains regularly with: <ul style="list-style-type: none"> Emergency medical services (EMS) to ensure proper coordination of victim care post-decontamination (identification of substance, administration of antidotes, etc.) Law enforcement to ensure proper coordination for evidence collection and crime scene control | Yes/No Yes/No |
| Emergency Response and command vehicles and Command Posts are equipped with Emergency Response Guidebook, NIOSH pocket guidebook, and discipline-related references relevant to the region | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|------------------------------------|
| Time to establish an Incident Command System (ICS) | On Arrival |
| Time to isolate the area and control access by the public | < 15 minutes |
| Time to identify the hazardous material involved | < 30 minutes |
| Time to rescue trapped victims | < 2 hours |
| Time to perform emergency decontamination of victims | < 2 hours (depending on substance) |

| Performance Measure | Performance Metric |
|---|--------------------------------|
| Time for regional assets to arrive onscene: A) Type I HazMat Team B) Type II or III Incident Management Team (IMT) | Less than or equal to 2 hours |
| Time for State assets to arrive onscene: B) Type I HazMat Teams C) Type I IMT | Less than or equal to 12 hours |
| Time for Federal assets to arrive onscene: B) Type I IMTs C) Urban Search and Rescue (USAR) Type I D) Environmental Protection Agency contractors E) United States Coast Guard (USCG) Strike Team F) Federal Bureau of Investigation Hazardous Materials Response Unit / Hazardous Materials Response Team (HMRU/HMRT) G) Federal Coordinating Office (FCO) | Less than or equal to 24 hours |
| Time to deploy a sufficient number of Radiological Emergency Preparedness Program (REPP) Response Teams (depends on size of incident) for an incident involving a radiological hazard | Within 24 hours. |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Type 1 HazMat Entry Teams for extrication and decontamination
- HazMat Information/Research Group/Team
- HazMat Medical Group/Team
- HazMat Resources Group/Team
- HazMat liaison officer
- HazMat specialists
- United States Coast Guard (USCG) National Strike Force (marine HazMat)

Planning

- Establishing/maintaining multi-disciplinary planning teams
- Planning of WMD protection/evacuation strategies.

Equipment and Systems

- Emergency alert and notification systems (EAS) that will alert 100% of the at-risk population (i.e., sirens, EAS, call out systems, etc.)
- HazMat/WMD entry suits and breathing apparatus
- Detection equipment, including flammability, toxicity, radiations, chemical warfare agents (CWAs) and biologicals
- Substance identification equipment, for bases and vapors, liquids, solida and biologicals (white powder)

- Weather prediction and hazard pluming equipment
- Reserve or spare hazardous materials response vehicles and equipment to provide resiliency/redundancy in the event of a large-scale incident
- Emergency Response Guidebooks, National Institute of Occupational Safety and Health (NIOSH) pocket guidebooks, and discipline-related references relevant to the region
- Decontamination supplies
- Decontamination equipment
- Waste disposal storage and equipment

Training

- Definition of target groups for training
- Crystallization of training curriculums (e.g. on policies and procedures; Emergency Operations Plans)
- Allocation of training facilities
- Preparation of instructors' training
- Individual staff and group/unit training
- Public education training programs
- Basic and advanced training
- Refresher training

Exercises

- Establishment of designated professional multi-disciplinary exercise preparation and management body
- Preparation of a periodical exercise cycle
- Preparation and conduct of integrated headquarters and units exercise
- Preparation and conduct of public exercise

Evaluation and Corrective Actions

- Setting norms for performance measures and competence
- Establishment of evaluation procedures and teams
- Assuming and monitoring corrective actions

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Toxic Industrial Chemical scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability applies to a wide range of incidents and emergencies, including those caused by an improvised nuclear device, aerosol anthrax, a blister agent, a nerve agent, and a radiological dispersal device.
- All victims are rescued within 4 hours
- All fires are extinguished in 4-day response phase.
- Water-based oil release may extend beyond the 96-hour limit. Assets will be on scene, but containment operations may not be able to begin immediately on arrival.

- Three operational response areas: port, refinery, and downwind
- The response phase is 96 hours.
- Local response time: 0–2 hours
- Regional response time: 2–12 hours
- State response time: 12–24 hours
- Federal response time: 24+ hours
- “Zero hour” (incident clock) = time incident occurred
- Unconstrained need: Consider all assets required for response, do not factor response time or asset availability into planning.
- Planning factors are based on scenario and planning assumptions for a level III hazardous materials (HazMat) incident, where there are 1,000 injuries and 350 deaths, 25,000 sheltered, 10,000 evacuated, and 100,000 self-evacuated. About half of equipment and facilities are damaged (of three refineries). Two ships sank and the port was damaged near improvised explosive device (IED) sites and property was damaged in the downwind area.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Toxic Industrial Chemical)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|--|---|
| Type 1 HazMat Entry Team (focused on extrication) | <ul style="list-style-type: none"> ▪ 3 victim extrications per hour per team ▪ 12 victim extrications over a 4-hour period per team | <ul style="list-style-type: none"> ▪ 1,000 injuries (downwind area) ▪ 350 deaths ▪ 2 response areas port and downwind. Note: cannot respond in level A in a fire environment (this excludes refinery response area). ▪ 4-hour rescue phase | Type 1 HazMat Entry Team (focused on extrication) |
| Type 1 HazMat Entry Team (focused on decontamination) | <ul style="list-style-type: none"> ▪ 10 victims decontaminated/hour per team (5-man team) ▪ 40 victims decontaminated per team in a 4-hour rescue phase | <ul style="list-style-type: none"> ▪ 1,000 injuries (downwind area) ▪ 350 deaths ▪ Two response areas: port and downwind. Note: cannot respond in level A in a fire environment (excludes refinery response area) ▪ 4-hour rescue phase | Type 1 HazMat Entry Team (focused on decontamination) |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--|---|--|
| HazMat Information/Research Group/Team | 1 team per 12-hour shift for all response areas | 96-hour response phase (8 shifts) | HazMat Information/Research Group/Team |
| HazMat Medical Group/Team | 1 team per 12-hour shift per response area | <ul style="list-style-type: none"> 96-hour response phase (8 shifts) 2 response areas (port and downwind) | HazMat Medical Group/Team |
| HazMat Resources Group/Team | 1 team per 12-hour shift per response area | <ul style="list-style-type: none"> 96-hour response phase (8 shifts) Two response areas (port and downwind) | HazMat Resources Group/Team |
| HazMat liaison officer | 1 officer per 12-hour shift per response area | <ul style="list-style-type: none"> 96-hour response phase (8 shifts) 2 response areas (port and downwind) | HazMat liaison officer |
| HazMat specialists | 1 specialist per response area per 12-hour shift | <ul style="list-style-type: none"> 96-hour response phase (8 shifts) 2 response areas (port and downwind) | HazMat specialists |

Approach for Large-Scale Events

- Just-in-time training is the only innovation to reduce number of teams required; however, the 4-hour rescue phase makes training counterproductive.
- The United States has approximately 64 nuclear stations supported by the Radiological Emergency Preparedness Program (REPP). No less than 30 REPP response teams should be able to respond to an “improvised nuclear device” scenario within 24 hours.
- Quantity of resources is achievable through mutual aid.
- Each jurisdiction is expected to sponsor and support community emergency response teams (CERTs).

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| Type I HazMat Entry Team (extrication) | <ul style="list-style-type: none"> Local: 1,020 teams (20 teams per Urban Area Security Initiative (UASI) area); multiple teams in or near UASI areas Local: 3,142 teams; 1 team that is fully equipped and trained in every |

| Resource | Assigned Level and Quantity |
|--|---|
| | county in the United States |
| Type I HazMat Entry Team (decontamination) | <ul style="list-style-type: none"> ▪ Local: 3,142 teams; 1 team that is fully equipped and trained in every county in the United States ▪ Local: 1,020 teams (20 teams per UASI area); multiple teams in or near UASI areas |
| HazMat information/research group/team | Local: 102 teams (2 teams per UASI area); 2 teams will be capable of rotating shifts to provide service to the incident |
| HazMat medical group/team | Local: 102 teams (2 teams per UASI area); 2 teams will be capable of rotating shifts to provide service to the incident |
| HazMat resources group/team | Local: 102 teams (2 teams per UASI area); 2 teams will be capable of rotating shifts to provide service to the incident |
| HazMat liaison officer | Local: 102 teams (2 teams per UASI area); 2 teams will be capable of rotating shifts to provide service to the incident |
| HazMat specialist | Local: 3,193 (1 team for every county in the United States and each UASI area); specialist can provide support to any location |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Explosive Device Response Operations
- Fatality Management
- Firefighting Operations/Support
- Isolation and Quarantine
- Mass Prophylaxis
- Onsite Incident Management
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response
- Responder Safety and Health
- Risk Management
- Structural Damage Assessment and Mitigation
- Triage and Pre-Hospital Treatment

- Urban Search and Rescue

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CITIZEN PROTECTION: EVACUATION AND/OR IN-PLACE PROTECTION

Capability Definition

Citizen Protection is the capability to plan for and immediately execute the safe and effective sheltering-in-place of an at-risk population, and/or the organized and managed evacuation of the at-risk population to areas of safe refuge in response to a potential or actual dangerous environment. In addition, this capability involves the safe reentry of the population.

Outcome

Affected and at-risk populations are safely sheltered-in-place and/or relocated to safe refuge areas, provided shelter and essential services, and effectively and safely reentered into the affected area, if appropriate.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF #1: Transportation
- ESF #5: Emergency Management
- ESF #6: Mass Care, Housing, and Human Services
- ESF #8: Public Health and Medical Services
- ESF #14: Public Safety
- ESF #15: External Affairs

Capability Description

| Activity | Description |
|----------|---|
| Planning | <ul style="list-style-type: none"> ▪ Define the decision-making processes for shelter-in-place/evacuations, to include voluntary and mandatory distinctions. ▪ Pre-identify suitable and accessible shelters for both general population and special-needs population, and their care givers, and animals. ▪ Anticipate secondary attack, security and survival vulnerabilities of the evacuated or sheltered population. ▪ Train and exercise the response community and the public. ▪ Pre-identify the special needs populations who may need evacuation/shelter-in-place. ▪ Develop and practice effective public self-evacuation and family emergency planning. ▪ Implement effective and robust emergency alert systems. ▪ Pre-identify the agencies involved in evacuations/sheltering, staffing of shelters, logistical supply, and support of shelters. ▪ Develop a memorandum of understanding (MOU) with adjacent communities that are not affected so they will become host |

| Activity | Description |
|-------------------------------|---|
| | <p>communities during incidents and will be prepared to manage evacuees from other jurisdictions.</p> <ul style="list-style-type: none"> ▪ Develop public communication plans |
| Identification | Rapidly and effectively identify the potential and/or actual danger to the public. |
| Notification | Notify the public of the danger and give people instructions for protection, either by providing shelter-in-place or through evacuation. |
| Evacuation | <ul style="list-style-type: none"> ▪ Establish evacuation routes and traffic flow and control measures. ▪ Conduct a door-to-door search to ensure that special needs populations and the general population have been evacuated. ▪ Ensure security of evacuated areas. ▪ Coordinate evacuations with receiving jurisdictions. |
| Transportation | <ul style="list-style-type: none"> ▪ Manage, support, and transport, if necessary, the at-home special needs populations during evacuations. ▪ Provide transportation for evacuees, to include special consideration for special needs populations and their care givers and animals. |
| Decontamination | Determine the decontamination needs of the affected populations. |
| Sheltering | Establish short-/long-term shelters for evacuees. |
| Logistical support and supply | Provide support and supply services, including but not limited to mental health services; staff, supplies, and restocking of supplies for shelters; provision of durable medical products; medical care/public health support; support to fill informational needs; facility support; family services; communications; transportation; provide a cache of food, water, and sustainment equipment/supplies to public safety personnel; and shelters for pets/animals. |
| Re-entry planning | <ul style="list-style-type: none"> ▪ Determine conditions to allow re-entry. ▪ Provide cleanup of affected area by governmental, public, and private entities. ▪ Determine environmental/health safety for public reentry. ▪ Educate the public on the safety of re-entry and conduct additional cleanup of residences and businesses, if needed. ▪ Plan for reentry of special needs population. ▪ Prioritize of the re-entry order. |
| Re-entry execution | <ul style="list-style-type: none"> ▪ Start the safe and organized re-entry of evacuees to homes and businesses. ▪ Demobilize shelters after activating re-entry plans. |

Critical Tasks

| UTL# | Task |
|--------------------|--|
| Pro.A.1 1.3.1.1 | Identify potential transportation targets. |
| Pro.B.2 3 | Develop transportation protection strategies. |
| Pro.C.3 1.2 | Develop public education programs and materials in multiple languages. |
| Pro.C.3 2 | Develop and conduct training courses for citizen participation in incident management. |
| Pro.C.3 3.1 | Distribute public education materials that identify hazards and threats. |
| Res.B.1 6.1.3 | Coordinate transportation response. |
| Res.B.1 6.1.3.3 | Conduct traffic control. |
| Res.B.3 1.1 | Develop plans, procedures, and protocols to manage evacuations, shelters-in-place, and quarantines. |
| Res.B.3 1.2 | Develop evacuation and emergency operations procedures for at-risk populations and locations. |
| Res.B.3 4 | Implement evacuation/shelter-in-place decisions. |
| Res.B.3 4.1 | Identify a course of action to resolve the incident/make decisions. |
| Res.B.3 4.1.2 | Identify the evacuation sites. |
| Res.B.3 4.1.3 | Identify populations and locations at risk. |
| Res.B.3 4.3.2 | Assist in the evacuation of special-needs populations. |
| Res.B.3 4.3.4 | Activate the approved traffic control plan. |
| Res.B.3 4.4 | Provide transportation/personnel support and resources. |
| Res.B.3 4.4.6 | Evacuate the affected population. |
| Res.B.3 4.5.3 | Assist in the reentry of people and animals/pets into evacuated areas when appropriate and safe. |
| Res.B.3 4.5.4 | Anticipate secondary attack, security and survival vulnerabilities of the evacuated or sheltered population. |
| Res.C.3 4.1.3 | Assess the need for emergency feeding and sheltering activities. |
| Res.C.3 4.3.1 | Conduct building inspections in advance to determine the stability of structures identified as mass housing, shelter, and care facilities. |

| UTL# | Task |
|-----------------|--|
| Rec.A.3 3.2.4.1 | Manage resources to support special needs populations, to include individuals with disabilities, non-English speaking persons, migrant workers, and those with developmental or medical conditions that require attention. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---|
| <p>An evacuation/shelter-in-place plan has been developed and addresses:</p> <ul style="list-style-type: none"> ▪ Authority and decision-making processes for shelter-in-place and/or evacuations ▪ Authority and procedures to declare and enforce a mandatory evacuation ▪ The immediate evacuation of neighborhoods, high-rise buildings, subways, airports, special events venues, etc. in response to a threat or attack ▪ Identification of evacuation routes and traffic flow and control measures ▪ Measures to ensure adequate services (e.g. gas, food, water, tow trucks, etc.) along the evacuation route(s) ▪ Transportation to evacuate 100% of persons who need assistance to include: those without transportation including the elderly and those with special needs; the homeless; tourists and visitors; and those in nursing homes, hospitals, jails and prisons and other facilities, as well as students and the work force during a surprise incident, and animals ▪ Leadership and required services at evacuation staging points and/or at temporary evacuation shelters for up to 72 hours ▪ Medical support, supervision, and syndromic surveillance of evacuees during a prolonged evacuation (e.g. monitoring and caring for people with pre-existing medical conditions or those who may become ill during the evacuation) ▪ Re-entry of the general population and special needs populations | <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> |
| <p>Populations who may need assistance with evacuation/shelter-in-place have been identified</p> | <p>Yes/No</p> |
| <p>A program is in place to educate the public on evacuation and shelter-in-place procedures</p> | <p>Yes/No</p> |
| <p>The agencies involved in evacuations/sheltering, staffing of shelters, logistical supply, and support of shelters have been identified and trained</p> | <p>Yes/No</p> |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Evacuation routes have been marked | Yes/No |
| Suitable shelters for both general population and special needs populations have been pre-identified for use during an incident | Yes/No |
| Memorandums of understanding (MOU) have been developed with jurisdictions that will serve as host communities for evacuees during an incident | Yes/No |
| Pre-event exercises of the notification and activation of evacuation and shelter-in-place plans are conducted with the public | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|---|
| Appropriate protective strategy was chosen to meet the potential risk/danger to the various populations | Yes/No |
| The most affected populations for evacuation are notified first (e.g., ring evacuations) | Yes/No |
| The public is notified of evacuation procedures, routes, locations, or sources of evacuation information throughout the incident | Yes/No |
| Time to notify affected population of shelter-in-place strategy | Immediate |
| Time to shelter-in-place the affected general population | Less than 30 minutes |
| The traffic and transportation plan is implemented to enable evacuation within the incident timeframe. | Yes/No |
| Time to evacuate the affected general population, including transients, for an event with advanced warning | 24–72 hours (depending on the severity and imminent probability of the event) |
| Time to evacuate special needs populations for an event with advanced warning | 24–72 hours |
| Transient populations (e.g. homeless, tourists, visitors) are identified | Yes/No |
| Number of self-evacuees who enter shelters without being decontaminated or checked for contamination | 0 |

| Performance Measure | Performance Metric |
|---|--------------------|
| Coordination with surrounding jurisdictions occurs for receiving facilities and locations of evacuees | Yes/No |
| Re-entry planning is conducted during the course of response to the event | Yes/No |
| Evacuees were instructed of re-entry procedures | Yes/No |
| Re-entry of citizens into the affected area is conducted according to plans and procedures | Yes/No |

Capability Elements

Personnel

- Public works staff to provide traffic control and towing of vehicles/obstacles
- Security and law enforcement officers to support traffic control efforts, evacuation and reentry efforts, and law enforcement activities
- Public education program manager and staff to implement pre-event evacuation education and training
- Fire/Emergency Medical Services (EMS)
- Small Animal Transport Teams (for domestic pets)
- Volunteer surge personnel

Equipment and Systems

- Emergency alert and notification systems that will alert 100 percent of the at-risk population (e.g., sirens, EAS, call out systems)
- Traffic control equipment
- Federal transportation resources to support reentry
- Transportation for evacuees
- Equipment to produce local multimedia materials (e.g., audio, visual, written materials) and disseminating them

Training

- Training of the protection/evacuation strategies in the Emergency Operations Plan (EOP)

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability factors were developed from an in-depth analysis of the Chlorine Tank Explosion scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability applies to a wide range of incidents and emergencies, including accidental or deliberate disease outbreaks, natural disasters, and nuclear and conventional events.
- A large amount of the chemical chlorine has been released into the atmosphere (a plume) and is disbursed in a widely populated area.

- Decontamination of evacuees will require additional resources and triage areas before citizens can be sheltered; therefore, fire/emergency medical services (EMS), hospitals, and HazMat teams will be required to decontaminate evacuees.
- Local and regional resources will be quickly overwhelmed and require State and Federal assistance.
- Long-term sheltering and decontamination will be required.
- City/jurisdiction is a large urban area with a network of streets and highways. Within the affected area, the evacuation and reentry routes and zones encompass 25 major intersections in a 25-mile evacuation radius.
- Approximately 25 percent of the evacuated population will require shelter. The remaining populations will self-evacuate and arrange own shelter.
- Approximately one percent of the 25 percent of the evacuated populations are special need populations and will require medical shelters and appropriate transportation.
- Transportation and traffic routes will be severely and negatively affected by the evacuation and many evacuees will require provision of transportation.
- Public anxiety and stress will result from evacuations, requiring mental health services, appropriate risk communications, and public education/instruction.
- Local jurisdictional resources will be quickly overwhelmed and will require mutual aid from other jurisdictions and support from Federal, State, and regional agencies.
- Through memorandums of understanding (MOUs) incorporated into planning, adjacent communities will be prepared to handle significant numbers of evacuees from affected areas. These host communities also will identify resources, personnel, and equipment to shelter and support evacuees.
- Pre-event identification of shelter sites has been planned for by emergency management agencies and MOUs are in place for use of the facilities.
- Although shelters will require a minimum time for setup and activation, populations will require services immediately on evacuation, notably those for special needs populations and containment.
- For shelter-in-place, evacuation, sheltering, and reentry planning, each jurisdiction has unique hazards and unique resources. Capabilities for at-risk populations are based on jurisdictional hazard vulnerability analysis. Plans (including emergency operations plans), procedures, mutual aid agreement, and so forth must be in place to support effective evacuation and sheltering, dependent on the hazard/risk analysis and the resources available for the at-risk population. The measurement for this capability is: Can the jurisdiction evacuate and/or shelter the at-risk population and, if they cannot, what actions will procure/garner adequate resources for them?

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Chlorine Tank Explosion)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|-----------------------------|------------------------------|
|-----------------------|--------------------|-----------------------------|------------------------------|

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|--|--|
| Emergency alert and notification systems (e.g., sirens, emergency alert system (EAS), call-out systems, television captioning system) | 1 system will alert 100% of the at-risk population | Warning and notification of 700,000 people | 1 system within the jurisdiction to reach the at-risk population with redundant capability |
| Local, regional, and State public works | Provision of traffic control equipment and towing of vehicles/obstacles | 70,000 people will self-evacuate and reenter the affected areas when safe, leading to traffic congestion and delaying response assets | <ul style="list-style-type: none"> ▪ Traffic control package containing: <ul style="list-style-type: none"> –Barriers –Cones –Directional signs/signals ▪ Within high-risk evacuation area (distributed to predetermined locations): <ul style="list-style-type: none"> –1,000 barriers –1,000 traffic cones –50 directional signs |
| Local and regional transportation jurisdictions | Ability to provide transportation to evacuees | 630,000 people will require assistance with evacuation through buses; each bus can hold 50 people and can be recycled and used multiple times during an evacuation | <ul style="list-style-type: none"> ▪ Local and regional (combined): 100 buses, including school and mass transit buses and other vehicles of mass transportation ▪ State and unaffected areas: 100 buses ▪ Federal: not timely resources for immediate evacuation, but can be used for reentry |
| Federal transportation resources | Ability to provide reentry support | 630,000 people will need reentry assistance | <ul style="list-style-type: none"> ▪ Support after utilizing local, regional, and State resources ▪ Federal: 100 buses or other mass transit vehicles |
| Special needs shelters/Shelter-in- | Shelters need capacity to support special needs | 1,800 persons with special needs will need assistance | Refer to health and medical capabilities |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--------------------------------------|---|---|--|
| place requirements | functions (e.g., oxygen, durable medical products, medical and emotional support) | | |
| Security and law enforcement | The event occurs in a large urban area with extensive network of streets and traffic flows | <ul style="list-style-type: none"> ▪ Legal authority to alter traffic flow and use of highways ▪ 1 law enforcement officer at major intersections; 25 major intersections in the evacuation route ▪ Other persons, (non-law enforcement types, such as Volunteers in Police Service) assigned traffic control duties at other intersections directing traffic flow | <ul style="list-style-type: none"> ▪ Local: 25 law enforcement officers ▪ Regional/State: 150–175 officers working outside the affected area restricting access and diverting highway traffic ▪ Local: 200 non-law enforcement persons to direct traffic along the evacuation/reentry routes ▪ Regional/State: resources for reentry would be needed to augment local resources: 300 persons |
| Evacuation of pets/companion animals | 60% of households have companion animals (CAs) and most people will not evacuate if they believe there is no facility to support them and their animals (general population shelters generally do not accept CAs) | Average: 2 pets/household | 10 small animal transport teams (per National Incident Management System (NIMS) typing) |

Approaches for Large-Scale Events

For all scenarios pertaining to State and local jurisdictional agencies, mitigation and prevention measures must be taken by government and private industry to limit the exposure of the population to the hazard or eliminate the hazard. For example: Do not build in flood plains or wildland fire areas. Enforce structural and nonstructural mitigation for earthquakes and hurricanes (severe weather).

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|--|
| Public warning system | <ul style="list-style-type: none"> ▪ Local: 1 per jurisdiction ▪ State: 1 per State ▪ Federal: 1 national system |
| Evacuation plan | Local: 1 per city/county |
| Personnel | Local: public education program manager; staff to implement pre-event evacuation education and training |
| Equipment | Local: multimedia materials production and dissemination equipment (e.g., audio, visual, written materials) |
| Training | Local: All staff is trained on policies and procedures of respective jurisdictions; staff also is trained on emergency operations plans of respective jurisdictions. |
| Transportation resources | <ul style="list-style-type: none"> ▪ Local: 17 public transportation vehicles (i.e., buses) per 100,000 to respond to the affected and unaffected areas in a timely manner ▪ State: 17 public transportation vehicles (i.e., buses) per 100,000 affected population ▪ Federal: 17 public transportation vehicles (i.e., buses) per 100,000 affected population to support reentry |
| Traffic control package (e.g. barriers, cones, and directional signs) | Local: in accordance with evacuation plans |
| Security and law enforcement | State: security and law enforcement officers to support traffic control efforts, evacuation and reentry efforts, and law enforcement activities |
| Fire/Emergency medical services (EMS) | As required per incident |
| Tow trucks | As required per incident |
| Public works | As required per incident |

Linked Capabilities

- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Mass Care (Sheltering, Feeding, and Related Services)
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response

- Restoration of Lifelines
- Risk Management
- Structural Damage and Mitigation Assessment
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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ISOLATION AND QUARANTINE

Capability Definition

Isolation and Quarantine is the capability to protect the health of the population through the use of isolation and/or quarantine measures in order to contain the spread of disease. Isolation of ill individuals may occur in homes, hospitals, designated health care facilities, or alternate facilities. Quarantine refers to the separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and may become infectious. Successful implementation will require that sufficient legal, logistical, and informational support exists to maintain these measures. Most experts feel that isolation and quarantine will not stop the outbreak and that if used, the focus will be on cases that might introduce the disease into the state or other geographic area.

Outcome

Individuals who are ill, exposed, or likely to be exposed are separated, movement is restricted, basic necessities of life are available, and their health is monitored in order to limit the spread of a newly introduced contagious disease (pandemic influenza). Legal authority for these measures is clearly defined and communicated to the public. Logistical support is provided to maintain measures until danger of contagion has elapsed.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the Emergency Support Function (ESF) #8: Public Health and Medical Services.

Capability Description

| Activity | Description |
|-----------------------|--|
| Mass care | Provision of a place for persons needing isolation or quarantine to be cared for or safely provided for during community separation. |
| Legal support | Legal environment of Isolation and Quarantine (legal authority including mass quarantine, close venues, writing of the orders, provision of judicial review, and termination of quarantine). |
| Logistical support | Provision of logistical support (food, water, support of routine or chronic illnesses). |
| Mental health support | Provision of psychosocial support (religious and mental health). |
| Personal Protection | Protection of caregivers or other household members. Personal protective equipment (PPE). |
| Medical services | Access to care and medical monitoring related to the epidemic (fever, adverse events related to medication, etc.). |
| Financial support | Financial impact to the individuals (salary, compensation, cost of housing). |
| Enforcement | Compliance monitoring – restriction of access. |
| Communication | Public education of instructions, warnings, and public buy-in. |

| Activity | Description |
|----------------|---|
| Transportation | Mass transportation and closing of public venues. |

Critical Tasks

| UTL# | Task |
|----------------|--|
| Res.B.2 6.3.3 | Coordinate quarantine activation and enforcement with public safety and law enforcement. |
| Res.B.2 8.4.4 | Ensure appropriate implementation of infection control precautions for isolated patients. |
| Res.B.2 10.2.6 | Assist in disease control, quarantine, containment, and eradication. |
| Res.B.3 1.3.1 | Ensure legal authority exists to isolate and/or quarantine individuals, groups, facilities, animals, and food products. |
| Res.B.3 5.1.1 | Screen inbound passengers from outbreak or pandemic areas for illness or exposure (use a questionnaire and check for fever). |
| Res.B.3 5.1.2 | Isolate or quarantine potentially infected travelers. |
| Res.B.3 5.1.3 | Educate international travelers on health risks and symptoms. |
| Res.B.3 5.1.4 | Prevent boarding of potentially infected passengers in foreign countries with endemic disease. |
| Res.B.3 5.1.5 | Screen and educate all staff of outbound flights to exclude potentially infected passengers. |
| Res.B.3 5.1.6 | Stand up isolation and quarantine units (including defining procedures/protocols) in all of the 83 target cities and as needed in foreign countries. |
| Res.B.3 5.2.1 | Identify community sites suitable for quarantine. |
| Res.B.3 5.2.2 | Introduce legislation authorizing isolation and quarantine (including quarantine of groups). |
| Res.B.3 5.2.3 | Issue/terminate an isolation or quarantine order or an agreement for voluntary isolation or quarantine. |
| Res.B.3 5.2.4 | Ensure appropriate judicial review. |
| Res.B.3 5.2.5 | Ensure that adequate food, water, and medication are provided to quarantined or isolated persons (through public health officials; oversight by case manager). (Note: Not only public health officials, all appropriate sectors are involved in |

| UTL# | Task |
|-----------------|---|
| | this.) |
| Res.B.3 5.2.6 | Ensure critical medical care for any ill individuals (related to the epidemic or not). |
| Res.B.3 5.2.7 | Ensure mental health care and access to religious practices. Ensure access to communication with family and friends to reduce unnecessary stress. |
| Res.B.3 5.2.8 | Provide personal protective equipment (PPE) and culturally and linguistically appropriate instruction in its use for household members and caregivers. |
| Res.B.3 5.3.1 | Monitor for fever or evidence of infection (quarantine) or progression of illness requiring hospitalization (isolation) by epidemic agent. |
| Res.B.3 5.3.2 | Identify and respond to adverse events (epidemic treatment or prophylaxis). |
| Res.B.3 5.3.3 | Compliance is monitored in whatever way is necessary (e.g., direct communication with the person under order via land line). |
| Res.B.3 5.4.1 | Notification of quarantine or isolation to ensure the compliance of the general public (e.g., doors are locked and may be opened <i>only</i> by public health officials or designated persons). |
| Res.B.3 5.4.2 | Promote to the public acceptance of isolation and quarantine as necessary control measures. |
| Res.B.3 5.4.3 | Issue an order that closes public venues based on the recommendation of an epidemiologist. |
| Res.B.3 5.4.4 | Track (with a database) the details of the persons who are being placed in isolation or quarantine using Personal Health Identification Numbers (PHINs). |
| Res.B.5 4.2.2 | Disseminate health and safety information to the public. |
| Res.B.5 4.2.5.1 | Direct and control public information releases about those people who have been isolated or quarantined. |
| Res.B.5 4.2.5.3 | Decrease the time needed to disseminate health and safety information to the public regarding risk and protective actions. |
| Res.C.1 3.3.4.7 | Coordinate with the agriculture community regarding animal influence. |
| Res.C.1 3.4.3 | Coordinate public health and medical services among those individuals who have been isolated or quarantined. |
| Res.C.1 4.3.1.8 | Improve monitoring of adverse treatment reactions among those people who have received medical countermeasures and have been isolated or quarantined. |
| Res.C.1 4.3.1.9 | Improve the monitoring of adverse treatment reactions among those who have received medical countermeasures and have been isolated or quarantined. |

| UTL# | Task |
|---------------|---|
| Rec.A.1 1.2 | Coordinate comprehensive stress management strategies, programs, and crisis response teams. |
| Rec.A.3 2.6.1 | Create and implement policies to deal with the financial impact to individuals who are placed in isolation or quarantine and to the public health system. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|----------------------------|
| Legislation authorizing appropriate isolation and quarantine measures (including quarantine of groups) is enacted | Yes/No |
| A plan is in place that addresses: <ul style="list-style-type: none"> Coordination of quarantine activation and enforcement with public safety and law enforcement Tracking the details of individuals placed in Isolation or Quarantine Personal Health Identification Number (PHIN). Addresses the implementation of infection control precautions | Yes/No Yes/No Yes/No |
| Defined legal authority to isolate and/or quarantine individuals, groups, facilities, animals and food products | Yes/No |
| Plan that addresses how to ensure adequate stockpiles of appropriate PPE | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--------------------|
| Percent of inbound passengers and crew from countries with epidemic disease who are screened (either pre-embarkation or on arrival) | 100% |
| Percent of screened positive persons who are isolated or quarantined | 100% |
| Percent of persons under isolation who are quarantined that receive a daily compliance contact | 100% |
| Time to assign a case manager to persons under isolation | Within six hours |

| Performance Measure | Performance Metric |
|---|--|
| and quarantine | |
| Percentage of persons caring for isolated patients who acquire the same infection during the isolation period | 0% |
| Time to release educational information to the public after isolation or quarantine is ordered | Within one hour |
| Time to update tracking system (database) that tracks an isolated or quarantined person's details (e.g., health monitoring, provision of care, adverse event from treatment or prophylaxis, etc.) | Within 24 hours of a person being ordered into Isolation or Quarantine |
| Frequency of updates to tracking system (database) | Daily |
| Percentage of persons assigned to care for patients in isolation that use appropriate infection control precautions | 100% |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Community Isolation/and Quarantine Teams
- Federal quarantine stations

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the pandemic influenza and plague scenarios. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- Isolation and quarantine deals specifically with infectious diseases.
- Isolation and quarantine deals specifically with separation of individuals rather than prohibition on structures.
- This capability refinement addresses community separation and not hospitalized patients.
- Recognition and assessment of exposure to an illness is an epidemiological function.
- 50 percent of infected persons are asymptomatic shedders of the influenza virus
- Shedding of the virus occurs 24 hours before the development of symptoms.
- Cases are occurring in a single wave over 8 weeks. The response is an evolving process – it has a phased approach.
- Number days in quarantine are 10 to 14 days (epidemiological evidence may allow for a reduction in this time).
- Number of days in isolation varies by age (7 days for adults; 14 days for children).
- World Health Organization (WHO) pandemic influenza phase: Phases 1 and 2 are interpandemic; 3, 4, and 5 are pandemic alert; 6 is pandemic period. General preparedness activities have occurred in WHO Phases 1 – 3.

- WHO Phase 1 – 3: General Preparedness activities.
- In WHO Phase 4, cases are occurring outside of the USA.
- WHO Phase 4, if there is extensive trade or travel links with the affected country, and WHO Phase 5 are the most important when considering isolation and quarantine.
- WHO Phase 5 is larger clusters, more transmission, suggesting that the virus is becoming more adoptive to human transmission.
- WHO Phase 5 is most important when considering Isolation and Quarantine.
- Setup isolation/quarantine stations in each foreign country that is a source of the infection.
- Under the Department of Health and Human Services (HHS), there are 83 tier 1 cities in the United States (i.e. airports with more than 1 million travelers, seaports with more than 100k travelers, or land borders with more than 5 million crossings); currently there are stations at 18 of these cities.
- Screening for inbound/outbound flights will be needed.
- WHO Phase 6 try and isolate 10 cases per million population. Sustained community transmission is assumed to be occurring when cases exceed 10 per million population.
- Attempt to quarantine 30 contacts per case (300 contacts per 1 million population).
- This will be community based rather than hospitalized patients.
- Closing of public venues may be retained here.
- There is a high percentage of absenteeism related to medical, traditional first responder, and public health personnel.
- Isolation orders will be based on a case definition, not strictly on laboratory test results.
- At least eight other countries are affected.
- Resources for provision of mental health services are not defined in this capability.
- Resources for provision of law enforcement are not defined in this capability.
- Resources for public information are not defined in this capability.

Target Capabilities for Isolation and Quarantine (Pandemic Influenza and Plague)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|---|------------------------------|
| Community Isolation/and Quarantine Team | One per 20 persons isolated or quarantined. | Isolate 10 per million population; quarantine 300 per million population. Current population of the USA is 297 million. Need to isolate 2970 persons and quarantine 89,100 persons. Total 92,070, divided by 20 =4,604. Could be reduced by number of hospital isolations — need to cross-reference with HRSA. | |
| Federal Quarantine Station | Two per 83 Tier One Cities, plus | Provide isolation and quarantine services to | |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|------------------------------------|---|------------------------------|
| | one per affected overseas country. | inbound and outbound passengers in Tier One cities. | |

Approaches for Large-Scale Events

- Community isolation/quarantine teams need to be situated locally.
- Federal quarantine stations need to be located in tier 1 cities (those that have airports with more than 1 million travelers, seaports with more than 100,000 travelers, or land borders with more than 5 million crossings). Note that 18 Federal quarantine stations currently exist in tier 1 cities.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Community isolation and quarantine team | Every district, county, and municipal office would have 1 team: <ul style="list-style-type: none"> ▪ 6 officers per district or county team ▪ 4 per municipal team |
| Federal quarantine station | <ul style="list-style-type: none"> ▪ 1 per each of 83 tier 1 cities; 1 per pandemic agent source country (8 per scenario) ▪ Tier 1 cities have the highest number of travelers; locating stations in tier 1 cities places resources at sites of highest need. |
| Community isolation/quarantine team | <ul style="list-style-type: none"> ▪ Local: distributed per population distribution ▪ Must be located close to population that will be isolated or quarantined to be able to provide capability |

Linked Capabilities

- Animal Health Emergency Support
- Communications
- Community Preparedness and Participation
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge

- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response
- Responder Safety and Health
- Risk Management
- Triage and Pre-Hospital Treatment
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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URBAN SEARCH & RESCUE

Capability Definition

Urban Search & Rescue is the capability to coordinate and conduct urban search and rescue (US&R) response efforts for all hazards including searching affected areas for victims and locating, accessing, medically stabilizing, and extricating victims trapped in damaged or collapsed structures.

Outcome

The greatest numbers of victims are rescued, in the shortest amount of time, while maintaining rescuer safety.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the Emergency Support Function (ESF) #9: Urban Search and Rescue.

Capability Description

| Activity | Description |
|----------------------------|---|
| Assessment | <ul style="list-style-type: none"> ▪ Assess situation to determine search and rescue needs. ▪ Assess the incident site for hazardous materials or conditions. |
| Advisory | Issue additional advisories, alerts and activation orders as required. |
| Search & Rescue Operations | <ul style="list-style-type: none"> ▪ Conduct search operations in an area affected by a large-scale emergency. ▪ Conduct urban search and rescue operations in various construction types and levels of entrapment. ▪ Utilize canine, physical and technical (e.g., electronic, robotic) search capability to search for trapped victims. ▪ Stabilize and support structures or debris for urban search and rescue operations which may include selecting and/or building proper shoring systems. ▪ Provide ability to perform search and rescue in all hazard environments. |
| Deployable Teams | Maintain operationally ready urban search and rescue task forces or strike teams (Federal, State, regional or local) that are trained and exercised |
| Team Management | <ul style="list-style-type: none"> ▪ Provide overall management & coordination of task force operations. ▪ Direct search and rescue task forces, strike teams or other resources. |
| Medical | <ul style="list-style-type: none"> ▪ Medically stabilize trapped victims for any condition including crush syndrome and associated confined space injuries. ▪ Transfer victims to more definitive medical care. |
| Extrication | Perform extrication and packaging of trapped victims in any hazard which may include lifting, cutting, breaching, breaking, especially structures of heavy reinforced concrete construction. |

| Activity | Description |
|--------------------|---|
| Planning | <ul style="list-style-type: none"> ▪ Provide necessary planning to support the overall search and rescue mission to include; incident planning, hazard evaluation, structural integrity assessments and technical documentation. ▪ Formulate redeployment plans for urban search and rescue assets and personnel. |
| Logistical Support | Provide the logistical support to the overall search and rescue mission to include; mobilization, transportation, equipment, communications and demobilization. Degree of self sufficiency will depend on the typing. |

Critical Tasks

| UTL# | Task |
|-----------------|---|
| Res.B.4 3 | Coordinate Urban Search & Rescue (US&R). |
| Res.B.4 4 | Conduct Urban Search & Rescue (US&R). |
| Res.B.4 4.2.2 | Deploy Federal, State, regional, or local Urban Search & Rescue (US&R) resources according to the Resource Typing List. |
| Res.B.4 4.3.1.2 | Assess the incident site for Hazardous Materials (HazMat) or other conditions. |
| Res.B.4 4.3.2.1 | Direct Urban Search & Rescue (US&R) resources according to the National Incident Management System (NIMS), the incident command system (ICS), and consensus-level technical rescue standards. |
| Res.B.4 4.3.4.1 | Search for trapped victims using canine, physical, and electronic search capabilities. |
| Res.B.4 4.3.4.2 | Medically stabilize trapped victims. |
| Res.B.4 4.3.4.3 | Extricate trapped victims. |
| Res.B.4 4.3.4.4 | Transfer victims to more definitive medical care. |
| Res.B.4 4.3.3 | Conduct area search for victims |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Jurisdiction has a search and rescue team appropriate to population | Yes/No |
| Team is equipped as defined through the National Incident Management System (NIMS) Resource Typing System | Yes/No |
| Federal, State / Regional and local US&R Capabilities are NIMS Compliant | Yes/No |

| | |
|--|--------|
| Team members have been trained to provide advanced life support (ALS) to trapped victims until extrication | Yes/No |
|--|--------|

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Time needed to begin organized search of an area affected by a large-scale emergency | Within 30 minutes |
| Time from incident inception to initial activation (of US&R capable unit’s initial-dispatch to the emergency) | Incident specific – record actual time |
| Time for local heavy rescue capability to arrive and to maintain operations un-supported until relieved. | 2 hours |
| Time for regional US&R capability to arrive and to maintain operations un-supported until relieved | 12 hours |
| Time from request to deployment of federally designated US&R task force teams | 6 hours |
| Time from activation to the first US&R – capable unit’s arrival on-scene | 24 hours |
| State, regional and/or local US&R successfully developed and implemented a tactical plan from the incident action plan (IAP) | Yes/No |
| Federally designated US&R task force team(s) successfully developed and implemented a tactical plan from the incident action plan (IAP) | Yes/No |
| Time needed to access void spaces in light construction (Victims’ survival depends upon how quickly a void space can be accessed. Accessing a void space requires similar skills and equipment regardless of the location or scenario. An additional measurement to the number of victims rescued.) | Within 1 hour |
| Time needed to access void spaces in heavy construction (Victims’ survival depends upon how quickly a void space can be accessed. Accessing a void space requires similar skills and equipment regardless of the location or scenario. An additional measurement to the number of victims rescued.) | Within 6 hours |
| Victims’ standard of care was maintained according Task Force Operations Manual and Medical Protocols | Yes/No |

| Performance Measure | Performance Metric |
|---|---|
| Advanced life support (ALS) to trapped victims was provided until extrication | Yes/No |
| Number of victims safely extricated in the incident (Measure the number of victims extricated per 24 hours. The type of structures/incident will modify the measurement: Heavy Construction vs. Light Construction) | Incident specific-record actual number of total victims extricated Type I US&R Team Light construction, 72 victims Heavy construction 36 victims Type II Collapse Search and Rescue Team Light construction, 36 victims Heavy construction 18 victims Type II Heavy Rescue Squad Strike Team Light construction, 30 victims Heavy construction 12 victims Type II Heavy Rescue Squad Light construction, 5 victims Heavy construction 0 victims |
| Number of victims safely extricated in the incident (Measure the number of victims extricated within 72 hours up to 14 days. The type of structures/incident will modify the measurement: Heavy Construction vs. Light Construction.) | 100% of victims trapped in light construction rescued within 72 hrs. 50% of victims trapped in heavy construction rescued in 72 hours and 100% rescued within 14 days |
| Number of US&R personnel injured/killed during rescue efforts | No more than one (1) No-Loss Time US&R injury per operational period Zero (0) US&R loss time injuries or deaths |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Type I US&R Task Force
- Type II Collapse Search and Rescue Team
- Type II Heavy Rescue Strike Team
- Type II Heavy Rescue Squad

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Toxic Industrial Chemical scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This capability applies to a wide range of incidents and emergencies, including improvised nuclear devices, toxic industrial chemical scenarios, major earthquakes or hurricanes, and radiological dispersal devices. The primary condition affecting the performance of the capability is whether the incident requires an urban search and rescue or water search and rescue. For urban search and rescue (US&R), conditions affecting the performance include the number and size of collapsed structures, number of trapped persons in collapsed structures, and any risks involved for the rescuers (including fire and potential hazardous materials (HazMat) exposure).
- Local response time: 0–2 hours
- Regional response time: 2–17 hours
- State response time: 12–24 hours
- Federal response time: 24+ hours
- All injuries and fatalities need to be extricated.
- All locations need HazMat assessment for proper personal protective equipment (PPE).
- Typical fire and HazMat response has PPE to extricate lightly trapped victims.
- US&R strike teams begin to extricate moderately trapped victims.
- US&R task forces extricate heavily trapped victims.
- Trapped victims surviving the initial exposure will be viable.
- Trapped victims have the best chance of survival if they are rescued within 72 hours. They may survive up to 14 days if provided drinking water.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Toxic Industrial Chemical)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|------------------------|---|--|---|
| Type I US&R Task Force | Extrication of victims in 24 hours: <ul style="list-style-type: none"> ▪ Heavy construction (HC): <ul style="list-style-type: none"> –Entombed: 4 –Structurally trapped: 12 –Nonstructurally trapped: 20 | <ul style="list-style-type: none"> ▪ HC: 20 maximum rescued per day ▪ LC: 40 maximum rescued per day | <ul style="list-style-type: none"> ▪ 1350 victims trapped ▪ 50% trapped in HC (675) ▪ 675 victims/3 day optimum rescue = 225 ▪ 225 victims/20 maximum = 11.25 Type I US&R Teams |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|--|
| | <ul style="list-style-type: none"> ▪ Light construction (LC): –Entombed: 8 –Structurally trapped: 24 –Nonstructurally trapped: 40 | | <ul style="list-style-type: none"> for 3 days ▪ 1350 victims trapped ▪ 50% trapped in LC (675) ▪ 675 victims/3 day optimum rescue = 225 ▪ 225 victims/40 maximum = 5.6 Type I US&R Teams for 3 days |
| Type II Collapse Search and Rescue Team | <p>Extrication of victims in 12 hours:</p> <ul style="list-style-type: none"> ▪ HC: <ul style="list-style-type: none"> –Entombed: 1 –Structurally trapped: 3 –Nonstructurally trapped: 5 ▪ LC: <ul style="list-style-type: none"> –Entombed: 2 –Structurally trapped: 6 –Nonstructurally trapped: 10 | <ul style="list-style-type: none"> ▪ HC: 18 maximum rescued per 24 hours ▪ LC: 36 maximum rescued per 24 hours | Requires 2 teams, each having 1 12-hour operational period |
| Type II Heavy Rescue Strike Team | <p>Extrication of victims in 12 hours:</p> <ul style="list-style-type: none"> ▪ HC: <ul style="list-style-type: none"> –Nonstructurally trapped: 6 ▪ LC: <ul style="list-style-type: none"> –Structurally trapped: 6 –Nonstructurally trapped: 9 | <ul style="list-style-type: none"> ▪ HC: 12 maximum rescued per day ▪ LC: 30 maximum rescued per day | Requires 2 teams, each having 1 12-hour operational period |
| Type II Heavy Rescue Squad | <p>Extrication of victims in 12 hours:</p> <ul style="list-style-type: none"> ▪ LC: <ul style="list-style-type: none"> –Structurally trapped: 2 | LC: 10 maximum rescued per day | Requires 2 teams, each having 1 12-hour operational period |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|-----------------------------|-----------------------------|------------------------------|
| | –Nonstructurally trapped: 3 | | |

Approaches for Large-Scale Events

- During incidents, licensing and certifications need to be national and not restricted by State borders. A border should not determine the location of a resource.
- Basic disaster training should be standard, such as that sanctioned by NIMS and the National Response Plan (NRP), to allow more personnel to be used on the day of the incident.
- Training must be coordinated at the Federal level.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| Type I US&R Task Force | Federal: National Response System Federal Task Force; current locations: 28 |
| Type II Collapse Search and Rescue Team | Cities of 100,000+ population: 238 |
| Type II Heavy Rescue Squad Strike Team | Cities of 50,000–100,000 population 364 |
| Type II Heavy Rescue Squad | Cities of 25,000–50,000 population: 481 |

Linked Capabilities

- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Emergency Operations Center Management
- Explosive Device Response Operations
- Fatality Management
- Firefighting Operations/Support
- Onsite Incident Management
- Planning
- Public Safety and Security Response
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Structural Damage and Mitigation Assessment
- Triage and Pre-Hospital Treatment
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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EMERGENCY PUBLIC INFORMATION AND WARNING

Capability Definition

Emergency Public Information and Warning is the capability to develop, coordinate, and disseminate accurate alerts and emergency information to the media and the public prior to an impending emergency and activate warning systems to notify those most at-risk in the event of an emergency. By refining its ability to disseminate accurate, consistent, timely, and easy-to-understand information about emergency response and recovery processes, a jurisdiction can contribute to the well-being of the community during and after an emergency.

Outcome

Members of the public receive prompt, accurate and useful information regarding threats to their health, safety and property, and receive clear, consistent information and periodic updates outlining protective measures that can be taken by individuals and their communities.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs) and Annex:

- ESF #5: Emergency Management
- ESF #15: External Affairs
- Public Affairs Support Annex

Capability Description

| Activity | Description |
|--------------------------|---|
| Warning system | Activate Emergency Alert System (EAS) and other warning systems that take into account persons with special needs/disabilities. |
| Media relations | Develop and implement a planned strategy for working with the media. |
| Joint Information Center | Provide and coordinate a unified “one voice” Joint Information Center (JIC) using a joint information system (JIS). |
| Information release | Research, compile, and disseminate timely and accurate alerts, warnings, and other emergency information. |
| Information release | Use languages and formats that address various demographics and special needs before, during, and after an emergency to: <ul style="list-style-type: none"> ▪ Provide prompt, accurate information to the public. ▪ Address all public inquiries. ▪ Address all media queries. |
| Media monitoring | Monitor media coverage to ensure that information is accurately relayed to the public; identify potential misconceptions or information gaps; and ensure information is released as scheduled, or as it became available. |

| Activity | Description |
|-------------------------|--|
| Stakeholder involvement | Develop and implement a strategy for establishing and maintaining stakeholder relations. |

Critical Tasks

| UTL# | Task |
|----------------------|---|
| Res.B.4 4.2.2.1 | Disseminate prompt, accurate information to the public in languages and formats that take into account demographics and special needs/disabilities. |
| Res.B.5 1 | Implement plans, procedures, and policies for coordinating, managing, and disseminating public information and warnings. |
| Res.B.5 2.1 | Develop tests, and exercise the plan to enhance its effectiveness. |
| Res.B.5 2.2 | Conduct an after-action review to determine strengths and shortfalls and develop a corrective plan accordingly. |
| Res.B.5 3 | Coordinate and integrate the resources and operations of external affairs organizations to provide accurate, consistent, and timely information through the Joint Information Center (JIC). |
| Res.B.5 4.1.2.1.1 | Activate the Homeland Security Advisory System, as appropriate. |
| Res.B.5 4.1.2.5 | Provide a central contact for the media through the Joint Information Center (JIC), ensuring a “one accurate message, many voices” approach to information dissemination. |
| Res.B.5 4.1.2.7 | Notify, as the first responding agency, both public and private partner agencies regarding Joint Information Center (JIC) activation. |
| Res.B.5 4.1.3 | Disseminate domestic and international travel advisories. |
| Res.B.5 4.1.4 | Issue corrective message when errors are recognized in previous public announcements. |
| Res.B.5 4.2.1 | Implement communications and warning systems to include the media, the Emergency Alert System (EAS), and other warning systems that take into account special needs/disabilities. |
| Res.B.5 4.2.2.4 | Disseminate critical health and safety information designed to alert the public to clinical symptoms and to reduce the risk of exposure to ongoing and potential hazards. |
| Res.B.5 4.2.5.3 | Develop and disseminate guidance for the public. |
| Res.B.5 4.2.7 | Disseminate guidance for the public regarding appropriate donation methods and volunteer activities. |

| UTL# | Task |
|---------------|--|
| Res.B.5 4.3.1 | Provide periodic updates and conduct regularly scheduled media conferences. |
| Res.B.5 4.3.4 | Implement routing and approval protocols for release of information. |
| Res.B.5 4.3.5 | Monitor media coverage to ensure that information is accurately relayed. |
| Res.B.5 4.3.6 | Track media contacts and public inquiries, listing contact, date, time, query, and outcome. |
| Res.B.5 4.4.3 | Implement a community relations plan for ensuring continued communications with citizens and city, county, tribal, State, Federal, and private industry leaders. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|----------------------------|
| The emergency operations plan (EOP) contains provisions for: <ul style="list-style-type: none"> ▪ Enacting the public information and warning function. ▪ Establishing a Joint Information Center (JIC). ▪ Procedures for use when normal information sources (i.e. TV) are lost | Yes/No Yes/No Yes/No |
| An emergency alert system (EAS) State activation plan is in place and all appropriate agencies and personnel are trained in and regularly exercise the EAS plan | Yes/No |
| Public awareness and education plan is in place with all appropriate agencies and partners | Yes/No |
| The Joint Information Center (JIC) includes representatives of each jurisdiction, agency, private sector, and nongovernmental organizations (NGOs) involved in incident management activities | Yes/No |
| Procedures exists for Joint Information Center (JIC) assembly and efficacy | Yes/No |
| Joint Information Center (JIC) is exercised on an annual basis | Yes/No |
| Changes to the Homeland Security Advisory System are communicated to the public | Yes/No |
| A public awareness and media guide has been developed and includes: <ul style="list-style-type: none"> ▪ Protocols for interfacing with the media and the community-citizens and tribal, city, county, State, Federal, and private industry leaders ▪ Protocols for interfacing with the media, legislative | Yes/No Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|------------------------------------|
| interests, and other very important persons <ul style="list-style-type: none"> ▪ A listing of homeland security and emergency management sources of information ▪ Protocols for operating in a Joint Information Center ▪ Protocols for identification of resources and responsibilities in advance of an accident | Yes/No Yes/No Yes/No |
| Procedures following standards set by the Emergency Management Accreditation Program (EMAP) and the National Fire Protection Association (NFPA) 1600 are in place for: <ul style="list-style-type: none"> ▪ Communicating with internal groups and individuals about disasters and emergencies ▪ Communicating with external groups and individuals about disasters and emergencies | Yes/No Yes/No |
| Procedures and protocols exist to communicate and coordinate effectively with other JICs and other incident command system (ICS) components and should be structured according to the incident command, unified command, or area command | Yes/No |
| Plans and procedures are tested periodically to ensure accuracy and completeness | Yes/No |
| The public awareness and education plan is exercised annually | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--------------------------------------|
| Time from threat notification to activation of warning systems | Within one half hour of the incident |
| Population notified of an emergency utilizing multiple available warning systems | Yes/No |
| Time to establish a JIC | Within the first 2 hours |
| Notifications were communicated to appropriate individuals and special needs groups in accordance with the public awareness and education plan | Yes/No |
| Percentage of JIC participants who document that notifications were communicated to appropriate individuals and groups according to the public awareness and education plan | 75% of participants |

| Performance Measure | Performance Metric |
|---|---------------------------|
| Percentage of JIC participants who agree that emergency public information was coordinated and consistent across agencies | 75% of participants |
| Media monitoring indicates that information was released as scheduled, or as it became available | Yes/No |
| Inquiries to the JIC regarding disseminated and other incident-related information were answered accurate | Yes/No |
| Inaccuracies were addressed on a timely basis | Yes/No |
| Time for notification of partner agencies by the public information officer (PIO) at the initial responding agency | Within 4 hours |
| Time from the incident to the first formal news conference | 3 hours from the incident |

Capability Elements

Personnel

- Public Information Officers (PIO) for each agency per level of government
- Joint Information Center (JIC) that includes representatives of each jurisdiction, agency, private sector, and nongovernmental organizations involved in incident management activities
- JIC support staff to include the following:
 - Deputy PIO for each PIO
 - Office Manager/Administrative Staff
 - Research Team
 - Media Operations Team
 - Logistics Team
 - Translators

Equipment and Systems

- Meeting space
- Alert and notification systems for each jurisdiction
- Communications equipment (e.g., cell phones, landline phones, satellite phones, video conferencing equipment, faxes, televisions)
- Computer equipment (e.g., laptops, server)
- Office equipment (e.g., copiers, printers)
- Satellite telecommunications
- Generators

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the major earthquake scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.

-
- All scenarios will require a multijurisdictional/multiagency response to implement the Joint Information System (JIS) and a Joint Information Center (JIC) to ensure that public information activities are consistent and coordinated across agencies and jurisdictions.
 - All scenarios require that jurisdictions provide timely and accurate public information. Some scenarios will have advanced warning, and others will occur with no warning. All scenarios need to consider alternate communications means. Power outages will disrupt radio, television, the World Wide Web, and other power-dependent information outlets.
 - Door-to-door notification would not be feasible given scenario requirements of higher population densities.
 - The jurisdiction has systems in place to conduct emergency notification.
 - Implement a public awareness program whenever people are threatened by a serious hazard.
 - The JIC will include representatives of each jurisdiction, agency, private sector, and nongovernmental organizations (NGOs) involved in incident management activities. Inclusion of liaisons from the various responding agencies will ensure a “one voice” approach and consistency of information released. A unified effort also fosters collaboration, helping to ensure all agencies’ critical messages are identified and appropriately addressed.
 - A single JIC location is preferable, but the system should be flexible enough to accommodate multiple JIC locations if required. For example, multiple JICs may be needed for a complex incident spanning a wide geographic area.*
 - Following the command structure will ensure consistency of operations and will enhance cooperation among JICs, command posts, and other partners.
 - Effective warning of people with special needs or disabilities will require the media, the Emergency Alert System (EAS), and other communications systems to use multiple communications.
 - This information was derived from the Partnership for Public Warning’s document, *A National Strategy for Integrated Public Warning Policy and Capability*.
 - The amount of resources needed should be determined by each agency participating in the response, in coordination with the leads for the JICs.
 - Emergency public information and warning is dependent on the timely availability of accurate information on the type of threat or hazard presented, as indicated in the *Target Capabilities List*. An additional factor is the availability and reliability of accurate information that has been verified and is ready for distribution.
 - Timely, accurate information is essential to all scenarios. It is important for the incident commander and other critical functions included in the ICS to emphasize public information in their respective operations.
 - Implementation of a JIC ensures a “one message, many voices” approach that incorporates representatives across multiple jurisdictions. All agencies involved in disaster response must be represented in the JIC.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Earthquake)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|------------------------------------|--|---|---|
| Public information officers (PIOs) | <ul style="list-style-type: none"> ▪ Operate 7/24 in two 12-hr shifts per JIC ▪ Includes at least one representative of each local, State, Federal, and coluntary agency, the Governor’s Office and the Incident Commander per JIC ▪ Per 2 12-hour shifts per JIC: <ul style="list-style-type: none"> –Local: 1 –State: 1 –Federal: 1 –Voluntary agency: 2 –Emergency management/ homeland security: 1 –Governor: 1 –U.S. Department of Transportation (DOT): 1 –Public health: 1 –Law enforcement: 1 –Fire: 1 –Emergency medical services (EMS): 1 –Public works: 1 –Search and rescue: 1 –Human services: 1 –Housing: 1 | Minimum of one per agency per level of government | <ul style="list-style-type: none"> ▪ 1 IC command structure per impacted jurisdiction= 2 PIOs ▪ County JIC=10 per county ▪ Regional JIC=10 PIOs per region ▪ State JIC=10 PIOs ▪ Federal=10 PIOs |
| JIC support staff (people) | <p>Operate 7/24 in two 12-hr shifts per JIC</p> <p>Includes Deputy PIO for each PIO office manager and administrative staff</p> <ul style="list-style-type: none"> ▪ Research team: fact checking, | Lead PIO for all levels of government | <p>Per 2 12-hour shifts per JIC:</p> <ul style="list-style-type: none"> ▪ Assistant PIO for each of the PIOs: 1 ▪ IT staff: 2 ▪ Support administrato |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--------------------------------|---|------------------------------|---|
| | <p>information verification, writing/research</p> <ul style="list-style-type: none"> ▪ Media operations team: field operations, media monitoring, video, photography, design work ▪ Logistics team: event planning, JIC setup and operations ▪ Government ▪ Translators | | <p>r: 1</p> <ul style="list-style-type: none"> ▪ Media relations (field operations, media monitoring) ▪ Creative services (writing/research, graphic liaison, program liaison) <p>Special Projects (video, photography, event planning)</p> |
| JIC support staff (training) | <p>Requires ICS 100–200, NIMS IS–700</p> <ul style="list-style-type: none"> ▪ Core base training, such as: <ul style="list-style-type: none"> –Basic public information course –Advanced public information course –Cultural competency –Interoperable communications –Public and volunteers –Risk communications | | |
| Alert and notification systems | Each jurisdiction should have an alert and notification system appropriate to population and hazards. | 1 per jurisdiction | 1 per jurisdiction |
| JIC Equipment | Available 7/24 for each JIC. | Applicable to all scenarios. | Quantities are estimated per activated JIC. |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--------------------|-----------------------------|------------------------------|
| Cell Phones with Walkie-Talkie, Chargers | 1 per PIO. | 1 per JIC staff | 92 per JIC. |
| Landline Phones with speakerphones | 1 per PIO. | 1 per JIC staff | 92 per JIC |
| Video Conference Capabilities | 1 per JIC. | 1 per JIC. | 1 per JIC. |
| Blast fax | 1 per JIC. | 1 per JIC. | 1 per JIC. |
| Fax machines – incoming, outgoing | 2 per JIC. | 2 per JIC. | 2 per JIC. |
| Radio bank – with recording capability | 1 per JIC. | 1 per JIC. | 1 per JIC. |
| Televisions with recording capability | 6 per JIC. | 1 per JIC. | 6 per JIC |
| Laptops/Computers with CD/DVD burner and appropriate software | 1 per person. | 1 per person | 92 per JIC |
| Server | 1 per JIC. | 1 per JIC. | 1 per JIC. |
| High-speed color copier | 1 per JIC. | 1 per JIC. | 1 per JIC. |
| Color Printers | 1 per 3 people. | 1 per 3 people | 30 per JIC |
| Desk, chair | 1 per staff. | 1 per staff. | 92 per JIC |
| Office supplies i.e. paper, pens, binders. Easels, video tapes etc. | 1 per staff. | 1 per staff | 1 per staff |
| ▪ Maps of updated, disaster-impacted areas | 1 per PIO. | 1 per PIO. | 1 per PIO. |
| Local telephone directories | 1 per person. | 1 per person. | 92 per JIC |
| Office telephone directory | 1 per person. | 1 per person. | 92 per JIC |
| JIC Meeting Space or access to a meeting room | 1 per JIC | 1 per JIC | 1 per JIC |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|-----------------------------|------------------------------|
| Private room or access to a private room | 1 per JIC. | 1 per JIC. | 1 per JIC. |
| <ul style="list-style-type: none"> ▪ JIC Media Briefing Room. designated media briefing areas: ▪ Podium/Lectern ▪ Malt Box ▪ Flags ▪ Seals ▪ Turtle Phone ▪ Overhead Projector – PowerPoint Projector ▪ Screen | Available 7/24 for incident duration. Accommodates x briefing attendees. 1 per JIC. | 1 per JIC. | 1 per JIC. |

Approaches for Large-Scale Events

Approaches to large-scale events are similar to Emergency Operations Center Management.

National Targets and Assigned Levels

In general, any community that operates an Emergency Operations Center (EOC) should have the capability to establish a JIC when incident conditions warrant.

| Resource | Assigned Level & Quantity |
|---|---|
| Public Information Officer (PIO) | Every jurisdiction with an EOC. Standing. |
| Joint Information Center (JIC) Support - Deputy PIO | Every jurisdiction with an EOC. Standing or Pre-designated. |
| JIC Support - Asst. PIO | Every jurisdiction with an EOC. Standing or Pre-designated. |
| JIC Support - Research Team | Every jurisdiction with an EOC. Standing or Pre-designated. |
| JIC Support - Media Operations Team | Every jurisdiction with an EOC. Standing or Pre-designated. |
| JIC Support - Logistics Team | Every jurisdiction with an EOC. Standing or Pre-designated. |
| Alert and Notification System | Every jurisdiction with an EOC. |

| Resource | Assigned Level & Quantity |
|-------------------------|--|
| | Standing. |
| JIC Meeting Space | Every jurisdiction with an EOC. Standing or Pre-designated. |
| JIC Media Briefing Room | Every jurisdiction with an EOC. Standing or Pre-designated. |
| JIC Office Equipment | Every jurisdiction with an EOC. Standing or Pre-designated. |

Linked Capabilities

- Animal Health Emergency Support
- Communications
- Community Preparedness and Participation
- Economic and Community Recovery
- Emergency Operations Center Management
- Environmental Health
- Epidemiological Surveillance and Investigation
- Evacuation and/or In-Place Protection
- Explosive Device Response Operations
- Firefighting Operations/Support
- Food and Agriculture Safety and Defense
- Information Gathering and Recognition of Indicators and Warnings
- Intelligence / Information Sharing and Dissemination
- Isolation and Quarantine
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Surge
- Onsite Incident Management
- Planning
- Public Safety and Security Response
- Risk Management
- Triage and Pre-Hospital Treatment
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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TRiage AND PRE-HOSPITAL TREATMENT

Capability Definition

Triage and Pre-Hospital Treatment is the capability to appropriately dispatch emergency medical services (EMS) resources; to provide feasible, suitable, and medically acceptable pre-hospital triage and treatment of patients; to provide transport as well as medical care en-route to an appropriate receiving facility; and to track patients to a treatment facility.

Outcome

Emergency Medical Services (EMS) resources are effectively and appropriately dispatched and provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF #1: Transportation
- ESF #8: Public Health and Medical Services

Capability Description

| Activity | Description |
|-------------|---|
| Preparation | Ensure that the EMS system is ready on a day-to-day basis to respond to all emergencies, including a catastrophic event. |
| Planning | <ul style="list-style-type: none"> ▪ Develop and exercise mass casualty plans and mutual aid agreements. ▪ Coordinate with Federal and/or State medical assets. ▪ Stockpile equipment and supplies, including personal protective equipment (PPE). ▪ Develop plans to access additional health and medical resources and personnel as necessary. ▪ Conduct after-action debriefings to identify opportunities for improvement. |
| Dispatch | Provide a broadly coordinated system that dispatches medical resources consistent with the nature of the incident. |
| Triage | Provide initial and ongoing triage of ill and injured patients that prioritizes treatment and transport and determines the medical facility destination appropriate for each patient's condition and the nature and magnitude of the incident. |
| Treatment | Ensure that ill and injured patients receive medical treatment appropriate to the incident by providing appropriately credentialed onscene medical personnel with medical oversight. |
| Transport | Transport patients in vehicles appropriate to each patient's conditions and the nature and magnitude of the incident. |

| Activity | Description |
|----------------------------------|---|
| Logistics | Ensure that sufficient and appropriate medical equipment and supplies, including PPE, are readily accessible by onscene personnel. |
| Medical command and coordination | Provide medical coordination of onscene personnel as well as other health resources, including public health services, hospitals, and healthcare providers. |
| Safety | Provide for the ongoing safety, health, and well-being of onscene personnel. |
| Communications | Ensure reliable voice and data interoperable communications systems for onscene personnel and other appropriate health and medical resources, including, but not limited to, healthcare and public health facilities. |
| Operations continuity | Maintain an effective response to emergencies in the community during a catastrophic incident and restore normal operations as rapidly as possible. |

Critical Tasks

| UTL# | Task |
|--------------------|--|
| Preparation | |
| Res.C.1 1.1.1.3 | Assess, categorize, and track health and medical resources at the State, regional, and local levels, including but not limited to trauma centers, burn centers, pediatric facilities, acute care facilities, and other specialty facilities. |
| Res.C.1 1.1.2.6 | Ensure appropriate protective resources are available, including vaccinations, prophylaxis, and PPE for pre-hospital providers and their families. |
| Res.C.1 1.1.5.4 | Ensure sufficient personnel and resources to respond to day-to-day emergencies in the community. |
| Res.C.1 1.1.5.5 | Ensure sufficient personnel, supplies, and equipment to respond to and manage a catastrophic incident until Federal resources become available. |
| Res.C.1 1.1.5.6 | Ensure effective, reliable interoperable communications between providers, medical command, public health, and healthcare facilities. |
| Res.C.1 1.1.5.7 | Establish and maintain intrastate and interstate medical communications systems. |
| Res.C.1 1.1.5.9 | Develop protocols and procedures for tracking response staff and equipment during day-to-day operations as well as catastrophic incidents. |
| Res.C.1 2.1.4 | Conduct appropriate medical training of dispatch personnel in dealing with mass casualty incidents. |
| Res.C.1 2.1.5 | Ensure that EMS systems include an education, licensure, and credentialing system consistent with national standards. |

| UTL# | Task |
|-------------------|---|
| Res.C.1 2.2.3 | Develop and/or implement training and exercise programs based on local risk vulnerability assessments and lessons learned. |
| Res.C.1 3.3.4.6 | Establish public safety access points that have enhanced capabilities (e.g., automatic location identification) and redundancy and are capable of handling a surge in call volume. |
| Planning | |
| Res.C.1 1.1.1.4 | Establish a means to allow EMS resources to be used across jurisdictions, both intrastate and interstate, using the National Incident Management System (NIMS) (e.g., mutual aid agreements). |
| Res.C.1 1.2.1 | Develop and/or maintain protocols and procedures for EMS dispatch, assessment, triage, treatment, transport, logistical support, medical command and coordination, safety, communications, and tracking of patients during day-to-day operations as well as catastrophic incidents. |
| Res.C.1 1.2.3.2.4 | Develop mechanisms to ensure freedom of movement of medical response, transport, and personnel when faced with restricted travel laws, isolation/quarantine, or security measures. |
| Res.C.1 1.2.3.5 | Develop plans and mechanisms to reimburse expenses for both public and private sectors following a declared catastrophic incident. |
| Response | |
| Res.C.1 3.4.1 | Dispatch and support medical care personnel. |
| Res.B.2 6.1.11 | Based on the type and severity of the incident, establish scene safety. |
| Res.C.1 4.3.1.1 | Conduct initial and ongoing pre-hospital triage. |
| Res.C.1 4.3.1.2 | Provide treatment appropriate to the nature of incident and number of injured/ill. |
| Res.C.1 4.3.1.2.1 | Provide ongoing pain management therapy as needed to victims awaiting transport. |
| Res.C.1 4.3.1.3 | Ensure decontamination of patients prior to treatment and transport. |
| Res.C.1 4.3.1.4 | Identify transport vehicles, victims, and priority of transport. |
| Res.C.1 4.3.1.4.1 | Initiate recall and/or mutual aid to staff spare ambulances and provide immediate surge capability. |
| Res.C.1 4.3.1.5 | Coordinate and transport patients to the appropriate treatment facility. |
| Res.C.1 4.3.1.6 | Administer antidotes for victims of WMD attacks. |

| UTL# | Task |
|--------------------|---|
| Res.C.1 4.3.1.6.1 | Provide ongoing assessment and treatment en route. |
| Res.C.1 4.3.1.6.2 | Transfer care of the patient to medical staff at the facility. |
| Res.C.1 4.3.1.7 | Ensure documentation of patient care and transfer, in accordance with mass casualty protocols. |
| Res.C.1 4.3.1.9 | Coordinate and integrate with the National Disaster Medical System. |
| Res.C.1 4.3.2 | Organize and distribute medical resources. |
| Res.C.1 4.3.2.3 | Assess need for additional medical resources/mutual aid. |
| Res.C.1 4.3.3.1 | Initiate a patient tracking system. |
| Res.C.1 4.3.4.1 | Provide medical support, safety considerations, and appropriate PPE for responders. |
| Recovery | |
| Res.C.1 3.1.2.2 | Implement comprehensive stress management strategies and programs for all emergency responders and other workers. |
| Res.C.1 4.3.1.10 | Ensure post-event medical monitoring and care. |
| Res.C.1 4.3.4.3 | Ensure decontamination of vehicles/EMS. |
| Res.C.1 4.3.5.2 | Conduct post-event analysis, including development and dissemination of lessons learned; revise plan as indicated. |
| Res.C.1 4.3.5.3 | Reestablish normal EMS operations. |
| Preparation | |
| Res.C.1 2.1.5 | Ensure that EMS systems include an education, licensure, and credentialing system consistent with national standards. |
| Res.C.1 2.2.3 | Develop and/or implement training and exercise programs based on local risk vulnerability assessments and lessons learned. |
| Res.C.1 2.1.4 | Conduct appropriate medical training of dispatch personnel in dealing with mass casualty incidents. |
| Res.C.1 1.1.5.4 | Ensure sufficient personnel and resources to respond to day-to-day emergencies in the community. |
| Res.C.1 1.1.5.5 | Ensure sufficient personnel, supplies, and equipment to respond to and manage a catastrophic incident until Federal resources become available. |
| Res.C.1 1.1.5.6 | Ensure effective, reliable interoperable communications between providers, |

| UTL# | Task |
|-------------------|---|
| | medical command, public health, and healthcare facilities. |
| Res.C.1 1.1.5.7 | Establish and maintain intrastate and interstate medical communications systems. |
| Res.C.1 1.1.5.9 | Develop protocols and procedures for tracking response staff and equipment during day-to-day operations as well as catastrophic incidents. |
| Res.C.1 1.1.2.6 | Ensure appropriate protective resources are available, including vaccinations, prophylaxis, and PPE for pre-hospital providers and their families. |
| Res.C.1 3.3.4.6 | Establish public safety access points that have enhanced capabilities (e.g., automatic location identification) and redundancy and are capable of handling a surge in call volume. |
| Res.C.1 1.1.1.3 | Assess, categorize, and track health and medical resources at the State, regional, and local levels, including but not limited to trauma centers, burn centers, pediatric facilities, acute care facilities, and other specialty facilities. |
| Planning | |
| Res.C.1 1.1.1.4 | Establish a means to allow EMS resources to be used across jurisdictions, both intrastate and interstate, using the National Incident Management System (NIMS) (e.g., mutual aid agreements). |
| Res.C.1 1.2.1 | Develop and/or maintain protocols and procedures for EMS dispatch, assessment, triage, treatment, transport, logistical support, medical command and coordination, safety, communications, and tracking of patients during day-to-day operations as well as catastrophic incidents. |
| Res.C.1 1.2.3.2.4 | Develop mechanisms to ensure freedom of movement of medical response, transport, and personnel when faced with restricted travel laws, isolation/quarantine, or security measures. |
| Res.C.1 1.2.3.5 | Develop plans and mechanisms to reimburse expenses for both public and private sectors following a declared catastrophic incident. |
| Response | |
| Res.C.1 3.4.1 | Dispatch and support medical care personnel. |
| Res.B.2 6.1.11 | Based on the type and severity of the incident, establish scene safety. |
| Res.C.1 4.3.1.4.1 | Initiate recall and/or mutual aid to staff spare ambulances and provide immediate surge capability. |
| Res.C.1 4.3.1.1 | Conduct initial and ongoing pre-hospital triage. |
| Res.C.1 4.3.2 | Organize and distribute medical resources. |

| UTL# | Task |
|-------------------|--|
| Res.C.1 4.3.2.3 | Assess need for additional medical resources/mutual aid. |
| Res.C.1 4.3.4.1 | Provide medical support, safety considerations, and appropriate PPE for responders. |
| Res.C.1 4.3.1.2 | Provide treatment appropriate to the nature of incident and number of injured/ill. |
| Res.C.1 4.3.1.2.1 | Provide ongoing pain management therapy as needed to victims awaiting transport. |
| Res.C.1 4.3.1.3 | Ensure decontamination of patients prior to treatment and transport. |
| Res.C.1 4.3.1.6 | Administer antidotes for victims of WMD attacks. |
| Res.C.1 4.3.1.4 | Identify transport vehicles, victims, and priority of transport. |
| Res.C.1 4.3.1.5 | Coordinate and transport patients to the appropriate treatment facility. |
| Res.C.1 4.3.3.1 | Initiate a patient tracking system. |
| Res.C.1 4.3.1.6.1 | Provide ongoing assessment and treatment en route. |
| Res.C.1 4.3.1.6.2 | Transfer care of the patient to medical staff at the facility. |
| Res.C.1 4.3.1.7 | Ensure documentation of patient care and transfer, in accordance with mass casualty protocols. |
| Res.C.1 4.3.1.9 | Coordinate and integrate with the National Disaster Medical System. |
| Recovery | |
| Res.C.1 4.3.4.3 | Ensure decontamination of vehicles/EMS. |
| Res.C.1 3.1.2.2 | Implement comprehensive stress management strategies and programs for all emergency responders and other workers. |
| Res.C.1 4.3.1.10 | Ensure post-event medical monitoring and care. |
| Res.C.1 4.3.5.2 | Conduct post-event analysis, including development and dissemination of lessons learned; revise plan as indicated. |
| Res.C.1 4.3.5.3 | Reestablish normal EMS operations. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| A State EMS personnel certification and licensure system that is modeled after the principles of the National EMS | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---|
| Education Agenda for the Future (and its five components) and NIMS is in place | |
| Written mutual aid protocols and procedures are developed | Yes/No |
| Sufficient certified/licensed career and/or volunteer EMS personnel are available to staff the current EMS system to meet an established community response time 24 hours per day, 7 days per week, and recall procedures are in place to summon off-duty personnel when needed | Yes/No; 24/7 EMS coverage and response consistent with established local response times |
| Sufficient numbers of ambulance transport and support vehicles are available to handle routine call volume 24/7 plus at least 30 percent spare vehicles maintained on an in-service basis (ie stocked and garaged) to support immediate surge needs (large cities only) | Yes/No; 24/7 EMS coverage and response consistent with established local response times |
| Frequency of exercises using scenarios that are based on a jurisdiction-specific risk vulnerability assessment and Homeland Security Exercise and Evaluation Program (HSEEP) guidelines | At least annually |
| Percentage of field responders and dispatchers who have received statewide training programs for dispatch, triage, treatment, and transport protocols and procedures | 80% of EMS field responders, 80% of dispatchers |
| EMS personnel participate on a regular basis with emergency management planning and operations | Yes/No |
| A jurisdiction-wide EMS data collection system that complies with the National EMS Information System (NEMSIS) version 2.0 or later is developed | Yes/No |
| Written protocols—approved by medical control—for EMS assessment, triage, transport, and tracking of patients during a catastrophic event are available | Yes/No |
| Written EMS dispatch procedures include the dispatch of personnel and equipment in the unique circumstances of a catastrophic event | Yes/No |
| Redundant public safety answering points (PSAPs) that comply with phase II Federal Communications Commission (FCC) requirements for cell phone access are available and are capable of handling a large volume of calls | Yes/No |
| The vehicle tracking system is consistent with a written infrastructure protection plan and NIMS resource typing | Yes/No |
| Written plans and procedures for coordination of the local EMS system with the National Disaster Medical System are available | Yes/No |
| Sufficient PPE is available for all EMS personnel who would respond to a catastrophic or routine incident (scenario- | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| specific) | |
| A NIMS-compliant plan that enables communicable disease first responders and receivers to understand their roles, responsibilities, and requirements when responding to a communicable disease outbreak is developed (scenario-specific) | Yes/No |
| A plan for prophylaxis and issuance of PPE to non-surge first responders and first receivers within 24 hours of a communicable disease outbreak, including the logistical chain to support this effort | Yes/No |
| A plan is developed that accounts for the multijurisdictional pre-hospital response to a catastrophic incident that considers mutual aid agreements and associated equipment, staff, and command and control, and nontraditional patient movement and transfers | Yes/No |
| Compatible communications equipment and communications radio frequency plans; common hospital diversion and bed capacity situational awareness at the local, State, and regional levels; and command and control dispatch procedures for task force operations are developed | Yes/No |
| A statewide interoperable patient tracking system that allows patient tracking from the first response site to a healthcare facility and allows data to be accessible among statewide users is developed | Yes/No |
| A plan to return to normal operations post-incident is in place | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Provide initial and ongoing triage of ill and injured patients that prioritizes treatment and transport and determines the medical facility destination appropriate for each patient's condition and the nature and magnitude of the incident | < 30 minutes |
| Ensure that ill and injured patients receive medical treatment appropriate to the incident by providing appropriately credentialed onscene medical personnel with medical oversight equal to 50 percent above the local jurisdictions peak shift normal staffing level | < 30 minutes |
| Transport patients in vehicles appropriate to each patient's conditions and the nature and magnitude of the incident | < 2 hours |
| Provide medical coordination of on-scene personnel as well as other health resources, including public health services, | Yes/No |

| Performance Measure | Performance Metric |
|--|--|
| hospitals, and healthcare providers | |
| Provide for the ongoing safety, health, and well-being of on-scene personnel | Yes/No |
| Ensure that sufficient and appropriate medical equipment and supplies, including PPE, are readily accessible by on-scene personnel | Yes/No |
| A patient tracking system that allows appropriate agencies access to patient locations is activated | Yes/No |
| Time to educate, administer prophylaxis/vaccination, and provide PPE to 100 percent of non-surge first responders/receivers (scenario specific) | Within 24 hours of a communicable disease outbreak |
| Time to educate, administer prophylaxis/vaccination, and provide PPE to 100 percent of all first responders/receivers (scenario specific) | Within 48 hours of a communicable disease outbreak |
| Abnormally large numbers of communicable disease patients (in addition to the jurisdictional norm) are handled (scenario-specific) | Yes/No |
| The pre-hospital system maintains the integrity and continuity to enable patient triage, treatment, and transport during a catastrophic incident | Yes/No |
| Medical dispatch is able to handle increased call volume | Yes/No |
| NIMS-compliant command and control at a mass casualty incident (MCI) is established | Yes/No |
| Primary and secondary communication links to medical command are established | Yes/No |
| Recall and Mutual aid agreements with State and local partners are executed | Yes/No |
| A data management system is operational | Yes/No |
| The EMS system is able to respond to increased demand during an incident | Yes/No |
| Critical incident stress management post-incident, both short term and long term, is available | Yes/No |
| Appropriate financial forms and information for reimbursement are available | Yes/No |

Capability Elements

Personnel (EMS)

- Emergency medical technicians (EMTs), registered nurses (RNs), doctors, and other healthcare professionals with appropriate credentials
- Medical oversight staff

Planning

- Triage protocols
- Transportation/transfer plans
- Patient care protocols
- Mutual aid agreements

Equipment and Systems

- Vaccines/prophylaxis
- Redundant communications
- Decontamination equipment
- Geographic information/routing systems
- Patient tracking information system
- Interoperable communications equipment
- Medical equipment and supplies, including antidotes for WMD substances, pain management supplies, trauma care supplies (including long boards and collars), and burn care supplies
- Personal Protective Equipment
- Transport equipment (e.g., air, ground), including spare emergency vehicles/ambulances (maintained in an in-service basis – stocked, fueled and garaged) and nontraditional transport vehicles
- Triage tags and support equipment (e.g., tarps, tracking boards, vests)

Training

- Medical/EMS training
- WMD treatment training
- Incident Command System (ICS) training
- National Incident Management System (NIMS) training

Planning Assumptions

General:

- The role of triage and pre hospital care during an incident will have a graded response depending on locality, demographics, type of incident and number of people effected. The primary role of the EMS and pre-hospital system during an incident is triage, treatment and transportation of patients to definitive care facilities. At any point of an incident or outbreak, there could be spikes or reductions in pre hospital needs. Therefore, assumptions and planning should consider overall response capabilities as opposed to numerics.

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- The national capacity requirement should focus on maintaining the integrity of the health care system and delivery of health care services to the general population. As the incident wears on through potential multiple phases, relief of medical staff will become necessary and the federal government may indeed be looked to provide relief. Given the fact that FEMA and HHS are in the process of developing federal medical contingency stations (FMCS), to provide help to state and local entities for these kinds of issues, it would be ideal to have these stations or equipment caches that make up a FMCS pre positioned across the country in strategically located areas.
 - An unknown percentage of EMS workers will become injured/ill during any given incident rendering them unavailable for duty.
 - Morbidity and mortality ratio will vary based upon type of agent, time, geography and available resources. Therefore, planning and preparedness activities should focus on reducing morbidity and mortality rates.
 - Non standard dispatch and triage criteria will need to be applied due huge demands on limited health care resources.
 - Special needs populations, i.e. pediatrics, geriatrics and the disabled, will need to be given particular consideration.
 - Information will need to be provided in multiple languages.
 - Public Health Emergency under HHS authority and a Stafford Act Emergency declaration will be declared in order to obtain needed federal resources.
 - Response to the demand for emergency medical services will require an altered standard approach to treatment and transport of injured or ill patients.
 - EMS Systems are functioning close to peak capacity at time of incident.
 - Professional responders and volunteers may fail to participate as expected due to dual roles in emergency care delivery and/or fear of the unknown.
 - It is assumed that EMS Systems will have education, licensure and credentialing systems in place consistent with national standards.
 - States will have in place trauma and triage protocols identifying transportation of large numbers of victims across regional and state boundaries to assure appropriate distribution of patients.
 - Local, regional and response agencies will have access to specialized medical resources from public/private sector agencies and academia.
 - EMS responders will have participated in multi-disciplinary exercises with state and local emergency management agencies, public health, hospitals, law enforcement and other related agencies.

Biological (Pandemic Influenza)

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- Pandemic is pervasive and not localized.
 - 50 percent of the transferring patient population (3,669) will require transfer during one two-month period; the other half (3,669) during a separate two-month period; averaging 61 patients per day; with surging to 200 patients per day for one week.
 - 10 percent of transferring patients (total of 733 patients over/during the entire scenario) could travel by commercial means sans medical attendance en route.
 - 50 percent are ambulatory (total 3,669) but require medical attendance en route at a rate of one EMS per 20 patients.
 - In support of the pre-hospital response to a biological incident, national capabilities should focus on a SNS stockpile, able to provide and deliver vaccines or prophylaxis to first responders/receivers/health care providers, general populace of effected communities, and then general populace. Additional pre-hospital considerations should include training and awareness programs with the assurance that pre hospital providers will have access to appropriate PPE.
 - Given the numbers of sick and dead in any given incident the local state and regional and federal response will be overwhelmed in a matter of days if not hours.
 - 500 cases per million population for patients with symptoms of acute infectious disease – especially smallpox, anthrax, plague, tularemia and influenza

Chemical:

- Given the numbers of exposed, injured and dead in any given incident the local state and regional and federal response will be overwhelmed in a matter of days if not hours
- 50 cases per million for patients with symptoms of acute botulinum intoxication or other acute chemical poisoning – especially that resulting from nerve agent exposure

Explosive:

- 50 cases per million population for patients suffering burn or trauma
- Most likely route of intoxication of a chemical expose in a mass exposure in a mass casualty event will be inhalation.
- There will be most likely a delay in the identification of the chemical.
- All chemicals are toxic depending on the concentration and time spent in that concentration.
- EMS will have inadequate decontamination capabilities.

Radiological/Nuclear:

- 50 cases per million population for patients manifesting the symptoms of radiation-induced injury – especially bone marrow suppression

- Triage will be a major issue for care providers.
- Decontamination and monitoring will be a major issue.
- As a rule of thumb, the sooner the onset of symptoms, the higher the dose received the less likely the victim will survive.
- Critical infrastructure and personnel will be damaged and rendered ineffective for a three mile radius.
- Tens of thousands will require decontamination and both short-term and long-term treatment.
- Emergency workers in the affected area will be overwhelmed.
- There will be a significant psychological impact on survivors creating long term mental health demands.
- The effects of the radiation will be prevalent for years creating long term health issues.
- Triage may identify a significant number of patients who have received lethal doses of radiation with zero chance of survivability who will require palliative care only.
- There is a lack of palliative care resources and planning for large numbers of victims.
- Assumption of victims per population may significantly depending on scenario, location, and nature of incident.

Planning Factors from an In-Depth Analysis of a Scenario(s) with Significant Demand for the Capability

| Event | Victims per Population | Duration of EMS role | Required Ambulances/ Other Transport* | EMS Personnel | Comments |
|--|--|----------------------|---|---------------------------------------|--|
| Biological – Communicable (plague, avian flu) | 20-30% of population | Days to months | 50% of sick population requires transport | 2 EMS personnel per transport vehicle | Numbers reflect 200 – 300 % increase in average daily activity |
| Biological – Non-communicable (anthrax – 330,000 exposures) | 4% of exposed become infected (13, 000 infected) | Days to weeks | 25% of infected population requires transport | 2 EMS personnel per transport vehicle | Majority of patient transports will occur in the first week. |
| Chemical | 100% of | Hours to | 25% of exposed | 2 EMS personnel | Majority of |

| Event | Victims per Population | Duration of EMS role | Required Ambulances/ Other Transport* | EMS Personnel | Comments |
|--|--|--|---|--|--|
| | exposed population | days | population Up to 75% of victims in a major incident will self-transport. | per transport vehicle; each ambulance transporting twice. On-scene: 1:4 ratio of personnel to patients | transports will be in the first hours |
| Explosive (may be multiple IEDs) | 100 fatalities 500 injured per each major IED | Hours | 50% of injured | 2 EMS personnel per transport vehicle (approx. 125 ambulances, each transporting twice). On-scene: 150 EMS personnel (1:4 ratio of personnel to patients) | Majority of transports will be in the first hours |
| Radiological Dispersion Device | 180 fatalities 270 injuries Up to 20,000 exposed/ potentially exposed | Hours | 50% of injured | 2 EMS personnel per transport vehicle (135 ambulances - each ambulance transporting only one patient due to decontamination requirements). On-scene: 135 EMS personnel (1:2 ratio of personnel to patients due to safety and logistic concerns) | Injuries include blast, burn, radiological exposure, and trauma. |
| Nuclear (10 kiloton) | Several hundred thousand over thousands of square miles | Hours to days due to logistical issues | Several hundred thousand | Only EMS personnel with specialized training and equipment can enter on-scene. EMS personnel receive decontaminated | Injuries include blast, burn, radiological exposure, and trauma. |

| Event | Victims per Population | Duration of EMS role | Required Ambulances/ Other Transport* | EMS Personnel | Comments |
|-------|------------------------|----------------------|---------------------------------------|--|----------|
| | | | | victims. 10s of 1000s EMS personnel. | |

Linked Capabilities

- Communications
- Community Preparedness and Participation
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Epidemiological Surveillance and Investigation
- Explosive Device Response Operations
- Fatality Management
- Isolation and Quarantine
- Law Enforcement Investigation and Operations
- Mass Care (Sheltering, Feeding, and Related Services)
- Medical Supplies Management and Distribution
- Medical Surge
- Onsite Incident Management
- Planning
- Public Health Laboratory Testing
- Responder Safety and Health
- Risk Management
- Triage and Pre-Hospital Treatment
- Urban Search and Rescue
- WMD/Hazardous Materials Response and Decontamination

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MEDICAL SURGE

Capability Definition

Medical Surge is the capability to rapidly expand the capacity of the existing healthcare system in order to provide triage and then to provide medical care. This includes providing definitive care to individuals at the appropriate clinical level of care, within sufficient time to achieve recovery and minimize medical complications. The capability applies to an event resulting in a number or type of patients that overwhelm the day-to-day acute-care medical capacity. Medical Surge is defined as rapid expansion of the capacity of the existing healthcare system in response to an event that results in increased need of personnel (clinical and non-clinical), support functions (laboratories and radiological), physical space (beds, alternate care facilities) and logistical support (clinical and non-clinical equipment and supplies).

Outcome

Injured or ill from the initial event are cared for and new cases that arise from initial illness or injury and new illnesses or injuries or exacerbation of pre-existing illness or injury due to disease, contamination or injury including exposure from communicable diseases and/or injuries which are secondary to the primary event are minimized. The at-risk population receives the appropriate protection (countermeasures) and treatment in a timely manner.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function:

- (ESF) #8: Public Health and Medical Services.

Capability Description

| Activity | Description |
|------------------------|--|
| Patient care | <ul style="list-style-type: none"> ▪ Triage, to include recognition of symptoms ▪ Treatment including provision of a medical screening, examination, and appropriate outpatient or inpatient care ▪ Patient movement ▪ Victim registry/patient tracking (to include medical monitoring) ▪ Decontamination ▪ Postmortem care and disposition ▪ Special needs populations ▪ Long-term care. |
| Training and education | <ul style="list-style-type: none"> ▪ Training and event-specific risk communication (provider and public in conjunction with public health officials) ▪ Public health education on aspects of self-care ▪ Training and education regarding worker safety ▪ Training in symptom recognition, identification, and treatment. ▪ CBRNE (chemical, biological, radiological, nuclear, and explosive) training for all healthcare providers |

| Activity | Description |
|----------------------|---|
| | <ul style="list-style-type: none"> ▪ Training non-specialists and staff in non-trauma hospitals to be prepared to accept trauma or special (burn, pediatric, etc.) cases that are beyond the capacity of the special centers or that self deliver to a non-trauma center hospital. ▪ Training for paraprofessionals to provide behavioral health services. ▪ Re-emphasis on training for injuries/illness related to “Natural Disasters” |
| Resource management | <ul style="list-style-type: none"> ▪ Logistics (supply/resupply, utilities, equipment, mass distribution plans for prophylaxis) ▪ Management of medical resources (prioritization of use, communication, information technology (IT)) ▪ Specialty beds, equipment, and staff ▪ Coordination and management (including verification of credentials) of healthcare professionals/volunteers working in private healthcare systems ▪ Clinical labs have to report syndromic and diagnostic data to the Public Health Lab Network. ▪ Surge personnel from outside the affected area |
| Hazards mitigation | <ul style="list-style-type: none"> ▪ Management of medical waste ▪ Decontamination ▪ Personal protective equipment (PPE) ▪ Implementation of infection control precautions (to include isolation and quarantine) ▪ Epidemiological surveillance of initial and subsequent hazards arising from or as a consequence to the initial event. |
| Coordination | <ul style="list-style-type: none"> ▪ Security ▪ Local and State emergency operations centers ▪ Local and regional healthcare facilities ▪ Mass care shelters ▪ Special needs shelters |
| Financial management | <ul style="list-style-type: none"> ▪ Establishment of an expense tracking system |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Res.B.1 3 | Activate an incident command system (ICS). |
| Res.B.2 1.2.2.1 | Establish criteria for patient decontamination that fully considers the safety of emergency medical services (EMS) personnel and hospital-based first responders, knowing that up to 80% of all victims will self-refer to the nearest hospital. |

| UTL# | Task |
|--------------------|--|
| Res.B.2 5.5.6 | Implement plans, procedures, and protocols to ensure individual gross decontamination of persons prior to admittance to shelters and other mass care facilities, medical and alternate care facilities, reception centers, and other places as needed. |
| Res.B.5 4.2.2.3 | Disseminate public health and safety information to the public to improve provision of home healthcare. |
| Res. C.1 1.1.3.4 | Establish a system including facilities that have been identified to deal with burns and other specialized medical injuries. |
| Res. C.1 1.2.3.1.1 | Provide post-hospitalization regulating and mass movement of patients that matches needy patients with transportation assets and available definitive care. |
| Res.C.1 1.2.3.1.2 | Enhance emergency system patient transport and tracking systems. |
| Res.C.1 3 | Provide coordination and support through the ICS for providing medical care. |
| Res.C.1 3.1.2.2 | Ensure that comprehensive stress management strategies and programs are in place and operational for all emergency responders and workers. |
| Res.C.1 3.3.1 | Coordinate with State, Tribal, and local medical, mental health, substance abuse, public health, and private sector officials to determine current assistance requirements. |
| Res.C.1 3.3.3.2 | Activate procedures for altered nursing and medical care standards. |
| Res.C.1 3.3.3.6 | Support medical surge capability by using volunteer resources. |
| Res.C.1 3.3.4.1 | Establish alternate emergency care sites and overflow emergency medical care facilities to manage hospital surge capacity. |
| Res.C.1 3.3.4.4 | Provide medical equipment and supplies in support of immediate medical response operations and for restocking supplies/equipment requested. |
| Res.C.1 3.4.3 | Coordinate public health and medical services among those people who have been isolated or quarantined. |
| Res.C.1 3.4.8 | Identify local, state and region mental health and substance abuse professionals or paraprofessionals by survey and needs assessment and integrate them within the response planning. |
| Res.C.1 4.1.7 | Provide emergency medical and dental care. |
| Res.C.1 4.2.2 | Activate healthcare workers' and volunteers' call systems. |
| Res.C.1 4.2.4 | Mobilize burn/trauma/pediatric healthcare specialists. |
| Res.C.1 4.3.3.2 | Provide accurate and relevant public health and medical information to clinicians, other responders, and the public in a timely manner. |

| UTL# | Task |
|-----------------|---|
| Res.C.3 1.4 | Implement medical surge plans, procedures, and protocols for special needs populations. |
| Rec.A.1 1.4.4 | Develop and execute medical mutual aid agreements. |
| Rec.A.1 1.4.5.4 | Execute medical mutual aid agreements. |
| Rec.A.1 3.1.1 | Provide long-term mental health and substance abuse behavioral health services to the community. |
| Rec.A.1 3.1.1.2 | Provide counseling support. |
| Rec.A.1 3.1.1.3 | Provide family support services. |
| Rec.A.1 3.1.1.4 | Provide worker crisis counseling and mental health and substance abuse behavioral health support. |
| Rec.A.1 3.1.1.5 | Mobilize mental health specialists for pediatrics. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| <p>Triage treatment and initial stabilization can be conducted for the following classes of patients within three hours of an emergency:</p> <ul style="list-style-type: none"> ▪ 500 cases per million population for patients with symptoms of acute infectious disease – especially smallpox, anthrax, plague, tularemia and influenza; ▪ 50 cases per million population for patients with symptoms of acute botulinum intoxication or other acute chemical poisoning – especially that resulting from nerve agent exposure; ▪ 50 cases per million population for patients suffering burn or trauma; and ▪ 50 cases per million populations for patients manifesting the symptoms of radiation-induced injury – especially bone marrow suppression | Yes/No |
| <p>A 50-bed nursing subunit can be staffed for 12 hours with:</p> <ul style="list-style-type: none"> (1) Physician (1) Physician’s assistant (PA) or nurse practitioner (NP) (physician extenders) (6) RNs or a mix of RNs and licensed practical nurses (LPN) (4) Nursing assistants/nursing support technicians (2) Medical clerks (unit secretaries) | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---|
| <p>hospitals do redesigns</p> <p>(3) Provision for shower heads supplied with warm clean water, sufficient in number to manage the planning volumes</p> <p>(4) Gender and privacy concern</p> <p>(5) Capability to separate, isolate, and secure personal property for later decontamination</p> <p>(6) Provision of supplies (for example, containers and name tags) and procedures for separately securing personal clothing and valuables and a process that allows valuables to be matched back with the patient</p> <p>(7) Provision of clothing for persons to wear following the decontamination</p> | <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p> |
| Secure and redundant communications system that ensure connectivity during a terrorist incident or other public health emergency between health care facilities and state and local health departments, emergency medical services, emergency management agencies, public safety agencies, neighboring jurisdictions and federal public health officials have been established | Yes/No |
| Hospitals are utilizing competency-based education and training programs for adult and pediatric pre-hospital, hospital, and outpatient health care personnel responding to a terrorist incident or other public health emergency | Yes/No |

Preparedness Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Medical surge plans have been developed | Yes/No |
| Personnel (option 2): ratio based on the number of surge beds needed and the predefined patient:staff ratios that exist (if any). The minimal number of staff providing direct patient care on the 50-bed nursing subunit per 12-hour shift is 12, which includes the physician, the physician extenders, nurses, and nursing assistants (ACC CONOPS) | <ul style="list-style-type: none"> ▪ State A: population—5,595,211; surge beds—2,798; healthcare personnel (1:4)—2,938; healthcare personnel (1:6)—1,958 ▪ State B: population—11,353,140; surge beds—5,677; |

| Performance Measure | Performance Metric |
|---|--|
| | <p>healthcare personnel (1:4)—5,960; healthcare personnel (1:6)—3,974</p> <ul style="list-style-type: none"> State C: population—20,851,820; surge beds—10,426; healthcare personnel (1:4)—10,947; healthcare personnel (1:6)—7,298 |
| Isolation capacity (for contagious biological events) | <ul style="list-style-type: none"> Ensure that all hospitals have the capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease (e.g., smallpox, pneumonic plague, SARS, influenza, hemorrhagic fevers) or a febrile patient with a suspect rash or other symptoms of concern who might be developing a highly communicable disease. Identify at least one regional healthcare facility, in each defined region, that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative pressure isolation within 3 hours of the event. |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Patients and responders are identified, screened, and monitored after an event | Yes/No |
| Personnel are available to augment treatment facilities | Yes/No |
| Protocols for the set up, staffing and operation of alternate care facilities are established and implemented in the event | Yes/No |
| Adequate supplies, pharmaceuticals, and equipment are available to support facility surge capacity | Yes/No |
| Patients are successfully tracked | Yes/No |

| Performance Measure | Performance Metric |
|--|--------------------|
| Policies for security of facility and its perimeter are implemented in the event | Yes/No |
| The percentage of staff at risk who are protected by appropriate PPE | 100% |
| Mass decontamination is performed at the healthcare facility | Yes/No |
| Percentage of the population receiving definitive medical care that recovers from injuries over time | Incident Dependant |
| Percentage of hospitals that are available to support the incident | 100% |
| Timely public health information is disseminated to improve provision of home healthcare | Yes/No |
| Adequate resources are available to provide post-hospitalization regulating and mass movement/transfer of patients | Yes/No |

Capability Elements

Personnel

- Hospital Administrators
- Physicians
- Physician's assistant (PA) or nurse practitioner (NP) (physician extenders)
- Nurses (registered nurses (RNs) or a mix of RNs and licensed practical nurses (LPN))
- Nursing assistants/nursing support technicians
- Pharmacists
- Pharmacy Technicians
- Medical clerks (unit secretaries)
- Respiratory therapist (RT)
- Radiology Technicians
- Laboratory Technicians
- Phlebotomists
- Physical Therapists
- Dietitians/Food Service
- Case manager
- Social worker
- Behavioral Health Specialists (paraprofessionals and professionals)
- Housekeepers
- Patient transporters
- Hospital Security
- Veterinarians

- Dentists
- Morticians

Planning

- Beds to be provided for patients who require hospitalization within 3 hours of a terrorism incident or other public health emergency
- Establishment of alternate care facilities capable of providing acute care needs and short term stabilization prior to transfer to established definitive care facility
- Isolation capacity to maintain suspected cases of a highly infectious disease
- Pharmaceutical caches to provide prophylaxis to hospital personnel, first responders, and their family members

Equipment and Systems

- Personal Protective Equipment for healthcare personnel
- Decontamination equipment (ASTM Standard E 2413)
- Communications and IT, allowing a secure and redundant communications system

Training and Education

- Competency-based education and training programs for healthcare personnel responding to a terrorist incident, natural disaster, or other public health emergency

Planning Assumptions

General

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Pandemic Influenza scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This Capability applies to a wide range of incidents and emergencies including accidental or deliberate disease outbreaks, natural disasters, nuclear and conventional events.
- The professionals listed in the following have basic skill sets commensurate with their professional training and experience qualified by professional licensure and/or industry standards.
- There will be a significant problem locating displaced family members as well as victims at treatment facilities.
- Emergency Response Plans are activated.
- Public Health Emergency and Stafford declaration will be utilized to enable the Secretary of the Department of Health and Human Services (HHS) to invoke Emergency Hiring Authority and additional resources for additional healthcare assets.
- Response to the overwhelming demand for services will require non-standard (Altered Standards of Care) approaches, including: Discharge of all but critically ill hospital patients. Expansion of hospital “capacity” by using all available space. Less than code compliance beds. Relaxation of practitioner licensure requirements as deemed appropriate. Utilization of general purpose and special needs shelters as temporary health facilities.
- Secondary bacterial infections following any mass casualty event will stress antibiotic supplies.

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- There will be critical shortages of health care resources such as staff, hospital beds, mechanical ventilators, morgue capacity, temporary holding sites with refrigeration for storage of bodies and other resources.
 - Routine medical admissions for acute medical and trauma needs will continue.
 - Alternate healthcare facility plans are implemented.
 - Emergency Use Authorities will be sought.
 - Victims and Responder monitoring and treatment may be required over a long time frame.
 - There may be a denigration of Healthcare Staff numbers for a variety of causes.
 - A large number (75 percent plus) of victims will self present without field triage or evaluation.
 - The “normal” supply chain may be disrupted.
 - Hospital logistical stores will be depleted in the early hours of any large scale event.
 - There will be a significant increase and demand for specialty healthcare personnel and beds (biological contagious, burn, trauma, pediatrics) depending of the specific event.
 - Healthcare providers are subject to the affects of disasters and may need decontamination and prophylaxis measures before being able to perform their response roles.

Pandemic Influenza:

- Pandemic is pervasive and not localized.
- Worst case scenario would produce 733,000 patients hospitalized on any given day.
- Up to 20 percent of those hospitalized (146,600 patients) are critical and will each require a critical care bed, mechanical ventilation; necessitating staff to patient ratios of 1:2 registered nurses (RN) (73,300 RNs), 1:10 physicians (14,660 MDs); 1:5 respiratory therapists (29,320 RTs).
- 80 percent of those hospitalized (586,400 patients) are non-critical and necessitate a general medical bed, patient to staff ratios of 1:40 physician (14,660 MDs) and 1:20 RN (29,320 RNs).
- Vaccine availability will be insufficient and time to produce additional vaccine unacceptably long.
- Antiviral drug production will be surged.
- Strategic National Stockpile (SNS) will be depleted.
- 42 million Out Patient visits were provided with antivirals; antipyretics; analgesics
- 50 million at home on self care are on over-the-counter (OTC) only.
- 1 percent of the hospitalized patient population (7,338) warrant transfer from one healthcare facility to another more than 100 miles.
- 50 percent of the transferring patient population (3,669) will require transfer during one two-month period; the other half (3,669) during a separate two-month period; averaging 61 patients per day, with surging to 200 patients per day for one week.
- 10 percent of transferring patients (total of 733 patients over/during the entire scenario) could travel by commercial means sans medical attendance en route.

-
- 50 percent are ambulatory (total 3,669) but require medical attendance en route at a rate of 1 nurse per 50 patients.
 - 40 percent are restricted to litters (total 2,936) and require medical attendance at a rate of 1 nurse per 20 patients.
 - 50 percent of litter patients are critical and require ventilation and 1 nurse per patient (1,468).
 - Because of the limited supply and production capacity, there is a need for explicit prioritization of influenza vaccine based on the risk of influenza complications, the likelihood of benefit from vaccination, role as an influenza pandemic responder, and impact of the pandemic on maintenance of critical infrastructure.
 - Persons of all ages will likely need 2 doses of vaccine, 3-4 weeks apart in order to be protected.

Chemical:

- Most likely route of introduction of a chemical exposure in a mass casualty event will be inhalation.
- There will most likely be a delay in the identification of the chemical.
- All chemicals are toxic depending on the concentration and time spent in that concentration.
- Medical treatment facilities have inadequate decontamination capabilities.

Nuclear Detonation:

- Triage will be a major issue for care providers.
 - Decontamination and monitoring will be a major issue.
 - As a rule of thumb, the sooner the onset of symptoms and the higher the dose received the less likely the victim will survive.
 - Generally, invasive (open) procedures should be performed within the first forty-eight hours (48) in those receiving significant doses of radiation exposure due to immunocompromise.
 - Critical infrastructure and personnel will be damaged and rendered ineffective for a three mile radius.
 - Tens of thousands will require decontamination and both short-term and long-term treatment.
 - The evacuated population will require shelter and food for an indefinite time.
 - Healthcare facilities and emergency workers in the affected area will be overwhelmed.
 - There will be a significant psychological impact on survivors creating long term mental health demands.
 - The effects of the radiation will be prevalent for years creating long term health issues.
 - Healthcare facilities involved in the affected area will have to be replaced and relocated.
 - Triage may identify a significant number of patients who have received lethal doses of radiation with zero chance of survivability who will require palliative care only.
 - There is a lack of palliative care resources and planning for large numbers of victims.
 - Timely and accurate emergency public health information / crisis information news releases are vital for mitigation and prevention of further health issues.
-

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Pandemic Influenza)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed <i>(Note: to completely mitigate scenario volume)</i> |
|---|--|-----------------------------|--|
| Beds | | | <p>Provide triage treatment and initial stabilization above the current daily staffed bed capacity for the following classes of adult and pediatric patients requiring hospitalization within 3 hours in the wake of a terrorism incident or other public health emergency:</p> <ul style="list-style-type: none"> ▪ 500 cases per million population for patients with symptoms of acute infectious disease—especially smallpox, anthrax, plague, tularemia and influenza ▪ 50 cases per million population for patients with symptoms of acute botulinum intoxication or other acute chemical poisoning—especially that resulting from nerve agent exposure ▪ 50 cases per million population for patients suffering from burns or other trauma ▪ 50 cases per million population for patients manifesting the symptoms of radiation-induced injury—especially bone marrow suppression |
| Personnel (option 1): the concept of operations for the acute care center | Suggested minimal staffing per 12-hour shift for a 50-bed nursing subunit follows: | | <ul style="list-style-type: none"> ▪ 1 physician ▪ 1 physician assistant (PA) or nurse practitioner (NP) (physician extenders) ▪ 6 registered nurses (RNs) or a mix of RNs and licensed practical nurses (LPNs) ▪ 4 nursing assistants/nursing support technicians ▪ Medical clerks (unit secretaries) ▪ Respiratory therapist (RT) ▪ Case manager ▪ Social worker ▪ Housekeepers ▪ 1 patient transporter |
| Pharmaceutical caches | | | Establish a regional system that ensures a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days to hospital |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed <i>(Note: to completely mitigate scenario volume)</i> |
|--|--------------------|-----------------------------|--|
| | | | personnel (medical and ancillary staff) and their family members and hospital-based emergency first responders and their families in the wake of a terrorist-induced outbreak of anthrax or other disease for which such countermeasures are appropriate. |
| Personal protective equipment (PPE) | | | Ensure adequate PPE (to include prophylaxes) to protect current and additional healthcare personnel during an incident. The quantity and type of PPE will be established based on a hazardous vulnerability analysis (HVA) and the level of decontamination that is being designed. |
| Decontamination (ASTM International Standard E 2413) | | | <ul style="list-style-type: none"> ▪ A community must be able to provide decontamination to 500 persons per million population in 3 hours. This should allow hospitals to plan for one set of equipment that would serve ambulatory patients (a showering setup), and one set of equipment that would decontaminate nonambulatory patients (two at a time, washed about 5 minutes a piece) but could be adapted if all persons are ambulatory. ▪ Communities must make four hospital employees available 24 hours a day to use level C protection to decontaminate patients who are grossly contaminated. |
| Communications and information technology | | | <ul style="list-style-type: none"> ▪ Establish a secure and redundant communications system that ensures connectivity during a terrorist incident or other public health emergency among healthcare facilities and State and local health departments, emergency medical services (EMS), emergency management agencies, public safety agencies, neighboring jurisdictions, and Federal public health officials. ▪ Enhance the capability of rural and urban hospitals, clinics, EMS systems, and poison control centers to report syndrome-related and diagnostic data that is suggestive of terrorism or a highly |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed <i>(Note: to completely mitigate scenario volume)</i> |
|------------------------|--------------------|-----------------------------|---|
| | | | infectious disease to local and State health departments on a 24/7 basis. |
| Training and education | | | Awardees will use competency-based education and training programs for adult and pediatric pre-hospital, hospital, and outpatient healthcare personnel responding to a terrorist incident or public health emergency. |

Approaches for Large-Scale Events

None specified.

National Targets and Assigned Levels

- The metrics set forth below are from the cooperative agreement guidance of the Health Resources and Services Administration’s (HRSA’s) National Bioterrorism Hospital Preparedness Program (NBHPP) and are for the express purpose of planning.
- All incidents are local and initially will be managed locally. All States have been charged through the NBHPP cooperative agreement to plan based on hazard vulnerability analyses that have been done in their States.
- It should be noted that because these are *planning* level requirements, these numbers have not been validated or proven to be realistic but serve as a starting point from which to plan.

| Resource | Assigned Level and Quantity |
|---|---|
| Beds | <p>Provide triage treatment and initial stabilization above the current daily bed capacity for the following classes of adult and pediatric patients requiring hospitalization within 3 hours in the wake of a terrorism incident or public health emergency:</p> <ul style="list-style-type: none"> ▪ 500 cases per million population for patients with symptoms of acute infectious disease—especially smallpox, anthrax, plague, tularemia, and influenza ▪ 50 cases per million population for patients with symptoms of acute botulinum intoxication or other acute chemical poisoning—especially that resulting from nerve agent exposure ▪ 50 cases per million population for patients suffering from burns or other trauma ▪ 50 cases per million population for patients manifesting the symptoms of radiation-induced injury—especially bone marrow suppression |
| Personnel (option 1): the concept of | <ul style="list-style-type: none"> ▪ 1 physician |

| Resource | Assigned Level and Quantity |
|--|--|
| operations for the acute care center | <ul style="list-style-type: none"> ▪ 1 PA or NP ▪ 6 RNs or a mix of RNs and LPNs ▪ 4 nursing assistants/nursing support technicians ▪ 2 medical clerks (unit secretaries) ▪ 1 RT ▪ 1 case manager ▪ 1 social worker ▪ 1 housekeeper ▪ 1 patient transporter |
| Personnel (option 2): ratio based on the number of surge beds needed and the predefined patient:staff ratios that exist (if any) | <ul style="list-style-type: none"> ▪ State A: population—5,595,211; surge beds—2,798; healthcare personnel (1:4)—2,938; healthcare personnel (1:6)—1,958 ▪ State B: population—11,353,140; surge beds—5,677; healthcare personnel (1:4)—5,960, healthcare personnel (1:6)—3,974 ▪ State C: population—20,851,820; surge beds—10,426; healthcare personnel (1:4)—10,947; healthcare personnel (1:6)—7,298 |
| Isolation capacity | <ul style="list-style-type: none"> ▪ Ensure that all hospitals have the capacity to maintain, in negative-pressure isolation, at least one suspected case of a highly infectious disease (e.g., smallpox, pneumonic plague, SARS, influenza, hemorrhagic fevers) or a febrile patient with a suspect rash or other symptoms of concern who might be developing a highly communicable disease. ▪ Identify at least one regional healthcare facility in each defined region that is able to support the initial evaluation and treatment of at least 10 adult and pediatric patients at a time in negative-pressure isolation within 3 hours of the event. |
| Pharmaceutical caches | Establish a regional system that ensures a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days to hospital personnel (medical and ancillary staff) and their family members and hospital-based emergency first responders and their families in the wake of a terrorist-induced outbreak of anthrax or other disease for which such countermeasures are appropriate. |
| Personal protective equipment (PPE) | Ensure adequate PPE to protect current and additional healthcare personnel during an incident. The quantity and type of PPE will be established based on an HVA and the level of decontamination that is being designed. |
| Decontamination (ASTM International) | <ul style="list-style-type: none"> ▪ A community must be able to provide decontamination to 500 persons per million population in 3 hours. This should allow hospitals to plan |

| Resource | Assigned Level and Quantity |
|---|---|
| Standard E 2413) | <p>for one set of equipment that would serve ambulatory patients (a showering setup) and one set of equipment that would decontaminate nonambulatory patients (two at a time, washed about 5 minutes each) but could be adapted if all persons are ambulatory.</p> <ul style="list-style-type: none"> ▪ Communities must make four hospital employees available 24 hours a day to use level C protection to decontaminate patients who are grossly contaminated. |
| Communications and information technology | <ul style="list-style-type: none"> ▪ Establish a secure and redundant communications system that ensures connectivity during a terrorist incident or public health emergency among healthcare facilities and State and local health departments, EMS, emergency management agencies, public safety agencies, neighboring jurisdictions, and Federal public health officials. ▪ Enhance the capability of rural and urban hospitals, clinics, EMS systems, and poison control centers to report syndrome-related and diagnostic data that are suggestive of terrorism or a highly infectious disease to their associated local and State health departments on a 24/7 basis. |
| Training and education | Use competency-based education and training programs for adult and pediatric pre-hospital, hospital, and outpatient healthcare personnel responding to a terrorist incident or public health emergency. |

Linked Capabilities

- Animal Health Emergency Support
- CBRNE Detection
- Communications
- Community Preparedness and Participation
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Epidemiological Surveillance and Investigation
- Fatality Management
- Isolation and Quarantine
- Law Enforcement Investigations and Operations (Evidence collection)
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Planning
- Public Health Laboratory Testing
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Structural Damage and Mitigation Assessment
- Triage and Pre-Hospital Treatment
- Volunteer Management and Donations

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MEDICAL SUPPLIES MANAGEMENT AND DISTRIBUTION

Capability Definition

Medical Supplies Management and Distribution is the capability to procure and maintain pharmaceuticals and medical materials prior to an incident and to transport, distribute, and track these materials during an incident.

Outcome

Critical medical supplies and equipment are appropriately secured, managed, distributed and restocked in a timeframe appropriate to the incident.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF #1: Transportation
- ESF #2: Communications
- ESF #5: Emergency Management
- ESF #7: Resource Support
- ESF #8: Public Health and Medical Services
- ESF #13: Public Safety and Security
- ESF #14: Long-Term Community Recovery and Mitigation
- ESF #15: External Affairs

Capability Description

| Activity | Description |
|--|--|
| Estimate Stockpile Requirements | Estimate medical material required for all hazards response, with the help of subject matter experts (SMEs) who can use various means, including modeling tools. |
| Stockpile/Inventory Acquisition and Management | <ul style="list-style-type: none"> ▪ Develop materiel acquisition and life cycle management strategies to optimize response capability and funding. ▪ Maintain capability to respond with initial “Push Packages” and follow on material tailored to specific events. ▪ Plan and establish supply chain(s) and maintain capability to respond to stakeholder requests, track materiel while in transit and validate receipt. ▪ Acquire pharmaceuticals and other medical materiel and manage through stockpiles maintained by federal, state or local authority, or in manufacturer and distributor inventory in connection with government contracts. ▪ Ensure access of all stockpile/inventory assets to a nation-wide storage and distribution network. |

| Activity | Description |
|--|---|
| Coordination of stockpile delivery and transfer to state | Personnel deployed at the same time as stockpile assets to coordinate with state and local officials so that stockpile assets can be efficiently received and distributed upon arrival at the site. |
| Transportation | Maintain dedicated transport fleet or relations with contract transport organizations with contingency plans for disruption of transportation modes (e.g. highway infrastructure breakdown, restricted or denied access to airways). |
| Alternative Sources Of Supplies And Pharmaceuticals | <ul style="list-style-type: none"> ▪ Maintain up-to-date knowledge of potential alternate sources of pharmaceuticals and medical products as well as points of contact should stockpiled resources prove inadequate. ▪ Establish and maintain memorandum of understanding (MOU) with production entities planning for surge capacity production if existing resources prove inadequate for an incident. |
| Asset Security | <ul style="list-style-type: none"> ▪ Securely store and handle all stockpiled materials under appropriate conditions that will maintain their stability integrity and effectiveness while providing appropriate levels of physical security for all materials and facilities. ▪ Provide appropriate physical security and security personnel during transport while assets are under both federal control and state/local control. ▪ Ensure proper credentialing of all personnel involved in the acquisition, maintenance, delivery and distribution of medical assets. |
| Hazardous Waste Disposal | <ul style="list-style-type: none"> ▪ Develop and execute a plan to promptly secure and properly dispose of hazardous waste materials associated with large scale use of medical materials in order to minimize the possibility of personal injury or supply cross-contamination. |

Critical Tasks

| UTL# | Task |
|-------------------|--|
| Res.B.1 1.3 | Identify, type, and inventory resources by material or services provided. |
| Res.B.1 1.3.4 | Inventory and categorize, by material or services provided, facilities, equipment, personnel, and systems available to support emergency operations. |
| Res.B.1 1.3.4.2.1 | Determine the availability of and provide supplies stocked in distribution facilities, national stockpiles, and customer supply centers. |
| Res.B.1 1.3.4.4 | Identify private vendors and suppliers to fill resource gaps. |

| UTL# | Task |
|-------------------|--|
| Res.B.1 5.5.3 | Support incident response operations. |
| Res.B.1 6.4.2 | Allocate, mobilize, and manage resources. |
| Res.B.1 6.4.2.1.2 | Coordinate and obtain external resources for sustained operations. |
| Res.B.1 6.4.2.1.3 | Prioritize use of supplies. |
| Res.B.1 6.4.2.1.6 | Coordinate distribution of stockpile assets. |
| Res.B.1 6.4.2.3 | Provide logistics support. |
| Res.B.1 6.4.2.3.3 | Process and manage requests for additional personnel or equipment. |
| Res.B.1 6.4.5 | Provide for financial management and reimbursement. |
| Res.B.2 2.5.1 | Support training on various types and models of equipment likely to be used in an emergency situation through government grants and industry-sponsored workshops. |
| Res.C.1 1.2.3.2.2 | Develop plans for establishing staging areas for internal and external response personnel, equipment, and supplies. |
| Res.C.1 3.3.4.4 | Provide medical equipment and supplies to support immediate medical response operations and to restock medical equipment and supplies as requested. |
| Res.C.1 3.4.4.2 | Ensure the timely provision of equipment and materials to shelters and mass care and medical facilities. (Note: This task needs to treat provision of personnel as a separate task because personnel and supplies are handled separately.) |
| Res.C.1 3.4.4.3 | Provide physical security, security personnel and credentialing to adequately safeguard the medical material assets at storage locations whether maintained by federal, state, local or private/commercial entities. |
| Res.C.1 3.4.4.4 | Provide physical security, security personnel and credentialing to adequately safeguard the medical material assets while in transit with federal, state, local or private/commercial entities. |

| UTL# | Task |
|-----------------|--|
| Res.C.2 1.2.5 | Establish strategies for transporting materials through restricted areas, quarantine lines, law enforcement checkpoints, and so forth that are agreed upon by all affected parties. |
| Res.C.2 2.1 | Establish and regularly exercise plans for transporting medical material assets at the Federal, State, local, and private/commercial levels with specific focus on their transfer between various levels or organizations. |
| Rec.C.3 5.1.1.5 | Provide and coordinate the use of emergency power generation services at critical facilities. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|--------------------------------|
| Emergency public health and medical material distribution plans are in place | Yes/No |
| A hazard-specific response plan that identifies and prioritizes resource needs is in place | Yes/No |
| Plans for the procurement, rotation and maintenance of federal, state, local stockpiled assets or private/commercial inventories are implemented | Yes/No |
| Medical treatment facilities and state, county and local governments have preplanned worst case scenario orders in place with the medical distributors and review and update regularly. Pre-planned orders should reflect differing needs for various possible scenarios (chemical, biological attacks, natural disaster) | Review and update semiannually |
| Medical treatment facilities and state, county and local governments have plans to consult local and regional sources of potential medical supplies and pharmaceuticals to lower dependency on federal assets | Yes/No |
| Plans for assuring physical security of medical materiel in transport and distribution are in place | Yes/No |
| Plans and procedures summarized above are used to train emergency coordinators in National Incident Management System (NIMS) compliant exercises | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|----------------------------|
| Distributors have plans to identify potential sources of excess in their supply chains that might be diverted to higher need locations | Yes/No |
| Manufacturers have MOUs to determine collective inventory accessibility and to ramp up manufacturing capability as needed | Yes/No |
| Plans and procedures are appropriately tested to assure that they are understood in NIMS compliant exercises | Tested annually |
| The federal government receives updates from distributors and manufacturers on the status of critical items that would prove necessary in a large scale incident with the focus on likely shortage situations | Updates due quarterly |
| Medical supplies, equipment and pharmaceutical manufacturers and distributors work in conjunction with the government to maintain increased inventory levels of critical items | Yes/No |
| Stockpile includes supplies and pharmaceuticals for special populations (i.e. pediatrics and geriatrics) | Yes/No |
| Alternate sources of pharmaceuticals and medical supplies identified and updated periodically | Updates at least quarterly |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--------------------|
| Time to request Strategic National Stockpile (SNS) following medical surveillance indication | 6 hours |
| Time from approved request for federal medical assets to activation and full staffing of RSS (Receipt, Staging and Storage) site | 6 hours |
| Time for deployment of supplies from local sources from request to arrival of supplies (to be used while waiting for state/federal assets to arrive) | 2 hours |
| Time from approved request of SNS support to delivery of first medical assets | 12 hours |
| Follow-on medical assets from SNS to be delivered on demand based on availability and need following approval of request | 12 – 36 hours |
| Medical supplies and pharmaceuticals, regardless of source, were properly maintained and arrived in undamaged, | Yes/No |

| Performance Measure | Performance Metric |
|---|--------------------|
| serviceable condition, within the expiration date on each bottle/case/vial | |
| Appropriate security (e.g., U.S. Marshals, State Troopers, County Sheriff, City Police) and credentialing provided at all steps of transportation of pharmaceuticals and supplies | Yes/No |

Capability Elements

Personnel

- Drivers/pilots to transport people and supplies
- Delivery personnel to load and unload supplies
- Manufacturers and distributors of medical devices who have their own transportation and delivery systems
- Planning and coordination personnel
- Security personnel
- Transportation coordinator (in the Emergency Operations Center (EOC))

Organization and Leadership

- Incident Management Team to provide policies, directives, procedures, and plans for response activities
- Stockpile Content Management Group to determine what is required in the various stockpiles or needs to be supplemented in the existing supply chain

Equipment and Systems

- Critical medical supplies
- Supply chain transportation equipment (e.g., trucks, airplanes, trains)
- Warehouses and associated equipment (e.g., forklifts, inventory tracking system)
- Medical supplies stockpiles
- Personal protective equipment (PPE)
- Interoperable communications equipment for all concerned with the supply chain
- National tracking system to capture all resources available
- Long-term stockpile storage facility
- Federal mobilization base camp
- State staging area

Exercises, Evaluations, After Actions

- Exercises that address how to manage and distribute medical supplies

Planning Assumptions

- Although this capability was originally designed around the pandemic flu scenario, the components listed are globally applicable to any of the scenarios. To address the concern of specific equipment, supplies, pharmaceuticals, vaccines, and so forth needed during a particular event is beyond the scope of this work due to lack of subject matter expert participants and the time constraints placed on this process. Attached is a document that

provides a general “disaster formulary” for medical supplies needed during a chemical, biological, radiological, nuclear, or explosive (CBRNE) event.

- For contagious and/or pandemic diseases (and possibly other scenarios), there will be limited or no implementation of cooperative agreements due to widespread infections or quarantine.
- Prior to dying, many people would use considerable healthcare resources because of their critical condition at admission.
- Existing medical devices (e.g., ventilators, respiratory equipment) would be inadequate. Manufacturers of large, expensive medical devices typically manufacture product on an “as needed” basis with a minimum of a 2–4 week lag time. Even surge production capacity is likely to be inadequate for short-term requirements.
- Surge capacities of pharmaceutical and medical product manufacturers and distributors will diminish compared with projected capabilities due to high absenteeism in all commercial sectors resulting from employees being directly affected by the scenario or choosing to stay home with families.
- Development of plans, procedures, and protocols for resource management in accordance with the National Incident Management System (NIMS) (Res.B.1.5) will be outlined within the Planning capability.
- Transport of medical supplies, pharmaceuticals, and laboratory supplies from federally controlled sources to the Federal mobilization base camp is the responsibility of the Federal Government.
- Transport of medical supplies, pharmaceuticals, and laboratory supplies from a Federal mobilization base camp to the State staging area is the responsibility of the State unless otherwise negotiated with the Federal Government.
- Non-federally owned supplies will be transported by the originating entity to a interagency warehouse unless otherwise negotiated with Federal or State organizations.
- Any of the services, performance measures, or capabilities can and should be applied to the supply chain for laboratory testing materials as well. Although this does not necessarily fall directly under *medical* supplies, it is crucial that the diagnostic supplies to support medical functions are not forgotten or ignored.
- The capability to keep track of potential shortages of critical drugs during a large-scale event already exists within the Food and Drug Administration’s Center for Drug Evaluation and Research. This program can serve as a viable model for beginning such a program with medical supply distributors and manufacturers. This process absolutely must be initiated as soon as possible with the government providing necessary assurances to maintain commercial confidentiality.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|-----------------------------|------------------------------|
|-----------------------|--------------------|-----------------------------|------------------------------|

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|---|
| Stockpile Content Management Group | Experts in medicine and public health to determine what is required in the various stockpiles or needs to be supplemented in the existing supply chain. | Three Management Groups with continuous open dialogue to determine the current requirements. | Pharmaceuticals Management Group. Medical Supplies Management Group. Laboratory Supplies Management Group |
| Strategic National Stockpile (including Vendor Managed Inventory) | Store and maintain medical materiel required for all hazards response. | Response capability will leverage both federal stockpiles and commercial capabilities. | Resource quantities needed must be determined by robust modeling tools to estimate stockpiles requirements based on the national planning scenarios and anticipated resultant patients/populations. |
| SNS Technical Advisory Response Unit (TARU) | Staff associated with the Strategic National Stockpile that can coordinate delivery and distribution of stockpile assets with state and local officials. | | 1 TARU per state/municipality receiving stockpile assets directly from stockpile. |
| State Staging Area (Receipt, Staging, and Storage Site (RSS)) | House federal assets that have been transferred to state during an incident. | 2 RSS per state | A minimum of 2 RSS sites per state |
| RSS personnel | Staff necessary to activate and manage RSS | | |
| RSS equipment | Material Handling Equipment and Supplies; and an Inventory management system required to efficiently run RSS | | |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---------------------------------------|---|---|---|
| Interagency warehouse | House critical resources as transferred from state, donated by non-governmental organizations (NGO) and public. | Incident will require one location for critical resources to be delivered). | 1 warehouse. |
| Warehouse Personnel | Staff necessary to activate, set up and manage warehouse and inventory | | |
| Warehouse equipment | Inventory management equipment and systems required to efficiently run warehouse | | |
| Transportation vehicles and personnel | Ability to move large amounts of critical resources (trucks, planes, boats, trains). | Climate controlled and non-climate controlled transport capacity for all pharmaceuticals, and medical and laboratory diagnostic supplies. | Volume capacity of vehicle multiplied by amount of resource needed. |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|----------------------------|--|---|--|
| Transportation Coordinator | Coordinates critical resource transportation needs between Federal, state, local and private agencies and organizations. | Scenario will require resources from all over to help support the incident, therefore coordinator will need to have overarching capability to monitor and troubleshoot movement of resources. | 1 to sit in Emergency Operation Center (EOC) / can be component Emergency Support Function (ESF) #1. |
| Security personnel | Provide required physical security to pharmaceuticals and medical supplies while stockpiled prior to an incident, in transit to and incident and while on site during an incident. | | |

Approaches for Large-Scale Events

None are specified.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| National Medical Equipment and Supplies Stockpile | Medical equipment and supplies necessary for a comprehensive all hazards response that are not currently accounted for in the Strategic National Stockpile at quantities determined by robust modeling tools and input from experts in the field. |
| State Pharmaceutical and Supply Stockpiles | State: If these stockpiles are to be created, they should be done with consultation from the SNS and/or appropriate federal, state, county and local groups. |

| Resource | Assigned Level and Quantity |
|--|---|
| Increase in Standing Stock at Local Medical Treatment Facilities | Local: Medical treatment facilities should consider increasing supplies on hand gradually to a point approximately 20% over their usual supply in order to buffer the time until federal assets can be deployed. |
| National Tracking System | <ul style="list-style-type: none"> ▪ National: 1 national system. ▪ Local: 1 within organizations that handle resources for emergency incidents |
| Transportation Coordinator | Local: 1 per EOC (as designated within EOC Management capability for city, county, state, federal and Department of Homeland Security [DHS] EOC). |
| Transportation Vehicles and personnel | <ul style="list-style-type: none"> ▪ Federal: scaleable depending on incident need. ▪ State scaleable depending on incident need. ▪ Local: scaleable depending on incident need. |
| Federal Mobilization Base Camp | National: not specified (base camps are activated at time of incident). |
| State Staging Area | State: at least 112 (2 per 50 states, 6 territories). |
| Interagency warehouse | Local: 1 per incident. |

Linked Capabilities

- Communications
- Community Preparedness and Participation
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Epidemiological Surveillance and Investigation
- Fatality Management
- Isolation and Quarantine
- Mass Care (Sheltering, Feeding, and Related Services)
- Mass Prophylaxis
- Medical Surge
- Onsite Incident Management
- Public Safety and Security Response
- Responder Safety and Health
- Risk Management
- Triage and Pre-Hospital Treatment
- Volunteer Management and Donations

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MASS PROPHYLAXIS

Capability Definition

Mass Prophylaxis is the capability to protect the health of the population through administration of critical interventions in response to a public health emergency in order to prevent the development of disease among those who are exposed or are potentially exposed to public health threats. This capability includes the provision of appropriate follow-up and monitoring of adverse events, as well as risk communication messages to address the concerns of the public.

Outcome

Appropriate drug prophylaxis and vaccination strategies are implemented in a timely manner upon the onset of an event to prevent the development of disease in exposed individuals. Public information strategies include recommendations on specific actions individuals can take to protect their family, friends, and themselves.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the Emergency Support Function:

- (ESF) #8: Public Health and Medical Services.

Capability Description

| Activity | Description |
|----------------------|---|
| Medical screening | Triage individuals for need for prophylaxis based on CDC guidelines and instructions. <i>Receiving, Distributing, and Dispensing Strategic National Stockpile (SNS) Assets: A Guide for Preparedness, Version 10 – Draft, June 2005</i> |
| Inventory management | <ul style="list-style-type: none"> ▪ Ensure availability of appropriate prophylaxis interventions. ▪ Ensure adherence to state and federal laws and regulations. ▪ Provide management of all medicines, medical supplies and equipment to include proper storage, monitoring, order/re-ordering and repackaging needed during a mass prophylaxis campaign. |
| Transportation | <ul style="list-style-type: none"> ▪ Plan for and coordinate transportation for the movement of people and medical material. |
| Command and control | <ul style="list-style-type: none"> ▪ Maintain a plan for managing dispensing operations in response to an emergency. This should incorporate planning, operations, logistics, communications, and reporting systems. |
| Public education | <ul style="list-style-type: none"> ▪ Educate the public about the health-related situation and actions they can take to protect their health, including providing information about the availability, use, and risks of prophylaxis interventions. ▪ Specify who may need treatment, where the exposures occurred, and |

| Activity | Description |
|--|--|
| | <p>how to access prophylaxis.</p> <ul style="list-style-type: none"> Educate the public about disease facts: signs, symptoms, incubation period, and transmission |
| Mass dispensing | <ul style="list-style-type: none"> Provide a network of dispensing sites and vaccination clinics for rapidly administering prophylaxis to the public. Adhere to State and Federal laws (i.e., dispensing, labeling, and use of investigational drugs and vaccines) and Emergency Use Authorization protocols. |
| Security | <ul style="list-style-type: none"> Plan for and coordinate security to adequately protect medical material and supplies from receipt and storage to distribution. Develop procedures for crowd control and protection from injury. |
| Adverse events management and tracking | <ul style="list-style-type: none"> Provide prophylaxis follow-up to monitor people for antibiotic effectiveness or vaccine immune response. Arrange alternative prophylaxis for people who have adverse effects from the initial prophylaxis. Data collection is essential for monitoring medication compliance. |

Critical Tasks

| UTL# | Task |
|-----------------|---|
| Res.B.5 4.2.2 | Disseminate health and safety information to the public. |
| Res.C.1 1.2.3.1 | Create plans and systems for patient movement and tracking. |
| Res.C.1 1.2.3.2 | Create plans and systems for transport and tracking of medical care and supplies. |
| Res.C.1 3.4.3 | Coordinate public health and medical services and supplies. |
| Res.C.2 1.2.6 | Provide security to protect medicines and supplies. |
| Res.C.2 1.2.7 | Maintain a system for inventory management to ensure availability of critical medicines and medical supplies. |
| Res.C.2 3.2 | Coordinate dispensing of mass therapeutics and vaccines. |
| Res.C.2 4 | Implement local, regional, and State plans for distributing and dispensing prophylaxis. |
| Res.C.2 4.4.3 | Provide antibiotic prophylaxis and/or immunizations to all responders and their families, including nongovernmental personnel supporting relief efforts, as medically indicated |

| UTL# | Task |
|---------------|---|
| Res.C.2 4.4.6 | Track outcomes and adverse events following mass distribution of prophylaxis. |
| Res.C.2 4.5.1 | Direct and control public information releases. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| <p>Current rating on the Strategic National Stockpile State Assessment is a passing grade.</p> <p>Note: The Mass Prophylaxis Appendix captures the State SNS Assessment Tool currently in use. The SNS program is revising the instrument to place more emphasis on performance outcomes.</p> | Passing Grade |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|---|
| Public information messages were accurate, consistent, and timely | Public informed in time to prevent and/or curb symptoms |
| Sufficient, competent personnel were available to staff dispensing centers or vaccination clinics | 100% of those required in accordance with the SNS plans and State/Local plans |
| Rate at which dispensing centers and vaccination clinics process patients (persons per hour) | Achieve throughput number of patients per hour in accordance with SNS plans and State/local plans |
| Percent proportion of at-risk population that was successfully vaccinated and provided prophylaxis | 100% within 48 hours of decision to provide prophylaxis |
| Rate of administration of the intervention was not affected by supply chain or other logistical problems | No interruption in administration of the intervention due to supply availability and logistics |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Technical Advisory Response Unit (TARU) Teams provide technical assistance related to stockpile operations
- Receiving, Shipping, and Storage (RSS) areas

- Dispensing/Vaccination Centers (DVC) Point of Distribution (PODs)
- Adverse Event Monitoring Teams
- Personnel for dispensing centers and vaccination clinics:
 - Clinicians/public health professions
 - Ancillary support personnel
 - Traffic control personnel
 - Security personnel
 - Inventory assistants
- Staff for storing, receiving and distributing federal SNS materials

Organization and Leadership

- Multiagency Coordination Systems (MACS)
- SNS coordination center

Equipment and Systems

- Medical Assets/Supplies (prophylaxis)

Planning Assumptions

- Assume population potentially exposed and requiring prophylaxis is 2 million in one metropolitan area.
- Additional illnesses will occur prior to mass prophylaxis campaign. Many people likely to present who fear they might have been exposed Multiple Unexplained Physical Symptoms (MUPS). Due to time elapsed prior to plan execution and non-informed public. Studies show that between 4 and 50 times as many people seek medical care after an event for MUPS than for diagnosable symptoms treatable by medical providers.
- State/local medicines and medical supplies are insufficient for mass prophylaxis .
- Federal medical assets requested and received at each location within 12 hours from the federal decision to deploy assets.
- State/locals receive prophylaxis materials and supplies for 6 million. Estimates affected Metropolitan Statistical Area (MSA) @ 2 million in 3 geographic locations.
- Mass prophylaxis within 48 hours; initial 10-day regimen with Cipro or Doxy assuming that the organism is sensitive to these antibiotics. Goal to protect exposed or potentially exposed population as quickly as possible based on current Centers for Disease Control (CDC) recommendations for anthrax prophylaxis.
- Follow-on prophylaxis with vaccine and antibiotics (50-day supply) for persons at highest risk of exposure based on epidemiological data and current CDC recommendations for anthrax prophylaxis.
- State/locals have sufficient personnel to fully command or staff a mass prophylaxis dispensing operation. This may include assistance from federal response teams, if requested.
- State/locals have developed and exercised an SNS response plan.
- Guidelines for post exposure prophylaxis populations will be developed by public health officials and subject matter experts depending on epidemiological circumstances. Decision based on estimates of timing, location and conditions of exposure.

- Point of Distribution (POD) Staffing: Number of PODs determined assumes 24 hour operation, Population equally distributed among PODs, perform at 100% capacity at all times, constant flow of people, staffing is constant and adequate. PODs should be located where easily accessible to the public i.e., publicly owned buildings.
- Medical Assets/Supplies – Adequate prophylaxis is readily available in the SNS.
- Population Centers – Resources readily available for largest urban areas for duration of prophylaxis period.
- Receiving, Shipping, and Storage (RSS) – Areas with SNS plans have identified a site for receiving, staging, and storing federal assets. In some worse case scenarios, more than one site may need to be identified.
- Risk Factors –
 - The occurrence of multiple events could deplete the availability of federal stockpiled medical assets and federal resources i.e., staff, supplies, etc.
 - The availability of staff and volunteers to operate the POD system.
 - Fear and mass panic could escalate.
 - Inadequate planning for mass prophylaxis would result in delays in response and ultimately risk of loss of life.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--------------------------------------|---|--|
| Dispensing/Vaccination Centers (DVCs) Points of Distribution (PODs) | 47,667 patients per hour (PPH) | Prophylaxis for 2 million | 47 DVCs (PODs) |
| Receiving, Shipping, and Storage | Single warehouse, 12,000 square feet | Prophylaxis medicines for 2 million | Federal assets from SNS based on estimated number of exposed persons |
| Technical Advisory Response Unit (TARU) Teams | 12-hour response. | 1 seven to nine member team for logistics, operations, and communications | 1 team per single geographic incident |
| SNS Coordination Center | 24 hours/7 days | 24-hour communications with site of incident/command | 18 staff/2 shifts = 36 SNS operations persons |
| Multiagency Coordination Systems (MACS) based on incident command system (ICS) functions (planning, logistics, | | Number/shift | Number/2–3 shifts |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|--------------------|---|---|
| operations, finance/administration and information | | | |
| Adverse event monitoring | 24 hours | 1 per 25,000 recipients of prophylaxis for recommended postexposure prophylaxis | <ul style="list-style-type: none"> 2 million/25,000 = 80 for period of postexposure prophylaxis Note: Estimates will vary depending on population receiving prophylaxis at each DVC and other options available such as call-in hotlines. |

Approaches for Large-Scale Events

Information above reflects six of the 15 scenarios.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| Receiving, Shipping, and Storage | State/local: 2 minimum |
| Dispensing/Vaccination Centers/Points of Distribution (DVC/PODs) | State/local: 47 PODs for 1 metropolitan area. |
| Prophylaxis supplies and materials | Federal/State/local/private: Prophylaxis for 2 million |
| Technical Advisory Response Unit (TARU) | Federal: 1 seven to nine member team |
| Adverse event monitoring | Federal/State: 1 per 25,000 |

Linked Capabilities

- Communications
- Community Preparedness and Participation
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Isolation and Quarantine
- Medical Supplies Management and Distribution

- Medical Surge
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response
- Responder Safety and Health
- Risk Management
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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MASS PROPHYLAXIS APPENDIX

| Strategic National Stockpile Assessment Tool Centers for Disease Control, U.S. Department of Health and Human Services | |
|---|--|
| <p>The Strategic National Stockpile (SNS) Program has developed a tool for evaluating State readiness to receive, distribute, and dispense SNS assets in the event of a national emergency. The assessment tool is an outline of the core functions identified by the SNS program and the key elements that are regarded as either critical or important planning steps within each function.</p> | |
| DEVELOPING AN SNS PLAN | |
| Critical Elements | <ul style="list-style-type: none"> A. SNS specific Preparedness Plan has been developed B. SNS Plan is incorporated into overall State Emergency Response Plan C. SNS Plan is updated annually |
| Important Elements | <ul style="list-style-type: none"> A. Planning Group formed and are working together in a collaborative planning effort (Inclusive of all representatives from State Public Health, State Emergency Management, Governor's Office and other supporting agencies) <ul style="list-style-type: none"> o Advisory Council o Workgroup o Health Department o Emergency Management Agency/State Office of Homeland Security o Public Works o Highway Department/Department of Transportation o Law Enforcement o National Guard (Army and Air) o Emergency Medical Services o Fire o Hospitals o Department of Administration/Finance o Department of Corrections o DOD/Military Installations o MMRS Cities B. Policy issues reviewed, identified, and addressed to support SNS operations <ul style="list-style-type: none"> o Process for requesting SNS assistance o Number of doses that a family member can pick-up at a dispensing site o Minimum identification requirements in order to receive medication o Credentialing process used to identify volunteers and staff at SNS sites o Rules of engagement for law enforcement o Providing prophylaxis to Native Americans on reservations C. Legal issues reviewed, identified, and addressed to support SNS operations <ul style="list-style-type: none"> o Medical practitioners authorized to issue standing orders and protocols for dispensing sites o Medical practitioners authorized to dispense medications during a state of emergency o Procurement of private property o Authorized overtime pay D. Liability/workers compensation |
| COMMAND AND CONTROL | |
| Critical Elements | <ul style="list-style-type: none"> A. State utilizes Incident Command System (ICS) structure with integration of SNS functions. Elements should include: <ul style="list-style-type: none"> o Governor's Office o Health Department |

| | |
|-------------------------------------|---|
| | <ul style="list-style-type: none"> ○ Emergency Management Agency ○ SNS Coordinators ○ Other State Offices ○ Emergency Response Organizations ○ Local Elected officials <p>B. Incident Commander identified with back-up and point of contact (POC) information</p> <p>C. Procedures are documented and in place for apportionment and inventory control of SNS materiel</p> <p>D. Sign-off on SNS plan documented between appropriate agencies and organizations</p> |
| Important Elements | <p>A. Regional plans between states are documented and in place between appropriate agencies and organizations</p> <p>B. State Emergency Operations Center (SEOC)/Health Department Operations Center (HDOC) is able to allow decision makers to communicate with each other</p> |
| REQUESTING SNS | |
| Critical Elements | <p>Individual or person(s) authorized by the governor to request SNS materiel are identified with POC information</p> <p>State SNS Plan contains request justification guidelines</p> <p>Signed MOU between CDC and State</p> |
| Important Elements | <p>Plan for Governor or designee(s) to communicate with key state officials to discuss incident and determine when to request SNS materials</p> <p>SNS Plan lists individuals who are authorized to sign for SNS materiel</p> <p>SNS Plan lists DEA Registrant</p> <p>Local SNS Plans contain request justification guidelines to the state</p> <p>Request procedures for on-going support for locals have been developed and are in the local SNS Plan</p> <p>Request procedures at the local and state level have been exercised</p> <ul style="list-style-type: none"> A. Initial request for support B. On-going requests for support |
| MANAGEMENT OF SNS OPERATIONS | |
| Critical Elements | <p>State SNS Coordinator identified with back-up and POC information</p> <p>The following State Leads have been identified with back-up and POC information:</p> <ul style="list-style-type: none"> Communications Security RSS Distribution Repackaging Dispensing Sites Treatment Centers Training/Exercise/Evaluation <p>Call-down rosters for SNS Leads are current and updated at least quarterly</p> |
| Important Elements | <p>State infrastructure in place to support State SNS plan</p> <ul style="list-style-type: none"> ○ Support from Governor's office ○ Support from State Health Director <p>Budget allocation adequately supports local SNS functions</p> <ul style="list-style-type: none"> ○ ____% of funds has been sent out to locals ○ Mechanism being used to fund locals ○ Specified deliverables ○ Contract monitoring |

| TACTICAL COMMUNICATION | |
|--|---|
| Critical Elements | <ul style="list-style-type: none"> A. State Communications Lead has a job action sheet and has been trained B. Communication networks and back-up system between Command and Control locations <ul style="list-style-type: none"> o State EOC o Health Department o RSS location o Distribution sites o Dispensing sites o Security o Transportation C. Maintenance plans to ensure rapid repair if communications systems go down D. Staffing call-down lists are reviewed to ensure accuracy at least quarterly |
| Important Elements | <p>Conducts call-down exercises to test call lists quarterly</p> <p>Internal Communications at RSS/Dispensing/Distribution sites</p> <ul style="list-style-type: none"> o Ham/Amateur Radio Operators o Cell Phones o UHF/VHF/ 800 MHz Radio Systems o Runners/couriers <p>Communication networks are tested and exercised at least once annually</p> |
| PUBLIC INFORMATION AND COMMUNICATIONS | |
| Critical Elements | <ul style="list-style-type: none"> A. State Public Information and Communications Lead has a job action sheet and has been trained B. A plan to coordinate local media efforts is in place: <ul style="list-style-type: none"> o All local media channels have been identified and contact information (and backup) documented o Capabilities and audiences for each media outlet have been identified o Regular meetings with local media are planned to educate, provide background information and foster collaboration between SNS Public Information and Communication Lead and media representatives. o Media channels have threat-specific information "on the shelf" and ready if needed. C. A plan to compile information for clinical and drug information has been developed <ul style="list-style-type: none"> o Information has been collected o Storage location (electronic and hard copy) identified and updated regularly o Plan for mass reproduction and storage of printed materials has been developed D. A plan for disseminating information to the public and to health care professionals has been developed: <ul style="list-style-type: none"> o Plan is in place for channels to disseminate information to state and local community. o Information has been evaluated and adapted for needs of local community o Plan to distribute printed materials o Plan for 24/7 Public Information Hotline in place E. A plan for public information campaigns has been developed: <ul style="list-style-type: none"> o Web site information, printed material, newspaper inserts, videos o Dispensing site location, news briefs, informing public, rumor control o Medication compliance |
| Important Elements | <ul style="list-style-type: none"> A. A plan to translate information is in place for non-English speaking, hearing impaired, visually impaired or functionally illiterate individuals: <ul style="list-style-type: none"> o Documents have been translated as appropriate for community |

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| | <ul style="list-style-type: none"> ○ On-site interpreters available for dispensing sites ○ Translators and TTY plans for Public Information Hotlines <p>B. Staff have been identified and trained in communications function</p> |
| SECURITY | |
| Critical Elements | <p>A. State Security Lead has a job action sheet and has been trained</p> <p>B. Security at RSS</p> <ul style="list-style-type: none"> ○ Ample persons to secure facility ○ Protect the SNS materiel once signed over to the state ○ Securing materiel during RSS operations <p>C. Coordination with US Marshals Service</p> <p>D. Plan in place for protecting staff/volunteers</p> <ul style="list-style-type: none"> ○ RSS sites ○ Dispensing sites ○ Distribution sites ○ Treatment centers <p>E. Crowd control plan for RSS sites</p> <p>F. Crowd control plan for Dispensing sites</p> <p>G. Crowd control plan for Treatment centers</p> <p>H. Developed a credentialing plan for SNS staff at RSS and Regional Distribution sites</p> <p>I. Developed a credentialing plan for SNS staff at Dispensing sites</p> |
| Important Elements | <p>A. Security procedures in place to transport SNS materiel to various locations around the state</p> <p>B. Traffic control plans for various SNS related sites (RSS, Dispensing, Distribution and Treatment Centers)</p> <p>C. Staff have been identified and trained in security functions</p> |
| RECEIPT/STAGE/STORE (RSS) | |
| Critical Elements | <p>A. State RSS Lead has a job action sheet and has been trained</p> <p>B. Primary location with alternate site(s) identified</p> <p>C. Locations reviewed by CDC SNS Consultant using Site Survey Tool</p> <p>D. The following Leads have been identified with back-up and POC information for each facility identified:</p> <ul style="list-style-type: none"> ○ RSS Site Manager ○ Material Management (Inventory Management System) ○ Apportionment (Pick Teams) ○ Logistics ○ QA/QC ○ Safety ○ Security ○ Communications/IT ○ Appropriate Material Handling Equipment on site or readily available upon request ○ Pallet Jacks ○ Pallets ○ Hand Carts/Dollies ○ Forklifts ○ Repackaging/Shipping Materials (tape, plastic wrap, pens, paper, etc.) <p>A. Appropriate Office Equipment</p> <ul style="list-style-type: none"> ○ Telephones ○ 3 Analog telephone lines for TARU Team ○ Fax machine ○ Table/chairs ○ Copier <p>B. Call-down rosters for RSS Leads/staff are current and updated quarterly</p> |

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| | C. Staff have been identified and trained in RSS functions |
| Important Elements | <ul style="list-style-type: none"> A. Locations have been reviewed by the State B. Developed staffing plan for 24/7 operations C. Developed care/feed plan for staff D. RSS Site Manager and back-up trained in RSS operations E. The following Leads and back-ups have been trained in RSS operations for each facility identified: <ul style="list-style-type: none"> o Materiel Management o Apportionment o QA/QC o Safety o Security o Communications/IT o Logistics Lead |
| CONTROLLING SNS INVENTORY | |
| Critical Elements | <ul style="list-style-type: none"> A. Inventory Management System (IMS) in place with back-up <ul style="list-style-type: none"> o Computer Program o Electronic Spread Sheet o Paper System B. Inventory staff identified and trained in IMS functions |
| Important Elements | <ul style="list-style-type: none"> A. Procedure for chain of custody involving SNS materiel B. Procedure for chain of custody involving controlled substances |
| REPACKAGING ORAL MEDS | |
| Critical Elements | <ul style="list-style-type: none"> A. State Repackaging Lead has a job action sheet and has been trained B. Repackaging plan or contingent contracts have been developed C. Repackaging staff call-down rosters are current and updated at least quarterly |
| Important Elements | <ul style="list-style-type: none"> A. Staff have been identified and trained in Repackaging functions |
| DISTRIBUTION | |
| Critical Elements | <ul style="list-style-type: none"> A. State Distribution Lead has a job action sheet and has been trained B. Plan for coordinating delivery of SNS materiel directly to treatment facilities, distribution/dispensing sites C. Agreements are documented and in place with organization(s) that will distribute materiel D. Plan for 24/7 recovery and repair of vehicles/distribution assets E. Appropriate Material Handling Equipment for Regional Distribution sites (off-loading and loading as needed) <ul style="list-style-type: none"> o Pallet Jacks o Hand Carts/Dollies o Forklifts o Repackaging/Shipping Materials (tape, plastic wrap, pens, paper, etc.) |
| Important Elements | <ul style="list-style-type: none"> A. Drivers and Support Personnel have been credentialed B. Staff have been identified and trained in Distribution functions <ul style="list-style-type: none"> o Chain of custody protocol o Routing information o Security/communication procedures o Appropriate Use of Material Handling Equipment o Assist in loading and off-loading materials |
| DISPENSING ORAL MEDS | |
| Critical Elements | <ul style="list-style-type: none"> A. Dispensing Site Managers have been identified with back-up and POC information for each dispensing site B. Safety Lead identified with back-up and POC information |

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| | <ul style="list-style-type: none"> C. Security Lead identified with back-up and POC information D. Communications Lead identified with back-up and POC information E. Logistics Lead identified with back-up and POC information F. Plan to rapidly dispense medications to the public G. Plan contains standard operating procedures/protocols for the operation and management of dispensing sites H. Plan in place to request and receive SNS materiel I. Plan contains interpreters/translation services identified to support dispensing operations J. Dispensing sites identified by state and or local jurisdiction <ul style="list-style-type: none"> o Population o Number of Sites o Estimated Thru-put of population/hour K. Call-down rosters for SNS Leads/staff are current and updated at least quarterly L. Core dispensing site staff per site have been identified and trained in Dispensing functions |
| Important Elements | <ul style="list-style-type: none"> A. Local Dispensing Site plans are exercised annually B. A cross section of identified dispensing sites have been reviewed by the state C. Agreements are documented and in place for dispensing sites D. Plan to provide prophylaxis to first responders, essential personnel and their families E. Equipment and supplies to support dispensing site operations <ul style="list-style-type: none"> o Office supplies o Medical supplies o Drug Fact Sheets o Agent Fact Sheets F. Name/Address/Patient/History (NAPH) forms and plan developed for patient tracking G. Plan to reproduce and distribute NAPH forms to dispensing sites H. Triage/Transport plan developed for those who are symptomatic I. Dispensing Site Manager and back-up trained in dispensing operations J. Safety Lead and back-up trained in dispensing operations K. Security Lead and back-up trained in dispensing operations L. Communications Lead and back-up trained in dispensing operations M. Logistics Lead and back-up trained in dispensing operations |
| TREATMENT CENTER COORDINATION | |
| Critical Elements | <ul style="list-style-type: none"> A. State Treatment Center Lead has a job action sheet and has been trained B. Point of Contacts for Treatment Centers have been identified and is documented in SNS plan |
| Important Elements | <ul style="list-style-type: none"> A. Coordination exists between SNS Coordinator and HRSA Coordinator at state level B. Process for Treatment Centers to request SNS materiel C. Request process has been exercised <ul style="list-style-type: none"> o Forms o Communication |
| TRAINING, EXERCISE, AND EVALUATION | |
| Critical Elements | <p>State Training/Exercise/Evaluation Lead has a job action sheet and has been trained</p> <ul style="list-style-type: none"> A. Training Plan <ul style="list-style-type: none"> • State/Regional/Local agencies • Timelines/ schedules • SNS functions • Incident Command System B. Training Plan implemented |

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|----------------------------------|---|
| | <p>C. Exercise Plan</p> <ul style="list-style-type: none"> • State/Regional/Local exercises • Goals and objectives • Orientations/Drills/Tabletops/Functional <p>D. Exercise Plan implemented</p> <p>E. Evaluation Plan</p> <ul style="list-style-type: none"> ○ After Action Review (AAR) ○ Written evaluation Report ○ Corrective Action Plan ○ SNS Plan updated/revised ○ Training ○ Exercises <p>F. Evaluation Plan implemented</p> |
| <p>Important Elements</p> | <p>A. State/Local Agencies support training/exercise functions</p> <ul style="list-style-type: none"> ○ Administrative ○ Financial ○ Personnel and equipment <p>B. Staff have been identified and trained in Training/Exercise/ Evaluation functions as it relates to the overall SNS program</p> <p>C. Are the Following Exercised or Evaluated?</p> <ul style="list-style-type: none"> ○ Overall SNS Plan ○ Requesting SNS Procedures ○ Tactical Communications Plan ○ Public Information and Communication Plan ○ Security Plan ○ RSS Plan ○ Inventory Management System Plan ○ Distribution Plan ○ Dispensing Plan ○ Treatment Center Coordination |

MASS CARE (SHELTERING, FEEDING, AND RELATED SERVICES)

Capability Definition

Mass Care is the capability to provide immediate shelter, feeding centers, basic first aid, bulk distribution of needed items, and related services to persons affected by a large-scale incident, including special needs populations. Among the people with special needs are individuals who have physical or mental disabilities that need medical attention or personal care that is beyond basic first aid. Among others with special needs are non-English speaking populations that may need to have information presented in other languages. The capability also provides for pet care/handling through local government and appropriate animal-related organizations.

Mass care is usually performed by nongovernmental organizations (NGOs), such as the American Red Cross, or by local government sponsored volunteer efforts, such as Citizen Corps. Special needs populations are generally the responsibility of local government, with medical needs addressed by the medical community and/or its alternate care facilities. State and federal entities also play a role in public and environmental health in ensuring safe conditions, safe food, potable water, sanitation, clean air, etc.

Outcome

Mass care services for the affected general population, services for special needs populations, and services for animals within the affected area are rapidly provided.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF #6: Mass Care, Housing, and Human Services
- ESF #8: Public Health and Medical Services

Capability Description

| Activity | Description |
|---|--|
| General population | Immediate sheltering, feeding, provision of relief supplies through bulk distribution, and provision of basic first aid for the general population |
| Special needs | Immediate provision of sheltering, feeding, personal care and durable medical goods, and medical services for special needs populations. People with special needs include individuals who need medical attention/personal care, other than basic first aid, due to physical or cognitive disabilities |
| Animal care | Immediate provision of sheltering, feeding, and medical care for pets |
| Public and environmental health oversight | Oversight is provided to ensure sanitation through safe food, clean air and water and waste disposal |

| Activity | Description |
|-----------------|--|
| Decontamination | Ensure individual gross decontamination of persons prior to admittance to shelters and other mass care facilities, reception centers, and other places as needed |

Critical Tasks

| UTL# | Task |
|-----------------|---|
| Res.C.3 4.4 | Conduct mass feeding activities. |
| Res.C.3 3.7.1 | Acquire and provide resources necessary to support mass care services. |
| Res.C.3 4.1.2 | Assess need for emergency feeding and sheltering activities. |
| Res.C.3 4.1.3 | Assess need for mass feeding services. |
| Res.C.3 4.1.4 | Assess need for bulk distribution of relief items. |
| Res.C.3 4.3 | Activate emergency shelters. |
| Res.C.3 4.3.2 | Provide shelter guidance to agencies responsible for the care of special needs populations. |
| Res.C.3 4.4 | Conduct mass feeding services. |
| Res.C.3 4.5 | Conduct bulk distribution of relief items. |
| Res.C.3 4.6.1.1 | Arrange for pet care/handling services. |
| Res.C.3 4.6.1.3 | Operate pet care/handling facilities. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| A mass care plan has been developed for the general population and special needs population | Yes/No |
| A special needs shelter plan has been developed with public health officials, to include a plan for medical care, supplies, and personnel | Yes/No |
| Shelter agreements are in place for each jurisdiction | Yes/No |
| Shelter plans include advance designation of shelters to assigned citizens/population according to the space available in shelters vis-à-vis the local | Yes/No |

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| residents | |
| Local government has a pet care/handling plan with appropriate partners | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Time from notification of disaster to opening of shelter for staff and setup, assuming safe entry | Within 12 hours |
| Time for shelter locations to be opened and operational | Within 48 hours |
| Time to establish oversight of sanitation of shelters, food service, and distribution operations | Within 12 hours |
| Percentage of total number of people seeking shelter for which there is capacity to shelter | 100% |
| Time for a pet care/handling plan to be implemented and shelters opened | Within 24 hours |
| Time to assess the need and provide mental health services for individuals sheltered | Within 48 hours |
| Time to identify locations with the greatest potential for efficient service delivery to meet feeding needs | Completed within 6 hours of the incident |
| Time for tasking appropriate organizations to mobilize resources to provide mass care services | Completed within 9 hours of the incident |
| Operational sites receive ongoing support to maintain service delivery | Within 24 hours of shelter opening |
| Time for resources to be onsite and service delivery to have commenced | Within 48 hours |
| Time for federal commodities and non-governmental donations to begin distribution to those in need | Within 72 hours |
| Time for facilities to be opened and operating to receive and distribute mass care supplies. | Within 24 hours |
| The locations of distribution centers are accurately | Yes/No |

| Performance Measure | Performance Metric |
|--|--------------------|
| and clearly communicated to the public | |
| Time for implementation of a system for reunification of families | Within 72 hours |
| All shelter residents transitioned from shelter to alternative accommodations/interim housing prior to shelter closure | Yes/No |
| Special needs shelter residents are returned to their original home facility or an acceptable alternate facility. | Yes/No |
| The mass care plan is successfully implemented. | Yes/No |
| The special needs shelter plan is successfully implemented. | Yes/No |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Voluntary Agency Shelter Management Team.
- Mobile Feeding Team
- Voluntary Agency Mobile Kitchen Team (Class A, B, and C)
- Voluntary Agency Warehouse Team
- Voluntary Agency Drop Trailer Team
- Shelter Child Care Teams
- Type 1 Small Animal Sheltering Team
- Small Animal Transportation Team
- Animal Incident Response Team
- Contracted caterers and vendors
- Personal care service providers

Equipment and Systems

- Pre-packaged meals/meals and water from contractors (e.g., vendors, caterers)
- Information Centers (for collection and collating data on evacuees and providing information to relatives)
- Computers and communication equipment (laptops, blackberry/cell phones)
- Medical equipment and supplies

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Major Earthquake scenario. Other

scenarios were reviewed to identify required adjustment or additions to the planning factors and national targets.

- This capability applies to a wide range of incidents and emergencies, including major hurricanes, improvised explosives, pandemic influenza, and improvised nuclear devices.
- An immediate and sustained need for bulk distribution of relief supplies will be required. Requirements will depend on the nature of and human needs produced by the incident.
- Assume 763,000 people need mass care support: 313,000 will need shelter and feeding (3 meals a day for the 313,000 people would equal 939,000 meals a day for shelters) immediately, and an additional 450,000 people remaining in the affected area will need feeding.
- Census data indicate that 20 percent of the population have a disability, 15 percent of people needing mass care support have a physical or cognitive disability that will require some level of special care (i.e. personal care assistance, sign language interpreter, mobility assistance, etc.)
- Twenty-five percent of the self-evacuee population will seek shelter out of the area.
- Approximately 37,000 trained workers will be needed to support the general population (worker to recipient ratio—1:30): 32,500 for shelter operations (30,000 within the affected area, 2,500 outside the area) and 4,500 for other human services.
- Sixty percent of the affected population will have pets.
- Scenarios typically count the number of persons in shelters as the basis for computing the number of companion animals (CAs). In a scenario with many dead and injured people (which varies by type of event), additional sheltering of CAs will be required. Some CAs will have perished in the same event that killed or injured humans. The assumption is made that the number of animals needing shelter will rise by 10 percent because their owners are either dead or injured.
- Assume 14,000 workers (includes some owners and volunteers) will be needed for pet care.
- State and local resources will immediately be overwhelmed; thus, Federal assistance will be needed immediately.
- The event will exceed local capacity for trained mass care staff.
- Government must deem areas safe for service delivery.
- Two primary earthquake areas must be considered—the west coast and the New Madrid fault zone (the central Mississippi Valley in Arkansas, Missouri, Tennessee, Kentucky, and Illinois).
- Prepositioned resources are likely to exist based on population and frequency of events; therefore, roughly two-thirds of resources are located east of the Mississippi River. Further, provisions should be made for additional resources beyond the stated needs because of the likelihood of the unavailability of existing resources due to damage and/or other competing events.
- Limited facilities within the affected area will be suitable for material support; must bring in most resources.
- Medical facilities will overflow. A segment of the people needing care will likely end up in State shelters and will need to be moved to alternate care facilities quickly.

- The average population per shelter will rise with a catastrophic event (estimate 1,000 residents per shelter, versus 250 residents typically) because fewer facilities will be available than the preplanning estimation.
- Public health and medical care in shelters will be a significant challenge as local emergency medical services (EMS) resources and medical facilities will likely be overwhelmed quickly. The deployment of public health and medical personnel and equipment to support medical needs in shelters will need to be immediate and sustained by the U.S. Department of Health and Human Services.
- Some previously identified structures will not be able to be shelters due to actual or potential damage.
- Significant disruption of the affected area’s infrastructure, particularly power, transportation, and communications systems, may occur.
- Timely logistical support to shelters and feeding sites will be essential and required for a sustained period of time.
- Close liaison and coordination with numerous voluntary and nongovernmental organizations (NGOs) will be necessary on the Federal, regional, State, and local levels.
- Disaster welfare information may be a priority concern for family members throughout the Nation.
- Transient populations such as tourists, students, and foreign visitors, within the affected areas will require assistance.
- Companion (small) animal sheltering team requirements assume that the shelters will house only animals. Pet friendly shelters (that include owner families with their pets) will have a reduced need for staff after the initial setup.
- The population seeking shelter needs to be informed regarding available pet care.
- Immediate response activities focusing on meeting urgent mass care needs should be located in safe areas.
- Adjacent communities need to be prepared to deal with significant numbers of evacuating persons from the affected area. (Those host communities will also need significant mass care support.)

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Major Earthquake)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|-----------------------------|------------------------------|
|-----------------------|--------------------|-----------------------------|------------------------------|

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|----------------------------------|--|
| Voluntary agency shelter management team | 1 shelter management team per average 250 shelter residents (Note: In a catastrophic event, the average number of residents per shelter will rise to an average of 1,000 per shelter, changing target levels.) | 313,000 people needing shelter | 1,252 shelter teams (an average of 250 people in each shelter) |
| Type 1 Small Animal Sheltering Team | 300 pets per shelter team | 193,000 animals displaced | 643 Type 1 Small Animal Sheltering Teams |
| Small animal transportation team | 2 small animal transportation teams each per Type 1 Small Animal Sheltering Team | 193,000 animals displaced | 1,286 small animal transportation teams |
| Animal incident response team | 4 animal incident response teams per each Type 1 Small Animal Sheltering Team | 193,000 animals displaced | 2,725 animal incident response teams |
| Mobile feeding team | 2 drivers and 1 appropriate vehicle capable of distributing 1,500 meals per day in accordance with safe food handling requirements | 1.5 million meals needed per day | 1,000 mobile feeding teams (1,000 x 1,500 meals = 1,500,000) |
| Voluntary Agency Mobile Kitchen Class A | 5,000 meals per day, 15 workers, 1 trailer, plus support equipment | 1.5 million meals needed per day | 300 Voluntary Agency Mobile Kitchens Class A (300 x 5,000 meals = 1,500,000) |
| Voluntary Agency Mobile Kitchen Class B | 10,000 meals per day, 20 workers, 1 trailer, plus support equipment | 1.5 million meals needed per day | 150 Voluntary Agency Mobile Kitchens Class B (150 x 10,000 meals = 1,500,000). |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|--|---|
| Voluntary Agency Mobile Kitchen Class C | 20,000 meals per day, 30 workers, 1 trailer, plus support equipment | 1.5 million meals needed per day | 75 Voluntary Agency Mobile Kitchens Class C (75 x 20,000 meals = 1,500,000) |
| Voluntary Agency Mobile Kitchen/Canteen | 800 meals per day | 1.5 million meals needed per day | 1,875 Voluntary Agency Mobile Kitchens/Canteens (1,875 x 800 meals = 1,500,000) |
| Voluntary agency warehouse team | 1 warehouse facility plus management | 10 voluntary agency warehouse teams | 10 voluntary agency warehouse teams |
| Voluntary agency drop trailer team | 1 trailer, 1 tractor, 1 driver | Maximum of 300 kitchen sites each needing 1 drop trailer for dry goods and 1 drop trailer for refrigerated goods | 600 voluntary agency drop trailer teams (1 dry goods trailer x 300 kitchen sites plus 1 refrigerated goods trailer x 300 kitchen sites = 600) |
| Prepackaged meals | Meal, Ready to Eat (MRE) via mission assignment and other private corporations such as HeaterMeal | 1.5 million meals needed per day | 1.5 million prepackaged meals |
| Shelter childcare team | 1 shelter childcare team per average 250 shelter residents | 313,000 people needing shelter | 1,252 shelter childcare teams (an average of 250 people in each shelter) |
| Meals from contractors (e.g., vendors, caterers) | Contracted caterers and vendors | 1.5 million meals needed per day | 1.5 million meals from contractors |

Approaches for Large-Scale Events

- Mass care will involve partnering with the private (commercial) and/or public sectors to ensure quick service delivery.
- Sheltering activities will be initiated on the local level immediately and augmented by resources (e.g., staff, supplies) from regional and national voluntary agency partners for large-scale events.

- Feeding activities will be initiated on the local level immediately and augmented by resources (e.g., staff, supplies) from regional and national voluntary agency partners for large-scale events.
- Pet sheltering activities will be initiated on the local level immediately and augmented by resources (e.g., staff, supplies) from regional and national voluntary agency partners for large-scale events.

National Targets and Assigned Levels

| Resource | National Target | Local Distribution | |
|--|--|--|-------------|
| | | The number represents the estimated amount of the resource that would be required to serve the affected population for different size jurisdictions during a major event | |
| Volunteer agency shelter management team | 1,352 volunteer agency shelter management teams nationally (1,252 plus 100 capacity needed to respond to concurrent disasters) | Population | Local Teams |
| | | <10K | 6 Teams |
| | | 10K-25K | 15 Teams |
| | | 25K-50K | 30 Teams |
| | | 50K-100K | 60 Teams |
| | | 100K-250K | 150 Teams |
| | | 250K-500K+ | 300 Teams |
| Type 1 Small Animal Sheltering Team | 743 Type 1 Small Animal Sheltering Teams (643 plus 100 capacity needed to respond to concurrent disasters) | Population | Local Teams |
| | | <10K | 3 Teams |
| | | 10K-25K | 6 Teams |
| | | 25K-50K | 12 Teams |
| | | 50K-100K | 23 Teams |
| | | 100K-250K | 56 Teams |
| | | 250K-500K+ | 111 Teams |
| Small animal transportation team | 1,486 small animal transportation teams (1,286 plus 200 capacity needed to respond to concurrent disasters) | Population | Local Teams |
| | | <10K | 5 Teams |
| | | 10K-25K | 12 Teams |
| | | 25K-50K | 23 Teams |
| | | 50K-100K | 45 Teams |
| | | 100K-250K | 111 Teams |
| | | 250K-500K+ | 222 Teams |
| Animal incident response team | 3,125 animal incident response teams (2,725 plus 400 capacity needed to respond to concurrent disasters) | Population | Local Teams |
| | | <10K | 9 Teams |
| | | 10K-25K | 23 Teams |

| Resource | National Target | Local Distribution | |
|----------|-----------------|--|-----------|
| | | The number represents the estimated amount of the resource that would be required to serve the affected population for different size jurisdictions during a major event | |
| | | 25K-50K | 45 Teams |
| | | 50K-100K | 89 Teams |
| | | 100K-250K | 222 Teams |
| | | 250K-500K+ | 444 Teams |

| Resource | National Target | Local Distribution | |
|---|--|--|-------------|
| | | The number represents the estimated amount of the resource that would be required to serve the affected population for different size jurisdictions during a major event | |
| Mobile feeding team | 1,100 mobile feeding teams nationally (1,000 plus 100 capacity needed to respond to concurrent disasters) | Population | Local Teams |
| | | <10K | 2 Teams |
| | | 10K-25K | 5 Teams |
| | | 25K-50K | 10 Teams |
| | | 50K-100K | 20 Teams |
| | | 100K-250K | 50 Teams |
| Voluntary Agency Mobile Kitchen Class A | 320 Voluntary Agency Mobile Kitchens Class A nationally (300 plus 20 capacity needed to respond to concurrent disasters) | Population | Kitchens |
| | | <10K | 1 |
| | | 10K-25K | 2 |
| | | 25K-50K | 3 |
| | | 50K-100K | 6 |
| | | 100K-250K | 16 |
| | | 250K-500K+ | 30 |

| | | | |
|---|--|--|-------------|
| Voluntary Agency Mobile Kitchen Class B | 160 Voluntary Agency Mobile Kitchens Class B nationally (150 plus 10 capacity needed to respond to concurrent disasters) | Population | Kitchens |
| | | <10K | 0 |
| | | 10K-25K | 1 |
| | | 25K-50K | 2 |
| | | 50K-100K | 3 |
| | | 100K-250K | 8 |
| 250K-500K+ | 15 | | |
| Voluntary Agency Mobile Kitchen Class C | 80 Voluntary Agency Mobile Kitchens Class C nationally (75 plus 5 capacity needed to respond to concurrent disasters) | Population | Kitchens |
| | | <10K | 0 |
| | | 10K-25K | 0 |
| | | 25K-50K | 1 |
| | | 50K-100K | 2 |
| | | 100K-250K | 4 |
| 250K-500K+ | 8 | | |
| Resource | National Target | Local Distribution | |
| | | The number represents the estimated amount of the resource that would be required to serve the affected population for different size jurisdictions during a major event | |
| Voluntary Agency Mobile Kitchen/Canteen | 1,950 Voluntary Agency Mobile Kitchens/Canteens (1,875 plus 75 capacity needed to respond to concurrent disasters) | Population | Kitchens |
| | | <10K | 4 |
| | | 10K-25K | 10 |
| | | 25K-50K | 20 |
| | | 50K-100K | 38 |
| | | 100K-250K | 100 |
| 250K-500K+ | 188 | | |
| Voluntary agency warehouse team | 500 voluntary agency warehouse teams | Population | Local Teams |
| | | <10K | 1 Team |
| | | 10K-25K | 1 Team |
| | | 25K-50K | 1 Team |
| | | 50K-100K | 2 Teams |
| | | 100K-250K | 2 Teams |
| 250K-500K+ | 3 Teams | | |

| | | | |
|--|--|------------|--------------------|
| Voluntary agency drop trailer team | 625 voluntary agency drop trailer teams nationally (600 teams plus 25 capacity needed to respond to concurrent disasters) | Population | Local Teams |
| | | <10K | 2 Teams |
| | | 10K-25K | 4 Teams |
| | | 25K-50K | 8 Teams |
| | | 50K-100K | 15 Teams |
| | | 100K-250K | 38 Teams |
| | | 250K-500K+ | 75 Teams |
| Prepackaged meals | 1.75 million prepackaged meals nationally (1.5 million plus 250,000 capacity needed to respond to concurrent disasters) | Population | Locally Contracted |
| | | <10K | 3,000 Meals |
| | | 10K-25K | 7,500 Meals |
| | | 25K-50K | 15,000 Meals |
| | | 50K-100K | 30,000 Meals |
| | | 100K-250K | 75,000 Meals |
| | | 250K-500K+ | 150,000 Meals |
| Voluntary agency shelter childcare team | 1,352 shelter childcare teams nationally (1,252 plus 100 capacity needed to respond to concurrent disasters) | Population | |
| | | <10K | 3,000 Meals |
| | | 10K-25K | 7,500 Meals |
| | | 25K-50K | 15,000 Meals |
| | | 50K-100K | 30,000 Meals |
| | | 100K-250K | 75,000 Meals |
| | | 250K-500K+ | 150,000 Meals |
| Meals from contractors (e.g., vendors, caterers) | 1.75 million meals from contractors nationally (1.5 million plus 250,000 capacity needed to respond to concurrent disasters) | | |

Linked Capabilities

- Animal Health Emergency Support
- Citizen Protection: Evacuation and/or In-place Protection
- Communications
- Community Preparedness and Participation
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environment Health and Vector Control
- Epidemiological Surveillance and Investigation
- Fatality Management
- Food and Agriculture Safety and Defense,

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- Isolation and Quarantine
 - Medical Supplies Management and Distribution
 - Medical Surge
 - Planning
 - Public Health Laboratory Testing
 - Public Safety and Security Response
 - Responder Safety and Health
 - Restoration of Lifelines
 - Structural Damage and Mitigation Assessment
 - Volunteer Management and Donations
 - WMD/Hazardous Materials Response and Decontamination

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FATALITY MANAGEMENT

Capability Definition

Fatality Management is the capability to effectively perform scene documentation; the complete collection and recovery of the dead, victim's personal effects, and items of evidence; decontamination of remains and personal effects (if required); transportation, storage, documentation, and recovery of forensic and physical evidence; determination of the nature and extent of injury; identification of the fatalities using scientific means; certification of the cause and manner of death; processing and returning of human remains and personal effects of the victims to the legally authorized person(s) (if possible); and interaction with and provision of legal, customary, compassionate, and culturally competent required services to the families of deceased within the context of the family assistance center. All activities should be sufficiently documented for admissibility in criminal and/or civil courts. Fatality management activities also need to be incorporated in the surveillance and intelligence sharing networks, to identify sentinel cases of bioterrorism and other public health threats. Fatality management operations are conducted through a unified command structure

Outcome

Complete documentation and recovery of human remains, personal effects, and items of evidence is done (except in cases where the health risk posed to personnel outweigh the benefits of recovery of remains and personal effects). Remains receive surface decontamination (if indicated) and, unless catastrophic circumstances dictate otherwise, are examined and identified, and released to the next-of-kin's funeral home with a complete certified death certificate. Reports of missing persons and antemortem data are efficiently collected. Victims' family members receive updated information prior to the media release. All hazardous material regulations are reviewed and any restriction on the transportation and disposition of remains are made clear by those with the authority and responsibility to establish the standards. All personal effects are made safe to return to next-of-kin unless contraindicated by catastrophic circumstances. Law Enforcement agencies are given all the information needed to investigate and prosecute the case successfully. Families are provided incident specific support services.

Relationship to National Response Plan ESF Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF #8: Public Health and Medical Services
- ESF #9: Urban Search and Rescue
- ESF #13: Public Safety and Security

Capability Description

| Activity | Description |
|----------------------------|--|
| Scene Operations | <ul style="list-style-type: none"> Conduct an initial evaluation of incident fatalities. Document fatalities at the scene. Recover human remains, evidence and personal effects. |
| Morgue Operations | <ul style="list-style-type: none"> Store remains temporarily and conduct multi-specialty forensic analysis of human remains to determine the cause and manner of death. |
| Antemortem Data Management | <ul style="list-style-type: none"> Integrate fatality management staff into the family assistance center (FAC) for the purpose of interviewing families of the missing and dead to collect information useful for identification purposes. Additional ancillary services and support are also provided as necessary and upon official notification of death. |
| Victim Identification | <ul style="list-style-type: none"> Compile antemortem records of missing individuals and comparing those to the repository of postmortem data collected through Scene and Morgue Operations. Positive identifications are confirmed by acceptable scientific methods including fingerprints, DNA, skeletal radiographs, dental radiographs, medical records, etc. |
| Final Disposition | <ul style="list-style-type: none"> Return the human remains and personal effects to the families for final disposition following recovery, decontamination, determination of the cause and manner of death and positive identification. If there is no one to whom to return the remains and personal effects, the designated local authority will take responsibility for final disposition (ie, ME/C, Sheriff). |
| Fatality Surge | <ul style="list-style-type: none"> Enhance or augment existing capabilities (Scene Ops, Morgue Ops, FAC Ops and Victim ID) to deal with a surge in number of fatalities. |

Critical Tasks

| UTL# | Task |
|--------------|--|
| Res.C.4 4.1 | Activate scene operations. |
| Res.C.4 4.2 | Activate morgue operations. |
| Res.C.4 4.3 | Activate collection of antemortem information within the family assistance center (FAC). |
| Res.C.4 4.4 | Activate victim identification operations. |
| Res.C.4 4.5 | Activate final disposition operations. |
| Res.C.4 4.6 | Activate a fatality surge plan. |
| Res.C.41.1.6 | Develop a fatality incident action plan (IAP) by evaluating previously |

| UTL# | Task |
|-----------------|---|
| | developed plans, procedures, protocols, and systems. |
| Res.C. 4 2 | Develop and conduct training and exercise programs for managing fatalities. |
| Res.C.4 3.2.2 | Coordinate with public health and regulatory agencies to develop plans, procedures, and protocols to protect the public from communicable diseases and radiological, chemical, and other hazards when handling remains. |
| Res C.4 4.1 | Document (photograph, measure, obtain witness statements) in a manner constant with the Medical Examiner/Coroner’s incident plan. |
| Res C.4 3.1.1 | Coordinate federal mortuary/morgue services. |
| Res.C.4 3.1.2 | Coordinate with local legal authority in mortuary affairs. |
| Res.C.4 4.1.4.2 | Recover human remains in a dignified manner. |
| Res.C.4 4.5.3 | Assist community leadership and vested organizations in developing plans and policies for establishing a community memorial for the incident. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| A comprehensive fatality management mission critical list (ie, facilities, personnel and agencies) is reviewed | Annually |
| Search and recovery plan is exercised and updated. | Every 2 years |
| Train augmented fatality management personnel (ie, law enforcement, fire, dental ID team, anthropologists, funeral directors) | Every 2 years |
| Update and train for collection, storage and management of antemortem data | Every 2 years |
| Update and train for collection, storage and management of postmortem data | Every 2 years |
| Exercise and update contingency plans with local, state, and private entities regarding final disposition of remains (ie, contaminated, unclaimed remains) | Every 2 years |
| Exercise and update contingency plans with local, state, and private entities regarding surge (ie, pandemic flu, natural disasters, terrorism) | Every 2 years |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---------------------|--------------------|
|---------------------|--------------------|

| Performance Measure | Performance Metric |
|---|--------------------|
| Time to activate a communications system for the general public to report missing persons | 1 hour |
| Time to first broadcast of available communication system for missing person reports | 2-4 hours |
| Time to survey location(s) of intact infrastructure (previously identified by Emergency Operations Center [EOC]) suitable to support fatality management activities (ie, location of FAC, administrative center, morgue). (time begins after initial personnel have arrived on-scene) | 12-18 hours |
| Time to participation of Jurisdiction Medical Examiner/Coroner (ME/C) in the family reception center | 2 hours |
| Time to activate and fully staff the antemortem information collection process within the Family Assistance Center | 24-48 hours |
| Time for repository/library to be ready to receive antemortem victims' records | 24-48 hours |
| Time for antemortem and postmortem medical, dental, fatality management databases to be ready to receive records | 24-48 hours |
| Time to set-up functional morgue facilities (e.g., Deployable Portable Morgue Unit (DPMU)) from arrival on-scene. | 24 hours |
| Time from callout for surge resources and personnel to be operational | 8-12 hours |
| Time for surge resources and personnel to be operational (time begins from callout) | 8-12 hours |

Capability Elements

Personnel

- Jurisdictional Medical Examiner/Coroner (ME/C)
- ME/C Public Information Officer
- Incident Historian
- Scene operations personnel:
 - Recovery Team (RT)
 - Medical Support Team
 - Field Investigative Unit
 - Medico-Legal Investigator (MLI)

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- Law Enforcement Investigative Unit
 - Photographer (Photo)
 - Scribe/GPS coordinates (Scribe)
 - Anthropologists
 - Dental Team
 - Body Recovery Unit
 - Body handlers (BH)
 - Scene Logistics Officer
 - Safety Officer
 - Scene Communications team
 - Scene Security team
 - Storage Officer
 - DMORT/WMD Team
 - Underwater Recovery Team
 - Family Assistance Center (FAC) personnel:
 - FAC Manager
 - DNA Specialist
 - Data entry
 - Administrative
 - FAC Core Support Elements
 - Scheduler
 - Medical records specialist
 - Interview specialist
 - Language Interpreter (all necessary languages)
 - Antemortem IT/Communications Team
 - Notification Team
 - Social Services rep/Chaplain
 - ME/C Public Affairs Officer
 - Morgue operations personnel:
 - Funeral Director or Embalmer
 - Body Tracker (should be Funeral Directors, MLI's or similar)
 - Forensic Odontologist Team
 - Fingerprint Specialist
 - X-Ray Technician or Radiologist
 - Postmortem IT Manager
 - Post-Mortem Data entry clerk
 - Forensic anthropologist
 - DNA specialist
 - Forensic pathology team
 - PE technician (MLI)

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- Evidence Technician (LEO)
 - Lab Technicians
 - Security Team
 - Safety Officer
 - City engineers/inspectors
 - State Dental Association (response team)
 - State ME/C Association (response team)
 - State Funeral Director Association (response team)
 - Disaster Mortuary Response Team (DMORT) has personnel plus basic load of equipment
 - Deployable Portable Morgue Unit (DPMU)
 - DMORT-WMD
 - DMORT Family Assistance Team
 - National Transportation Safety Board (NTSB) Family Assistance Team
 - DHS National Disaster Medical System's (NDMS) Disaster Medical Assistance Teams (DMAT)
 - DHS Nuclear Incident Support Teams (NIST)

Organizations

- Public Health Department
 - Elected Officials
 - Department of Public Works
 - Health Care Facilities
 - Private Entities
 - Department of the Environment Services
 - Fire/EMS Services
 - MMRS (Metropolitan Medical Response System)
 - National Guard
 - Dept of Public Safety (State Police)
 - Department of the Environment
 - Department of Corrections
 - Attorney General
 - Bureau of Vital Statistics
 - Department of Transportation
 - Department of Veterans Affairs
 - Department of Homeland Security
 - Department of Defense
 - Department of Justice (DOJ) (Federal Bureau of Investigation, FBI)
 - FBI Office of Victim Assistance Program
 - Department of Health and Human Services (HHS), Office of Public Health Emergency Preparedness (OPHEP)
 - HHS, Centers for Disease Control and Prevention (CDC)
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- Environmental Protection Agency (EPA)
- Department of Transportation
- American Red Cross

Equipment

- HazMat Assets
- Cameras
- Computers
- Communications equipment
- Refrigeration storage facilities
- Structural Stability Equipment

Planning

- Mass Fatality Plan for locality
- Coordinated Memorandums of Understanding with supporting agencies (governmental and private)
- Emergency Management Accreditation Compact (EMAC) Agreements with other jurisdictions
- Standing contracts (as indicated)
- Resource list

Training

- EMI – Mass Fatality Incident Response Course (number)
- NIMS (IS-700)
- NRP- (IS-800)
- ICS – (IS-200)
- EOC Management and Operations (IS-)

Exercises, Evaluations, and Corrective Actions

- Participate in mass fatality exercises; include law enforcement, public health, and hospital specialties.

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the Improvised Nuclear Device (IED) scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- This Capability applies to a wide range of incidents and emergencies, accidental or deliberate including disease outbreaks, geological and meteorological disasters, nuclear, hazardous materials (HazMat) or conventional events and all manners of transportation incidents (land, air, marine).
- IND in a single event, located in a major urban area.
- The explosion and electromagnetic pulse have disrupted/destroyed infrastructure, taking out communications, electrical grids, water, transportation, and computers at ground zero. Electrical outages may cascade down the stem causing blackouts on the entire Easter seaboard.

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- There may be simultaneous transportation accidents due to flash blindness or permanent retinal damage in operators.
 - The Federal Government would be severely impacted with cascading implications.
 - There will be up to 229, 270 fatalities.
 - Due to the severity of the explosion, no remains will be found in the crater (30 percent of fatalities = 68,781). However, appropriate legal document will be required to be generated by the medical-legal authority (death certificate by judicial decree).
 - Some remains will be in areas of high levels of fallout. (20 percent of fatalities = 45,854). These remains in the hot zone will not begin to be recovered until between 3 and 14 days after incident at which time the radiation level should be approximately 0.1 percent of its initial level following the detonation of the IND.
 - The majority of remains available for immediate processing (50 percent of fatalities = 114,635) will be burn victims in areas where radiation is not hazardous.
 - 50 percent of severely burned remains (n=56,317) will require extensive scientific identification methods.
 - 50 percent of the other remains (n=56,317) will require less extensive scientific identification methods.
 - Family members will mobilize to the incident scene to search for loved ones.
 - Families will surge for information on unaccounted family members and share information on unaccounted family members.
 - Recovery and identification of remains is expected to continue for multiple years.
 - The local ME/C is no longer operationally functional due to the effects of the IND. Mutual aid with the adjoining medical examiner system will respond to assist the local medical examiner.
 - Active duty military will be victims in the event. Therefore, the military's Casualty Assistance Office will be involved.
 - Emergency workers, including those necessary for fatality management, may not report to duty due to evacuating their families or because they have been injured or killed.
 - Decontamination: At present, decontamination assets are at the federal level and consist of one Department of Defense (DOD), team and one Disaster Mortuary Operational Response Team – Weapons of Mass Destruction (DMORT-WMD) team. These resources would take 12 – 24 hours to arrive on-scene and could process up to 25 bodies/hour. This assumption does not include the actual recovery of the contaminated remains.
 - Sceneops: After the recovery process begins, a Recovery team (consisting of Field Investigation and Body Handling Units) will process 3 bodies/hour (for a 12-hr shift).
 - Under ideal circumstances (non-contaminated, physically identifiable, and intact remains), the Dover Mortuary – at full resource activation (12 (Medical Examiner/Coroner (ME/C), plus support staff and logistic support) – can handle 100 cases per day.
 - Antemortem Data Collection In The Family Assistance Center (FAC) A 2-person interview team in the FAC requires 2 hours/family interview (+ breaks). 5 families can be interviewed
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over the course of a 12-hour shift by one team. Additional support elements handle the collection and management of specimens (DNA) and records (medical).

- Morgueops: One 35-member Morgue Operations team can process and positively identify 5 bodies/day (based on historical data – see attachment A)
- The National Association of Medical Examiners recommends that a pathologist can adequately perform 250-350 autopsies per year.
- Scene hazards such as structural collapse, explosives and chemical hazards are communicated to the ME/C upon notification and/or arrival.
- Fatality management staffing includes ME/C, funeral service personnel, cemetery and crematorium personnel, dentist, anthropologist, crime lab technician, and any other person whose responsibility involves direct handling of human remains.
- The ME/C is defined as the agency chief and all staff authorized to act on behalf of his/her authority (i.e. Medico Legal Investigators [MLI]).
- Community leaders will support the time requirements to conduct a safe, efficient, methodical, and complete collection of human remains and evidence for the purposes of crime scene investigation for law enforcement (LE) and victim ID for the ME/C.
- As worker safety permits, remains, personal effects and items of evidence will be processed by fatality management personnel in accordance with incident action plan (IAP).
- Deaths will be protracted and require medical treatment facilities to report deaths to ME/C.
- There will be multiple sites for managing fatalities in multiple jurisdictions.
- ME/C may have to institute a unified command with other ME/C.
- ME/C may have to institute a decentralized approach due to lack of communications and geographical distribution.
- Different jurisdictions have different laws about public health emergencies and who has authority.
- Different jurisdictions have different laws pertaining to the issuance of death certificates when there is no scientific evidence of an individual’s remains.
- Different jurisdictions may have different standards for processing remains, identifying remains, ruling out atypical cases, those requiring autopsy and establishing cause and manner of death.
- There may be a large discrepancy in the identification and release of bodies among jurisdictions.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability

| Resource Organization | Estimated capacity | Scenario Requirement values | Quantity of resources needed |
|--|--------------------|-----------------------------|----------------------------------|
| Jurisdictional Medical Examiner/Coroner (ME/C) | 1 per jurisdiction | 1 per jurisdiction | 1 for each jurisdiction affected |

| Resource Organization | Estimated capacity | Scenario Requirement values | Quantity of resources needed |
|---|--|--|------------------------------|
| ME/C Public Information Officer | 1 | 1 | 1 |
| Incident Historian | 1 team per incident | 1 team per incident | 1 team |
| Scene operations personnel/Recovery Team: (per 12 hr shift) | | | |
| Medical Support Team | | | |
| Field Investigative Unit (Each unit can recover 36 bodies per shift). Each unit consists of 1 of : <ul style="list-style-type: none"> ▪ Medico-Legal Investigator (MLI) ▪ Law Enforcement Investigative Unit ▪ Photographer (Photo) ▪ Scribe/GPS coordinates (Scribe) ▪ Anthropologists ▪ Dental Team | 15 units per 12 hr shift (5 units suiting, 5 in field and 5 coming out of field) | 414 days | |
| Body Recovery Unit (1 for each Field investigative unit) | 4 body handlers per team | 15 units per 12 hr shift (5 units suiting, 5 in field and 5 coming out of field) | 414 days |
| Scene Logistics Team | 1 per incident | 1 per incident | 414 days |
| Safety Officer | 1 per incident | 1 per incident | 414 days |
| Scene Communications team | 1 per incident | 1 per incident | 414 days |
| Escort Security team (provided by ESF 13) | 1 per field investigative unit, 1 per body recovery unit | 10 teams per 12 hr shift | 414 days |
| FM Staging Security Team | 2 teams, one for hot and cold staging areas | | 414 days |

| Resource Organization | Estimated capacity | Scenario Requirement values | Quantity of resources needed |
|--|--|-----------------------------|---------------------------------|
| Storage Officer | 1 per incident | 1 per incident | 414 days |
| Remains decontamination team | 2 remains per 1 hr per 35 member team | 16 teams per day | 388 days |
| Underwater Recovery Team (provided by ESF 9) | | | |
| Family Assistance Center (FAC) personnel/Antemortem Data Collection Team: per 12 hr shift (Historical data shows 10 family members will present at the FAC for each victim for the IND scenario we assume 1,000,000 will present at the FAC.) | | | |
| FAC Manager | 1 per FAC | 1 per FAC | 1 per affected jurisdiction = 3 |
| DNA Specialist | 20 personnel from LE or DNA specialists per shift – each specialist can collect 2 samples per hour | 40 per day for each FAC | 120 per day |
| Data entry | 50-60 personnel | 120 per day for each FAC | 360 per day |
| Administrative | 5 per shift | 10 per day | 30 per day |
| Scheduler | 2 personnel | 4 per day | 12 per day |
| Medical records specialist | 10 personnel per shift | 20 per day | 60 per day |
| Interview specialist | 100 TEAMS OF 2 each per shift – each team can | 200 per day - | 600 per day |

| Resource Organization | Estimated capacity | Scenario Requirement values | Quantity of resources needed |
|---|---|---------------------------------------|------------------------------|
| | interview 5 families per day | | |
| Language Interpreter (all necessary languages) | As situation dictates | | |
| Antemortem IT/Communications Team | 5 personnel per team per shift | 10 per day | 30 per day |
| Notification Team | 20 per daytime shift | 20 per day | 60 per day |
| Social Services rep/Chaplain | As determined by Social services/chaplain | | |
| LE | As determined by LE | | |
| ME/C Public Affairs Officer | 1 per shift | 2 per day | 6 per day |
| Morgue operations personnel: per 12 hr shift per morgue (numbers are averages based on historical data). Time frames are based on 1.5 hrs to perform each autopsy with 112,000 set of remains to autopsy. A morgue ops team this size can process 100 sets of remains per day. | | | |
| Embalming Section | 4 personnel per station | 48 personnel (8 embalmings per shift) | 1100 days |
| Body Tracker (should be Funeral Directors, MLI's or similar) | 8 personnel per shift | 16 personnel per day | 1100 days |
| Dental Section | 5 personnel per station | 10 personnel per day | 1100 days |
| Fingerprint Section | 2 personnel per station | 4 per day | 1100 days |

| Resource Organization | Estimated capacity | Scenario Requirement values | Quantity of resources needed |
|--|-------------------------|-----------------------------|------------------------------|
| Radiology Section (digital equipment) | 2 personnel per station | 4 per day | 1100 days |
| Postmortem IT Manager | 1 = section leader | 2 per day | 1100 days |
| Post-Mortem Data entry clerk | 3 per section | 6 per day | 1100 days |
| Anthropology Section | 2 personnel per section | 4 per day | 1100 days |
| DNA Section | 2 personnel per section | 4 per day | 1100 days |
| Pathology Section | 3 personnel per section | 6 per day | 1100 days |
| Personnel Effects and Photography Section | 4 personnel per section | 8 per day | 1100 days |
| Logistics Section | 4 personnel per shift | 8 per day | 1100 days |
| Security Team (provided by ESF 13) | | | |
| Safety Officer | 1 per shift | | |
| Medical Team | 1 per morgue | | |
| City engineers/inspectors | | | |
| State Dental Association (response team) | | | |
| State ME/C Association (response team) | | | |
| State Funeral Director Association (response team) | | | |
| Disaster Mortuary Response Team (DMORT) has personnel plus basic load of equipment | | | |
| Deployable Portable Morgue Unit (DPMU) | 2 | 2 | 2 |
| DMORT-WMD | | | |

| Resource Organization | Estimated capacity | Scenario Requirement values | Quantity of resources needed |
|--|--------------------|-----------------------------|------------------------------|
| DMORT Family Assistance Team | | | |
| NTSB Family Assistance Team | | | |
| DHS National Disaster Medical System's (NDMS) Disaster Medical Assistance Teams (DMAT) | | | |
| DHS Nuclear Incident Support Teams (NIST) | | | |

Approaches for Large-Scale Events

(Please see introduction to Fatality Management Target Capability List document as well as discussion of IND earlier in this document).

For pandemic influenza, major planning assumptions are as follows:

- Personnel involved in fatality management should be designated “first responders” for priority group determination for the distribution of limited antiviral medications and vaccines.
- Because pandemic influenza is a natural disease event, the ME/C may or may not have the lead responsibility to manage fatalities. In some areas, local jurisdictional authorities in coordination with hospitals, funeral homes, and EMS and law enforcement responders will likely manage the remains. In some jurisdiction, the ME/C’s primary role may be to assist in the identification process.
- The influenza pandemic would spread quickly across the United States, affecting most communities virtually simultaneously for purposes of planning. The use of assets at the Federal Government would likely be relatively small related to the local demands for its voluntary DMORT members. Similarly, DOD assets would likely be stretched very thin.
- Among working aged adults, about 20% to 25% will become ill during the pandemic wave. About 10% will be sick or caring for ill family members during the peak of the community outbreak. Rates could be higher in some communities or work settings.

National Targets and Assigned Levels Based on the assumptions of:

| Resource | Assigned Level and Quantity |
|--|-----------------------------|
| Department of Defense Mortuary - Dover | Federal - 1 |
| Disaster Mortuary Operational Response Team (DMORT) – Type 1 | Federal |
| DMORT - WMD | Federal |
| DMORT-Family Assistance Center | Federal |

| Resource | Assigned Level and Quantity |
|---|---|
| (FAC) | |
| Portable Morgue | Federal (DPMU) - 3 State – 1 for every 5 states = 10 |
| Morgue Operations Team | Federal - 3 State – 1 per 5 states = 10 |
| Morgue Security Team | State/Local – 1 per morgue = 13 |
| Body Recovery Unit | State/Local - 30 per morgue = 390 |
| Medical Support Team | Federal/State/Local – one per morgue = 13 |
| Field Investigative Unit | State/Local - 30 per morgue = 390 |
| Scene Logistics Unit | State/Local – one per morgue = 13 |
| Escort Security Team | State/Local - 30 per morgue = 390 |
| Fatality Management Staging Security Team | State/Local – one per staging area = 26 |
| Incident Historian Team | State – 1 per state = 50 |
| Remains Decontamination Team | State/Local – 16 teams per morgue = 208 |
| Dive (underwater) Recovery Team | Federal - 28 State – one per state = 50 |
| Medical Examiner/Coroner | Federal State – 1 per state - 50 Local – 1 per jurisdiction |
| Refrigerated Storage | Federal – accommodate 200 remains State – accommodate 100 remains Local – to accommodate 10% of jurisdiction's population |
| Mortuary Officers (Funeral Directors) | State Local Private |
| Antemortem Data Collection Team within Family Assistance Center | Federal - 3 State-1 per state = 50 Local – 1 per UASI = 51 |
| Transportation | Federal State Local Private |

Linked Capabilities

- Communications
- Community Preparedness and Participation

- Emergency Operations Center Management
- Epidemiological Surveillance and Investigation
- Law Enforcement Investigation and Operations
- Mass Care (Sheltering, Feeding, and Related Services)
- Medical Supplies Management and Distribution
- Medical Surge
- Onsite Incident Management
- Planning
- Public Health Laboratory Testing
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Triage and Pre-Hospital Treatment
- Urban Search and Rescue
- WMD/Hazardous Materials Response and Decontamination

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Recover Mission Area

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STRUCTURAL DAMAGE AND MITIGATION ASSESSMENT

Capability Definition

Structural Damage and Mitigation Assessment is the capability to conduct damage and safety assessments of civil, commercial, and residential infrastructure and to perform structural inspections, and mitigation activities. The capability includes being able to provide contractor management, construction management, cost estimating, technical assistance, and other engineering services to support and manage response and recovery operations.

Outcome

Accurate situation needs and damage assessments occur. Mitigation projects to lessen the impact of similar future events are identified and prioritized. The full range of engineering, building inspection, and enforcement services are implemented, managed, and coordinated in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-event conditions.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function (ESF) #3: Public Works and Engineering.

Capability Description

| Activity | Description |
|-----------------------------|---|
| Inspections and assessments | <ul style="list-style-type: none"> ▪ Conduct structural inspections ▪ Conduct building inspections ▪ Conduct damage assessments ▪ Conduct safety inspections |
| Technical assistance | <ul style="list-style-type: none"> ▪ Identify and set priorities for mitigation strategies for recovery efforts, including potential security mitigation actions ▪ Estimate costs |
| Management/coordination | <ul style="list-style-type: none"> ▪ Coordinate construction ▪ Coordinate contractors ▪ Coordinate insurance industry/private-sector ▪ Manage grants |

Critical Tasks

| UTL# | Task |
|--------------------|---|
| Rec.A.3 3.2.1.1 | Implement and manage the Federal Emergency Management Agency (FEMA) Public Assistance Program (PA) to support the repair and restoration of public property. |
| Rec.C.2 1.2 | Develop standards and procedures to identify qualified contractors offering recovery/restoration services. |
| Rec.C.2 2.3.1.2 | Coordinate, fund, and implement contracts for construction management and inspection. |
| Rec.C.2 2.3.1.3 | Coordinate resources to conduct building inspections and damage assessment. |
| Rec.C.2 2.3.4 | Identify the need for additional engineering and assessment resources from other Federal agencies and issue mission assignments to activate such resources. |
| Rec.C.2 3.1.1 | Participate in post-incident assessments of structures, public works and infrastructure to develop cost estimates, complete written project worksheets, determine priority repair/reconstruction projects, and help to prioritize engineering and construction resources. |
| Rec.C.2 3.1.3 | Conduct building inspections and damage assessments of public and private structures. |
| Rec.C.2 3.2.2 | Assess the requirement to relocate affected essential services to backup locations. |
| Rec.C.2 3.3.3 | Recommend a prioritization schedule of critical infrastructure services, facilities, and assets restoration. |
| Rec.C.2 3.4.1 | Conduct debris assessment. |
| Rec.C.2 3.4.2 | Assess the requirement for decontamination or safe demolition, removal, and disposition of contaminated debris. |
| Rec.C.2 3.4.5 | Manage, monitor, and/or provide technical advice on debris management and reestablishment of ground and water routes into the affected area. |
| Rec.C.2 3.4.5.1 | Assess the need for emergency flood protection and/or emergency erosion control. |
| Rec.C.3 3.1.5 | Coordinate, fund, and implement contracts for emergency repair of utilities and other services. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Damage Assessment and Mitigation plans and procedures are in place | Yes/No |
| Critical Resource List has been developed | Yes/No |
| Mitigation measures and emergency restoration procedures have been identified | Yes/No |
| Paid and volunteer staff meet relevant qualifications and certification standards necessary to perform assigned mission and tasks | Yes/No |
| Jurisdiction maintains situation and damage assessment plans in Recovery Annex | Yes/No |
| Jurisdiction conducts code enforcement activities | Yes/No |
| Jurisdiction has street maps which provide alternate routes to affected areas | Yes/No |
| Emergency response plans are exercised | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|---|--|
| Time to mobilize personnel for damage assessment after the observed end of the natural disaster | Not later than 24 hours |
| Time to conduct building safety inspections for habitability (green, yellow, and red tags) | Within 4 weeks |
| Time to conduct an emergency work damage assessment and Public Works (PW) preparation | Within 6 months of the end of the incident period. |
| Time to conduct a permanent work damage assessment and PW preparation (FEMA and non-FEMA) | Within 12 months of the end of the incident period |
| Time for the jurisdiction to provide technical assistance to emergency responders | Within 24 hours following the end of the disaster |
| The jurisdiction identifies and prioritizes FEMA and non-FEMA mitigation activities concurrent with the development of individual project worksheets for specific repair/reconstruction projects | Yes/No |
| Situation assessments are conducted using one of the following methods: (1) aerial reconnaissance, (2) remote sensing, (3) computer modeling (e.g., HAZUS), or (4) rapid field assessments/windshield surveys. Results are compared and contrasted to provide a best initial estimate | Yes/No |
| Time to conduct a situation assessment and provide the results | Within 12–24 hours after the incident |

| Performance Measure | Performance Metric |
|--|--|
| Time to conduct a detailed situation assessment, to include information on buildings that are in imminent danger of collapse and critical resources or infrastructure are threatened | Within 24–48 hours of the conclusion of the disaster |
| Time to complete 200 applicants' briefings for FEMA's Public Assistance Program applicants | Within 2 months (100,000 category E Projects, at 10 buildings per applicant) |
| Time to process all FEMA project worksheets and complete eligibility and other reviews | Within 2 weeks of the project worksheet entry |
| Time to obligate Federal grant funds for FEMA's Public Assistance applicants | 50% within 1 year 75% within 2 years 90% within 3 years 95% within 4 years 100% within 5 years |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Public Assistance Teams: Buildings
- Public Assistance Teams: Debris, emergency measures
- Public Assistance Teams: Other permanent work
- Rapid Needs Assessment Teams
- Disaster Assessment Teams
- Engineering services (to include safety engineers)
- Home and Business Assessment Teams

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the major earthquake scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- Of the 1 million buildings moderately damaged, 200,000 were commercial buildings, 100,000 were public buildings, and 700,000 were residences (300,000 red tagged unsafe for habitation). Of these 1,000 were large office buildings that were partially collapsed and where victims were trapped.
- The scenario identifies earthquake damage to more than 1 million buildings. For purposes of quantifying this capability, the indefinite amount above the 1 million was assumed to be statistically insignificant.
- Total number of Public Assistance Projects: 300,000.

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- Management of significant debris removal operations, emergency protective measures for the public, and the restoration of transportation routes will take immediate precedence over building and structural assessments.
 - Requirement for Federal support will be increased because significant numbers of State, local, and private sector personnel in the impacted area will not be available to support structural damage assessment and mitigation activities.
 - Port facilities in affected area significantly damaged, cargo throughput reduced by 50 percent.
 - Transit system unavailable by 50 percent.
 - Rail system cargo throughput reduced by 50 percent.
 - Highest probability U.S. earthquake areas are: Arkansas, Arizona, California, Colorado, Hawaii, Idaho, Illinois, Kentucky, Missouri, Montana, Nevada, Oregon, South Carolina, Tennessee, Utah, and Washington, according to the United States Geological Survey (USGS). There are approximately 64 metropolitan statistical areas (MSA) with populations greater than 100,000 in these states.
 - Rapid Needs Assessment Teams would need to be located in close proximity to these 64 MSAs to perform necessary tasks immediately following the incident.
 - Public Assistance Teams, Disaster Assessment Teams, and Engineering Services resources could be based regionally (using 10 standard Federal Regions) or at the national level, given the longer timeline of their missions.
 - FEMA's principal responsibility will be to prepare project worksheets for the 100,000 damaged public buildings in order to implement the Public Assistance Grant program.
 - Assume that damaged building projects represents 33 percent of total number of FEMA eligible projects with other categories as follows:
 - Debris – 15%
 - Emergency Measures – 25%
 - Roads/Bridges – 12%
 - Flood Control - <1%
 - Utilities – 10%
 - Other – 5%
 - Rapid Needs Assessment Teams – 30 for this scenario
 - Population of affected area in this scenario – 10,000,000
 - Ratio of teams to population 3 teams/1M people
 - From the Census Bureau's Metropolitan Area Rankings 1997 press release, 69,704,815 people live within the 64 MSA with populations greater than 100,000 that are located in states with the highest earthquake probability.
 - Therefore, the total number of Rapid Needs Assessment Teams is 210.
 - Moderately damaged means that the impacted building is less than 50 percent damaged.
 - Initial safety assessments will be required before deploying additional resources to conduct building, structural, and mitigation assessments. The Federal government can provide assistance to state and local governments with building inspections to protect public health and safety.
 - Sufficient resources from Federal agencies and the private sector will be available for assessment and recovery operations.
-

- Normal deployment time for required response personnel increased by 24-48 hours.
- Appropriate and trained professional staff could be mobilized within 48 hours from multiple locations, nationwide.
- All operations would be managed out of a Joint Field Office (JFO) established for the disaster incident.
- Initial meetings with impacted state/local governments would result in the formation of teams to complete:
 - Emergency Inspections (health/safety)
 - Repair/reconstruction Project Worksheets (PWs) for public structures and mitigation activities.
- Additional teams would need to be established utilizing the private sector (including the insurance industry) to focus on inspection/recovery for the private sector, to include mitigation activities.
- 300,000 project worksheets for approximately 10,000 applicants
- 50 applicants will participate in each applicant’s briefing
- 20 of the Rapid Needs Assessment (RNA) Teams will be deployed to the county with the greatest amount of damage, while the other affected counties will require only two RNA teams each.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Major Earthquake)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|--|--|
| Public Assistance Team (Buildings) | 35 public structures per team, per week. | 100,000 public structures. [(100000 structures* 7 days/week)/ (35structures/team/week *365days)] | 55 Public Assistance teams for completion within 365 days. |
| Public Assistance Team (Debris, Emergency Measures) | 30 PWs per team per week. | 120,000 projects. [(30 PWs/team/week * 180 days / 7 days)]. | 155 Public Assistance teams |
| Public Assistance Team (other permanent work) | 30 PWs per team per week. | 80,000 projects. [(80,000 PWs) / (30 PWs/team/day * 365 days / 7 days)]. | 51 Public Assistance teams |
| Public Assistance Teams Total | | | 522 Public Assistance teams. |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|------------------------------|----------------------------------|--|----------------------------------|
| Rapid Needs Assessment Team | 1.4 teams per counties per day. | Six counties impacted; 1,000 buildings partially collapsed. | 30 Rapid Needs Assessment teams. |
| Disaster Assessment Team | 30 structures per day, per team. | 200,000 private/commercial structures; 700,000 residences. [900,000 structures/(30 structures/team/day * 30 days)]. | 1,000 teams |
| Engineering Services | 30 structures per day, per team. | 100,000 public buildings with 15,000 destroyed; require inspection to determine safety (e.g., need for “Red Tag”). [100,000 structures/(30 structures/team/day * 30 days)]. | 112 teams |
| Home and Business Assessment | | | 3,300 SBA Verifiers. |

Approaches for Large-Scale Events

- By extending the time for public building inspections/project worksheets to be completed from one to two years, the workload will be reduced by 50 percent.
- By extending the time for private building inspections to be completed from one month to two or more months, the workload is reduced by at least 50 percent.
- By extending the time for building inspections to be completed from one month to two or more months, the workload is reduced by at least 50 percent.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|---|---|
| <i>The numbers below are National Targets but are based only on the Earthquake scenario, and assume placement of resources in the 64 MSAs in the 16 states where earthquakes are probable; additional resources may be needed in other parts of the country to address the other scenarios.</i> | |
| Public Assistance Team (Buildings) | 110 Teams – the Public Assistance Teams will consist primarily of Federal staff, with some assistance from state/local representatives: Federal – 80% of the 55 teams. State/Local – 20% of the 55 teams. |

| Resource | Assigned Level and Quantity |
|---|--|
| Public Assistance Team (Debris, Emergency Measures) | 310 Teams. Federal – 80% of the 155 teams. State/Local – 20% of the 155 teams. |
| Public Assistance Team (other permanent work) | 102 Teams. Federal – 80% of the 51 teams. State/Local – 20% of the 51 teams. |
| Rapid Needs Assessment Team | 210 teams total -- The ideal team will comprise one Federal, one state, and one local representative. Federal – 33% of 210 teams. State – 33% of 210 teams. Local – 33% of 210 teams. |
| Disaster Assessment Team | 1000 Teams. State/Local – 78% of the 1,000 teams. Private – 22% of the 1,000 teams. |
| Engineering Services | Federal – 112 teams. |
| Home and Business Assessment | Federal – 3,300 SBA Verifiers |

Linked Capabilities

- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Environmental Health
- Mass Care (Sheltering, Feeding, and Related Services)
- Medical Surge
- Planning
- Public Safety and Security Response
- Responder Safety and Health
- Restoration of Lifelines
- Risk Management
- Urban Search and Rescue
- WMD/Hazardous Materials Response and Decontamination

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RESTORATION OF LIFELINES

Capability Definition

Restoration of Lifelines is the capability to manage clearing and restoration activities (e.g., demolition, repairing, reconstruction). This includes the restoration of essential gas, electric, oil, communications, water, wastewater and sewer, transportation and transportation infrastructure, and other utilities; this also includes clearing debris from lifelines (e.g., transportation, communications, utilities).

Outcome

Lifelines to facilitate emergency response and recovery activities are restored and essential lifeline services for the affected population are reestablished.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports Emergency Support Function (ESF) #3: Public Works and Engineering

Capability Description

| Activity | Description |
|------------------------|---|
| Assessment | Assess damage and investigate and set priorities |
| Repair and restoration | <ul style="list-style-type: none"> ▪ Clear debris from lifelines. ▪ Repair and restoration of publicly owned gas, electric, communications, and water and wastewater utilities ▪ Repair and restore privately owned gas, electric, communications, and water and wastewater utilities ▪ Repair and restore transportation systems |
| Management | <ul style="list-style-type: none"> ▪ Provide emergency power resources ▪ Manage contractors |

Critical Tasks

| UTL# | Task |
|------------------|---|
| Rec.C.2 3.1.1 | Participate in post-incident assessments of structures, public works, and infrastructure to help determine critical needs and workloads. |
| Rec.C.2 3.2.4 | Monitor private-sector planning and operations related to response and recovery/restoration of infrastructure-related services. |
| Rec.C.3 3.1.2 | Ensure integration of private-sector planning and operations related to response and recovery/restoration of infrastructure-related services. |
| Rec.C.3 | Execute emergency contracting support for life-saving and life-sustaining services. |

| UTL# | Task |
|--------------------|---|
| 3.1.4 | |
| Rec.C.3 3.1.5.1 | Provide housing for utility restoration personnel, including facilities for restoration personnel within the impacted area. |
| Rec.C.3 3.2.5 | Provide Federal funding for the repair or replacement of public systems and facilities. |
| Rec.C.3 3.2.5.6 | Provide Federal funding for the restoration of public utilities. |
| Rec.C.3 5.1.1.5 | Provide and coordinate the use of emergency power generation services (using Federal stockpiles) at critical facilities. |
| Rec.C.3 5.5 | Conduct recovery and restoration operations. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| Jurisdiction's restoration prioritization plans in place | Yes/No |
| Key resource needs are identified, and contingent contracts and mutual aid agreements are in place | Yes/No |
| Plans and procedures have been developed to activate restoration activities | Yes/No |
| Plans and procedures are appropriately trained and exercised | Yes/No |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|---|
| Time to mobilize personnel and equipment for the Fast Response Unit (FRU) | 6 hours |
| Time to mobilize personnel and equipment for lifelines damage assessment (e.g., helicopter, satellite GIS) | Within 6 hours after the end of the event |
| Time to mobilize 25 percent of needed personnel, vehicles, and heavy equipment for debris management | 12 hours |
| Time to mobilize 75 percent of needed personnel, vehicles, and heavy equipment for debris management | 30 hours |
| Time to mobilize 100 percent of needed personnel, vehicles, and heavy equipment for debris management | 60 hours |

| Performance Measure | Performance Metric |
|---|-------------------------------|
| Time to commence debris removal | After the first 24 hours |
| Time to mobilize personnel, equipment, and materials to establish electricity sufficient and restore 100 percent of damaged power utilities that provide service to essential facilities (e.g., hospitals, police and fire departments) | Within 36 hours of disruption |
| Time to mobilize personnel, equipment, and materials and restore 25 percent of water and sewer service | Within 14 days |
| Time to mobilize personnel, equipment, and materials and restore 25 percent of natural gas service | Within 7 days |
| Time to mobilize personnel, equipment, and materials and restore 100 percent of communications or to provide alternate communications to essential facilities (e.g., hospitals, police and fire departments) | Within 8–12 hours |
| Time to mobilize personnel, equipment, and materials and establish key transportation avenues | Within 12 hours |
| Time to identify alternate transportation routes to provide emergency services | Within 2 hours |
| Time to provide housing for mobilized personnel while they are operating at recovery scene | Within 36 hours of disruption |

Capability Elements

Personnel (Personnel and Teams include applicable equipment and training as defined by NIMS Resource Typing System)

- Paid and volunteer staff that meet relevant qualifications and certification standards
- Debris Removal Team
- Damage Assessment Team: Gas distribution system
- Damage Assessment Team: Water and sewer
- Damage Assessment Team: Electric power
- Damage Assessment Team: Communications system
- Water and Sewer Restoration Crew
- Gas Distribution System Restoration Crew
- Communications System Restoration Crew
- Electric Power Restoration Crew
- Transportation Assessment Team

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability factors were developed from an in-depth analysis of the major earthquake scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- 10,000 water mains are damaged or destroyed.
- 300 miles of electrical and cable lines are damaged affecting 650,000 households and businesses.
- 8,000 gas mains are damaged such that natural gas is emitted in various neighborhoods in the affected area.
- 1,300 square miles of Metropolitan area is affected.
- Telecommunication switch services degraded by 50% or higher. Cellular facilities damaged 50 percent or higher.
- 200 miles of highways/railroads and subways, 100 bridges and tunnels, 2 category 1 runways and 2 category III runways damaged.
- 50 percent of waste water treatment infrastructure damaged.
- Responsibility for lifeline repairs will be based on ownership of lifeline facilities (public vs. private sector).
- FEMA’s principal responsibility will be to prepare project worksheets for damaged lifelines owned by the public sector in order to implement the Public Assistance Grant program.
- FEMA can provide assistance to state and local governments for debris removal from public property, and to implement emergency measures to protect public health and safety, if public health and safety is threatened by damage to lifelines.
- Normal deployment time for required response personnel increased by 24-48 hours.
- Reestablishment of utilities will take longer with fewer restoration crews; however, the utility restoration industry has extensive and frequent experience, and can deliver personnel, equipment and materials within certain time perimeters.
- Assessment teams would need to be deployed immediately following the event, particularly for gas, electric, and communication systems in order to provide service to essential institutions and facilities (e.g., police, fire, and hospitals), although many of these facilities already may have contingency plans and backup utilities.
- Debris on public property may be removed to allow access of emergency vehicles.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Major Earthquake)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|-----------------------------|------------------------------|
|-----------------------|--------------------|-----------------------------|------------------------------|

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|---|---|---|
| Debris Removal Team | 80 cu. yd. per hour (moved to side of road). | Bridges and major highways down or blocked. | 80 teams to clear debris from transportation avenues in 72 hours. |
| Damage Assessment Team: Gas Distribution System | .5 square miles per hour. | 1300 square miles of metropolitan area | 25 teams to assess damage within 12 hours. |
| Damage Assessment Team: Water and sewer | 1 damaged main per 1.5 hours; 8 per 12 hour shift. | 10,000 water mains. | 40 assessment teams to cover 12 hour shifts for 30 days. |
| Damage Assessment Team: Electric Power | 1 mile of damaged wire per .5 hour interval; 24 miles per 12 hour shift. | 300 miles of damaged electrical lines. | 2 Damage assessment investigators to assess 300 miles of line in 13 days. |
| Damage Assessment Team: Communications System | 1 crew to identify 1 line per 12 hr. interval. | 8,000 fiber optic breaks. | 400 crews find 8000 breaks within 20 days. |
| Water and Sewer Restoration Crew | 1 main repaired per four hour interval; 3 mains repaired per 12 hour shift. | 10,000 water mains. | 100 crews per 12 hr. shift 10,000 water mains completed in 17 days. |
| Gas Distribution System Restoration Crew | 1 main per day per team. | 25 percent of 8,000 mains in 14 days. | 143 teams. |
| Communications System Restoration Crew | 1- 3 person team per break, per 12 hr. day. | 8,000 breaks in fiber optic lines. | 300 crews to complete 8000 breaks in 26 days. |
| Electric Power Restoration Crew | 1 crew restores 95 customers per 12 hour interval. | 600,000 customers without electricity. | 1200 crews can restore electrical service in 5.2 days. |
| Transportation Assessment Team | 1 team identifying alternate routes. | 50 percent of transportation avenues unavailable. | 1 team - 1 day. |

Approaches for Large-Scale Events

- Water and sewer restoration crews, Gas distribution system restoration crews, Communications System restoration crews, and Electric Power restoration crews could double the estimated restoration time by:

- utilizing temporary emergency resources (e.g., portable generators);
- requesting citizens to take conservation measures;
- utilizing cross-border resources.

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|--|
| <i>Note: the teams identified below will be generated in response to a specific incident by assembling staff from various locations; they are not dedicated, standing organizations.</i> | |
| Debris Management Team | Federal/State/Local Partnership – 80 teams distributed regionally. |
| Damage Assessment Team-Gas Distribution System | Local (with private sector partnership) – 25 teams distributed regionally. |
| Damage Assessment Team-Water and Sewer | Local (with private sector partnership) – 40 teams distributed regionally. |
| Damage Assessment Crew-Electric Power | Local (with private sector partnership) – 2 teams distributed regionally. |
| Damage Assessment Crew-Communications System | Local (with private sector partnership) – 400 teams distributed regionally. |
| Water and Sewer Restoration Crew | Local (with private sector partnership) – 100 teams distributed regionally. |
| Gas Distribution System Restoration Crew | Local (with private sector partnership) – 143 teams distributed regionally. |
| Communications System Restoration Crew | Local (with private sector partnership) – 300 teams distributed regionally. |
| Electric Power Restoration Crew | Local (with private sector partnership) – 1200 teams distributed regionally. |
| Transportation Assessment Team | Local (with private sector partnership) – 1 team distributed locally. |

Linked Capabilities

- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Critical Infrastructure Protection
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Environmental Health

- Explosive Device Response Operations
- Fatality Management
- Law Enforcement Investigation and Operations
- Mass Care (Sheltering, Feeding, and Related Services)
- Medical Surge
- Onsite Incident Management
- Planning
- Responder Safety and Health
- Risk Management
- Structural Damage and Mitigation Assessment
- Urban Search and Rescue

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ECONOMIC AND COMMUNITY RECOVERY

Capability Definition

Economic and Community Recovery is the capability to implement short- and long-term recovery and mitigation processes after an incident. This will include identifying the extent of damage caused by an incident, conducting thorough post-event assessments and determining and providing the support needed for recovery and restoration activities to minimize future loss from a similar event.

Outcome

Economic impact is estimated, priorities are set for recovery activities, business disruption is minimized and returned to operation, and individuals and families are provided with appropriate levels and types of relief with minimal delay.

Relationship to National Response Plan Emergency Support Function (ESF)/Annex

This capability supports the following Emergency Support Functions (ESFs):

- ESF#6: Mass Care, Housing, and Human Services
- ESF#14: Long-Term Community Recovery and Mitigation

Capability Description

| Activity | Description |
|---------------------|---|
| Assessment | <ul style="list-style-type: none"> ▪ Assess losses and damage to public and private facilities. ▪ Process applications for losses and damages. ▪ Assess economic impact of losses to the public and private sectors. |
| Recovery assistance | <ul style="list-style-type: none"> ▪ Identify short- and long-term recovery needs. ▪ Prioritize and implement recovery activities. ▪ Coordinate short- and long-term recovery efforts. ▪ Coordinate with government and private entities to minimize economic impact and advance recovery. ▪ Provide nonmonetary forms of disaster assistance (e.g., crisis counseling, disaster legal services). ▪ Train businesses in continuity planning. ▪ Guide sustainable growth that fosters low impact development. |

Critical Tasks

| UTL# | Task |
|-----------------|--|
| Rec.A.3 3.2 | Establish community recovery assistance programs. |
| Rec.A.3 3.2.1 | Implement and manage Federal assistance programs. |
| Rec.A.3 3.2.2 | Implement State, regional, tribal, and local assistance and recovery plans. |
| Rec.A.3 3.2.2.1 | Implement private-sector recovery, local assistance, and recovery and mitigation plans. |
| Rec.C.4 2 | Provide economic stabilization, community recovery, and mitigation support and/or financial restitution to key service sectors (e.g., medical, financial, public health and safety). |
| Rec.C.4 2.4 | Conduct post-event assessment and planning to effect successful long-term recovery, including the mitigation of damages from future disasters. |
| Rec.A.3 3.2 | Establish community recovery assistance programs. |

Preparedness Measures and Metrics

| Preparedness Measure | Preparedness Metric |
|---|---------------------|
| Resumption, restoration and recovery plans in place | Yes/No |
| Recovery and mitigation planning efforts are coordinated with an existing or ongoing continuity of operations plan (COOP). | Yes/No |
| The jurisdiction has solicited and considered the input of major private industries and business associations in the planning process | Yes/No |
| The jurisdiction has appropriate insurance coverage | Yes/No |
| Personnel, by type, are trained to assist in implementing the plans to aid communities and businesses in stabilization and recovery | Yes/No |
| The jurisdiction has qualified personnel in each functional area | Yes/No |
| Jurisdiction has established protocols for locating and recalling staff during the recovery process | Yes/No |
| Recovery plans have been exercised | Yes/No |
| Continuity of Operations Plan (COOP) is in place | Yes/No |
| Debris management priorities are established within the community to improve restoration of key community | Yes/No |

| Preparedness Measure | Preparedness Metric |
|--|---------------------|
| functions and critical infrastructures | |

Performance Measures and Metrics

| Performance Measure | Performance Metric |
|--|--|
| Time within which the jurisdiction estimates the social and economic consequences of an event in the affected area | Depending on plan component 0 to 7 days |
| Time within which the jurisdiction estimates the social and economic consequences of an event in the affected area, with refinements | 0 to 30 days |
| Time in which claim process is activated to manage claims | As early as 1 week for individual claims and as long as 1 year plus for government-to-government assistance |
| Time in which the jurisdiction initiates efforts to coordinate with the nonprofit sector and relief NGOs | Within two days following an event and continuing |
| Time in which the jurisdiction initiates efforts to coordinate with the other levels of government | 1 to 3 years after the event |
| The jurisdiction is able to identify unmet social needs | Yes/No |
| The jurisdiction is able to identify unmet economic needs | Yes/No |
| Time in which the jurisdiction will gauge the effectiveness of previous recovery planning and mitigation efforts | 1 to 3 years after the event |
| Time in which persons in temporary housing/interim shelters will be relocated | Beginning within 30 days and continuing |
| Time in which impacted individuals and businesses will be registered for disaster assistance | <ul style="list-style-type: none"> ▪ Beginning the day of the event and continuing up to 1 year ▪ 50% will be registered within 60 days. <p>Note: Some disaster assistance will be immediate and not require registration.</p> |
| Time in which Federal disaster assistance grants are provided to individuals | Within 2 weeks of registration |
| Time in which Federal disaster assistance loans are provided to individuals and businesses | Within 30 days of application |

| Performance Measure | Performance Metric |
|--|--|
| Time in which long-term community recovery planning meetings are held with private industries and NGOs | Beginning within 30 days |
| Time for the initiation of nonmonetary forms of disaster assistance (e.g., crisis counseling, disaster legal services) to individuals and businesses | Beginning within 7 days |
| Time that debris management strategies are implemented | Beginning immediately and continuing |
| Time that infrastructure repairs are conducted | Beginning within 30 days after debris removal (contingent on the capabilities of affected State and local governments) |
| Time for the implementation of property damage mitigation initiatives | Beginning within 90 days and continuing |
| Time to assess and implement appropriate changes to codes and code enforcement | Beginning immediately and continuing |
| Mitigation plan implemented | Yes/No |
| A recovery plan is implemented. | Yes/No |

Capability Elements

Personnel

- Community planning and development officer to coordinate an economic recovery and mitigation plan
- Damage assessment officer to assess damages to publicly and privately owned facilities
- Finance and administration chief to compile and administer financial assistance requests and applications
- Economic impact community representatives (from regional and local businesses) to assess the economic impact to private business
- Local trade organizations and professional association members
- Essential service representatives to assess the impact to essential service infrastructure and basic service distribution systems
- Insurance community to manage insurance claims processing
- Private sector and utility system representatives to manage repair and reconstruction of disaster damage
- Personnel from individual assistance and public assistance programs to implement disaster assistance programs to include registration of applicants, inspection of disaster damages, and processing applications

Organization and Leadership

-
- Volunteer Organizations Active in Disasters (VOADs) and Non-Governmental Organizations (NGOs)
 - Emergency Management Agency

Planning

- A program or protocol to assemble regional and local business representatives to examine the economic impact and recovery alternatives
- A program or protocol to assemble essential service representatives to assess infrastructure damage and recovery/mitigation alternatives

Planning Assumptions

- Although applicable to several of the 15 National Planning Scenarios, the capability planning factors were developed from an in-depth analysis of the major earthquake scenario. Other scenarios were reviewed to identify required adjustments or additions to the planning factors and national targets.
- 300,000 homes have been destroyed; there are 1,400 deaths; 18,000 hospitalizations, 150,000 buildings destroyed and 1 million buildings damaged. 250,000 individuals seek shelter in safe areas and over 250,000 people self-evacuate the area.
- This Capability focuses on the recovery of a particular community (public infrastructure, individual housing, businesses, etc); it does not address recovery of a large economic sector.
- Due to the disruption of local and regional transportation systems, alternative methods of distribution and transportation will need to be identified and/or implemented(Based on past information that for every 1 home destroyed, 10 will be damaged).
- Of the 1 million buildings moderately damaged, 200,000 were commercial buildings and 100,000 were public buildings. Of these, 1,000 were large office buildings, they were partially collapsed. (Estimates based on trends from previous disasters).
- Multiple hazardous materials issues will need to be addressed.
- Assume all displaced families will require some form of government sheltering and housing assistance.
- Level of losses may result in multiple bankruptcies. (Based upon previous events and the severe economic impact scenarios, certain entities will be unable to overcome financial losses. Governments as well as business may face bankruptcy.)
- Resource component is time sensitive since pre-event implementation of effective recovery and mitigation planning efforts will impact response to community needs.
- Resource Package may be called to operate for years after the incident.

Planning Factors from an In-Depth Analysis of a Scenario with Significant Demand for the Capability (Earthquake)

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|---|--|---|--|
| Community Planning & Development Officer | | One per jurisdiction | |
| Damage Assessment Officer | Average of 5 inspections per day – home/business | 3.3 million homes inspected 500,000 businesses inspected | 5,000 inspectors to process work over a period of 6 months |
| Finance Officer | Up to 30,000 electronically processed claims per day. (Federal Emergency Management Agency (FEMA) only, and only those claims that are auto-determined) Small Business Administration (SBA) loan officer can process an average of 5 applications per day | 1.85 million applicants in 60 days 1 million applications received in 60 days by SBA | One finance officer (FEMA only- with adequate support staff) completes applications in 60 days 1,000 loan officers to process SBA applications in 60 days |
| Economic Impact Community Representatives: Business leaders (Industry/major employers) Chambers of Commerce and business associations. Local trade organizations and professional association membership | One team can estimate the economic impact of the disaster. Size of team contingent on disaster variables | The number on each team will vary by jurisdiction | Teams will be needed by level of government |
| Essential Services | One team serves to | Ongoing | One team per |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|--|---|--|---|
| Reps: Water and Wastewater, Public Health and Sanitation, Utilities, Transportation, and Hospital Police Fire and Emergency Medical Service (EMS) Communications Debris removal and disposal | liaison with key community functions in one jurisdiction | | jurisdiction |
| Insurance community | Average of 4 inspections per day – residential/commercial | 185,000 (5% of total damaged properties) have earthquake insurance | 260 inspectors over 6 months |
| Volunteer Organizations Active in Disasters (VOADs) and Non-governmental Organizations (NGOs) | Elastic – Surge capacity to fit specific needs | | |
| Private sector, including construction, building supplies, transportation assets | Capacity is contingent on availability of repair and reconstruction contractors and building supplies | | |
| Personnel to implement disaster assistance programs. | Agencies gear up and gear down based on workload requirements | | Estimated personnel requirements would roughly equal triple the 2004 Hurricane Season staff level. (e.g., SBA level |

| Resource Organization | Estimated Capacity | Scenario Requirement Values | Quantity of Resources Needed |
|-----------------------|--------------------|-----------------------------|------------------------------|
| | | | was 2800.) |

Approaches for Large-Scale Events

- For temporary housing, may use tents, dorms, ships, train cars, terminals, temporary relocation sites, and converted commercial space instead of mobile homes and trailers. Also military facilities.
- Modes of delivery of assistance awards may vary, ranging from new expedited processes to alternative distribution methods.
- For temporary provisions, “Comfort Kits” may need to be instituted as a substitute for immediate award of disaster assistance.
- To foster communication, every neighbor tells a neighbor. Set up centralized information dissemination posts (7/11 stores)

National Targets and Assigned Levels

| Resource | Assigned Level and Quantity |
|--|---|
| <i>Note: Many of the staff “pools” identified below will be generated in response to a specific incident by assembling governmental and contract staff from various locations; they are not dedicated, standing organizations.</i> | |
| Damage Assessment Officer | National and Regional Pools (supplemented by national hiring efforts) – 5,000 inspectors to process work over a period of 6 months |
| Finance Officer | Federal (FEMA) -- 1 finance officer to complete applications in 60 days |
| Technical support and computer infrastructure | To support FEMA finance officer in automated processing of 30,000 loans per day |
| Loan officers to process SBA applications in 60 days | National/Regional -- 1,000 loan officers (pulled from existing federal/contracted employees; some created through just-in-time training – more specialized) |
| A program/protocol to assemble regional/local business representatives to examine economic impact and recovery alternatives | Federal program implemented locally |
| Economic Impact Community Representatives | Local – An average of 10 per coordination team, comprising business leaders (Industry/major employers), chambers of commerce and business associations, and local trade organizations and professional association membership |

| Resource | Assigned Level and Quantity |
|--|---|
| A program/protocol to assemble essential service representatives to assess infrastructure damage and recovery alternatives | Federal program implemented locally |
| Essential Services Reps | Local – 20 members per coordination team; 1 team per jurisdiction, comprising representatives from Water & Wastewater, Public Health & Sanitation, Utilities, Transportation, Hospital, Police, Fire and EMS, Communications, debris removal and disposal |
| Insurance community | Combination of National, state, and local – 260 inspectors over 6 months |
| Volunteer Organizations Active in Disasters (VOADs) and Non-Governmental Organizations (NGOs) | Combination of National, state, and local – 10 members per team; 1 team per region affected |
| Private sector, including construction, building supplies, transportation assets | Combination of National, state, and local |
| Personnel to implement disaster assistance programs | National & Regional Pools (supplemented by national hiring efforts) – 30,000; Estimated personnel requirements would roughly equal triple the 2004 Hurricane Season staff level, FEMA level was 7,200 total field representatives |

Linked Capabilities

- Animal Health Emergency Support
- Citizen Protection: Evacuation and/or In-Place Protection
- Communications
- Community Preparedness and Participation
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Operations Center Management
- Emergency Public Information and Warning
- Environmental Health
- Epidemiological Surveillance and Investigation
- Firefighting Operations/Support
- Food and Agriculture Safety and Defense
- Intelligence/Information Sharing and Dissemination
- Mass Care (Sheltering, Feeding, and Related Services)
- Medical Supplies Management and Distribution
- On-site Incident Management
- Planning
- Public Health Laboratory Testing
- Public Safety and Security Response
- Restoration of Lifelines

- Risk Management
- Structural Damage and Mitigation Assessment
- Urban Search and Rescue
- Volunteer Management and Donations
- WMD/Hazardous Materials Response and Decontamination

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