

Welcome

This is Day One of **Addressing and Communicating about Rural Health Disparities with Data**

- Please remain on mute when in the full group, and unmute in the breakout rooms.
- Please update your Zoom screen name:
 - Full name
 - Agency/organization
- You should have received a link to download workbooks in email. Please make sure you have downloaded the workbooks for Days 1 and 2. The link is also in the chat.
 - After clicking the link, under the “File” menu select “Download” and choose your preferred format (such as Microsoft Word)
- Please make a note of your breakout room number. You will work with the same group throughout both days of the training.

Addressing and Communicating about Rural Health Disparities with Data

Day I: September 20, 2022

Strategic Decision-Making and Prioritization



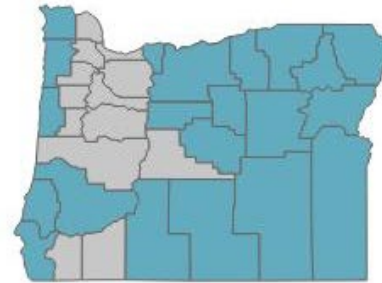
Betty Bekemeier, PhD, MPH, RN, FAAN

Director, Northwest Center for Public Health Practice

SHARE-NW Overview

Goals

1. Provide data for decision-making → **Linked datasets**
2. Improve access to data → **Dashboards**
3. Increase capacity for data use in decision-making → **Training**



Funded by Office of Minority Health (HHS/OASH)
Grant No. CPIMP171144

Agenda

- Pre-workshop survey
- Strategic decision-making
 - Review concepts
 - Activity I: Introductions & data-driven decision-making
- Prioritization
 - Review concepts
 - Activity II: completing a prioritization matrix
- Summary
- Homework description

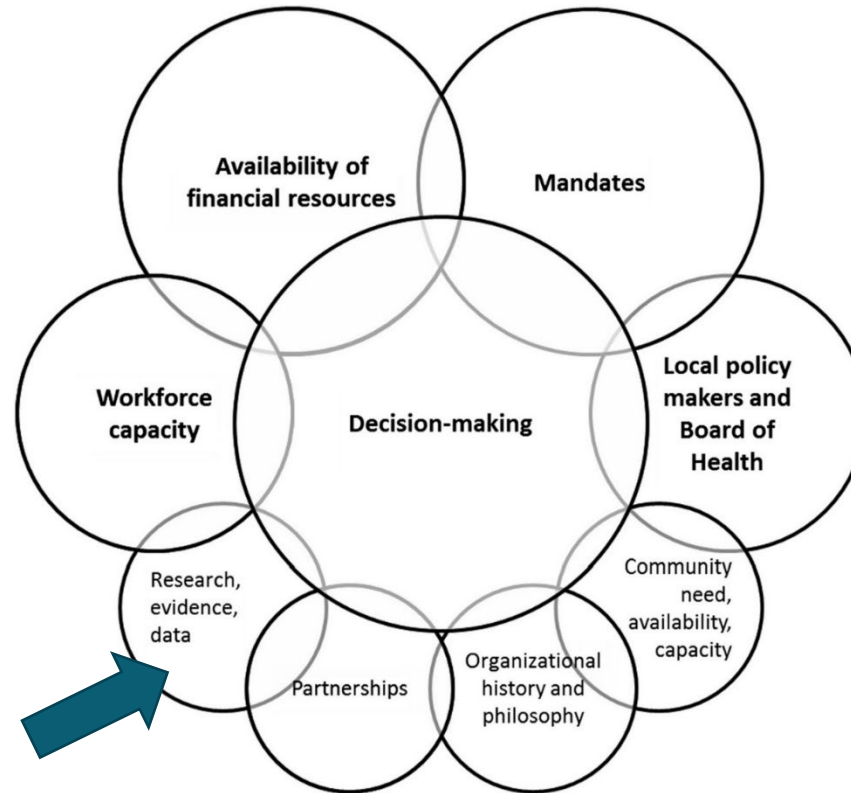
Types of Data-informed Decisions Desired

Your PRE-WORKSHOP SURVEY identified your “Problems to Address”:

- Prioritizing issues to address
- Allocating resources
- Quality improvement
- Program sustainability decisions
- Working through problems with stakeholders
- Convincing others of the importance of data

Strategic Decision-Making

Evidence-Based Decision Making



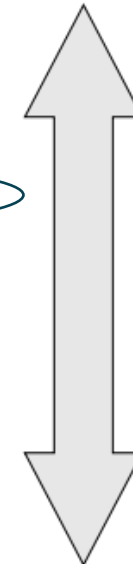
Factors that influence resource allocation decisions

Source: Bekemeier, et al., (2013)

Types of Evidence for PH Practice

- Scientific literature in systematic reviews
- Scientific literature in one or more journal articles
- Public health surveillance data
- Program evaluations
- Qualitative data
 - Community members
 - Other stakeholders
- Media/marketing data
- Word of mouth
- Personal experience

Objective



Subjective

Figure 2

Different forms of evidence. Adapted from Chambers & Kerner (37).

Common Data Pitfalls

Data are commonly misinterpreted or misused by:

- Crude numbers vs. rates
- Confusing association with causation
- Confounding factors
- Small “n”
- Threats to validity
- Bias
- Time lag

Breakout Activity I

Now, let's do some teamwork! In groups, take the next 25 minutes to:

- **Consider the scenario**
- **Move on to the discussion questions**

See pages 1- 3 of your workbooks for instructions.

Afterward, we'll discuss your responses as a larger group.

Breakout Activity I: Debrief

1. What were the key elements that worked well for using data to support community level decision-making?
2. In what ways do decisions look different when they are data-informed?
3. What does bias in the data look like?

Share your answers in the Zoom chat



BREAK

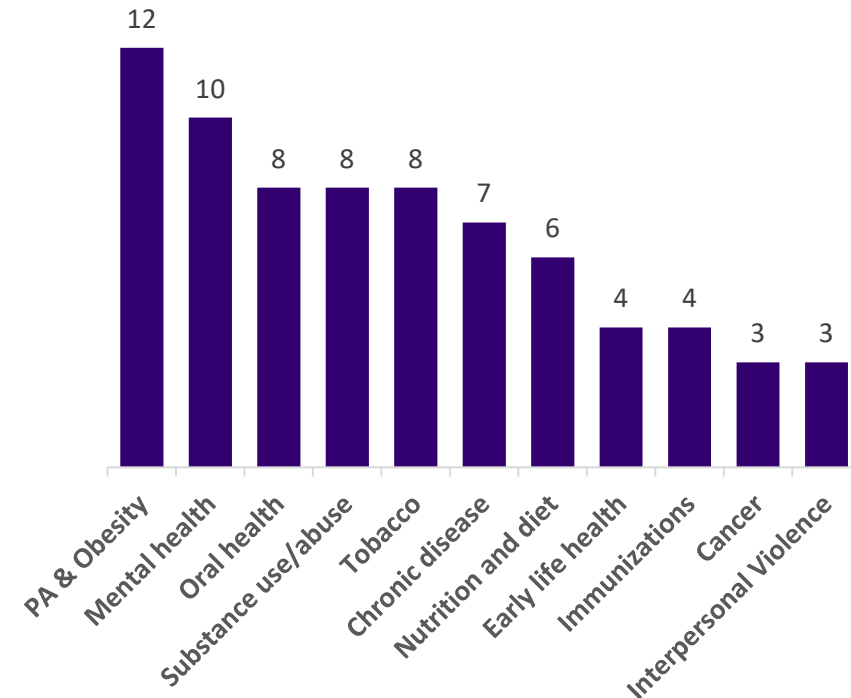
Using Data for Prioritization

Prioritization As Data-Informed Decision Making

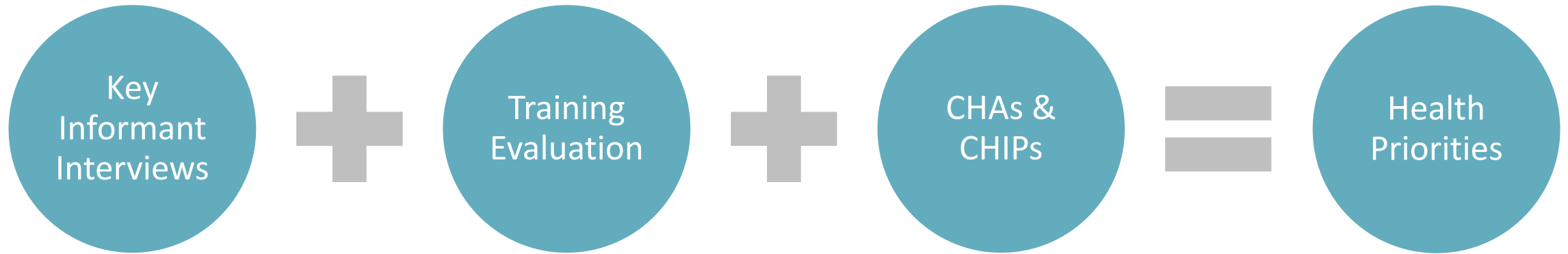
Oregon's Rural Community Health Assessment and Community Health Improvement Plan

Top four most frequently mentioned priorities:

1. Physical activity & obesity
2. Mental health
3. Oral health
4. Substance use and abuse



Identifying Health Priorities



Obesity
Physical
Activity
Nutrition



Diabetes



Tobacco



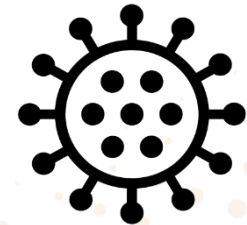
Mental Health
Suicide
Substance Use



Injury
Violence



Oral Health



+ COVID-19

Sample Decision Criteria

Effectiveness

Population-
based Impact

Feasibility

Preferences of
Community

Impact on
Multiple Health
Outcomes

Equity Impact

Legal
Considerations

Freedom

Sustainability

Partner Priority

Data-informed

Political Will

Stigmatization

Unintended
Consequences


Cost/ROI

Momentum

Prioritization Matrix

- Helps consider multiple options, using several criteria
- Weight different criteria to account for differing degrees of importance
- Score options based on how well criterion was met
 - 3 = met well, 1 = not met

	Criterion A Weight = 3	Criterion B Weight = 2	Criterion C Weight = 1	Priority Score
Strategy A	1	3	2	
Strategy B				
Strategy C				



First, assign scores

Prioritization Matrix

- Helps consider multiple options, using several criteria
- Weight different criteria to account for differing degrees of importance
- Score options based on how well criterion was met
 - 3 = met well, 1 = not met

	Criterion A Weight = 3	Criterion B Weight = 2	Criterion C Weight = 1	Priority Score
Strategy A	1 1 (score) x 3 (weight) = 3	3 3 (score) x 2 (weight) = 6	2 2 (score) x 1 (weight) = 2	3 + 6 + 2 = 11
Strategy B				...and add scores together for a Priority Score (highlighted)
Strategy C				

Then, multiply
scores by the
weight...

...and add
scores
together for a
Priority Score
(highlighted)

Prioritization Matrix

- Helps consider multiple options, using several criteria
- Weight different criteria to account for differing degrees of importance
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	Criterion A Weight = 3	Criterion B Weight = 2	Criterion C Weight = 1	Priority Score
Strategy A	1 1 (score) x 3 (weight) = 3	3 3 (score) x 2 (weight) = 6	2 2 (score) x 1 (weight) = 2	11
Strategy B	2 2 (score) x 3 (weight) = 6	1 1 (score) x 2 (weight) = 2	2 2 (score) x 1 (weight) = 2	10
Strategy C	3 3 (score) x 3 (weight) = 9	2 2 (score) x 2 (weight) = 4	1 1 (score) x 1 (weight) = 1	14

Breakout Activity II

Now, let's do some teamwork! In groups, take the next 25 - 30 minutes to:

- **Consider the scenario**
- **Move on to the discussion questions**

See pages 4 - 6 of your workbooks for instructions.

Afterward, we'll discuss your responses as a larger group.

Breakout Activity II: Debrief

1. What additional data related to the social determinants of health or other factors might have been helpful in your deliberations?
2. What data would help you with your next steps in carrying out your group's identified strategy/strategies?

Share your answers in the Zoom chat

Key Takeaways

- ✓ Keep data and evidence in the decision-making process
- ✓ Keep data part of the conversation
- ✓ Don't let the perfect (data) be the enemy of the good
- ✓ Use strategies that make data a part of the decision-making culture

Homework

There are two parts of the homework:

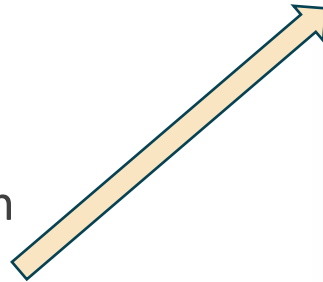
- Getting to know the SHARE-NW dashboards
- Further applying tools and methods to address social determinants using the SHARE-NW dashboards (optional)

See link to homework assignment in chat

Curated Trainings

Sample training topics:

- Data and health equity
- Mental and behavioral health
- **Obesity and physical activity**
- Diabetes
- Injury and violence prevention
- Tobacco
- Oral health



A screenshot of the SHARE-NW website. The top navigation bar includes links for Home, Data Dashboards, Trainings and Webinars, and About. The main heading is 'Trainings and Webinars: Obesity and Physical Activity'. Below this, a paragraph explains that the training topic corresponds to data on the website and that listed trainings are publicly available and evaluated for quality by the SHARE-NW team. A note states that all trainings and webinars featured on the website are free. The section 'Selected Trainings and Webinars' features a training titled 'A Systems Approach to Understanding Childhood Obesity'. It lists learning objectives: describing public health as part of a larger inter-related system, describing different stakeholders with the power to address childhood obesity, and explaining how local health departments (LHDs) can use systems thinking approaches while planning intersectoral initiatives to reduce inequities in childhood obesity. It also specifies the format as an online module and the source as Region 2 Public Health Training Center. A 'Go to training' button is provided. Below this, another training titled 'Best Practices in Program Planning for Local Obesity Prevention' is listed with its learning objectives: employing appropriate methods to engage priority users, preparing to create or revise a program logic model informed by root-cause analysis and evidence-based theory, and appraising the current stage of development of the obesity-prevention program as it relates to best-practice planning. On the right side, a 'Jump to:' section includes links for 'Selected Trainings and Webinars' (Primary focus on the topic area) and 'Related Trainings and Webinars' (Some content related to the topic area, while the primary focus is on a different topic).

Addressing and Communicating about Rural Health Disparities with Data

Day II: September 22, 2022

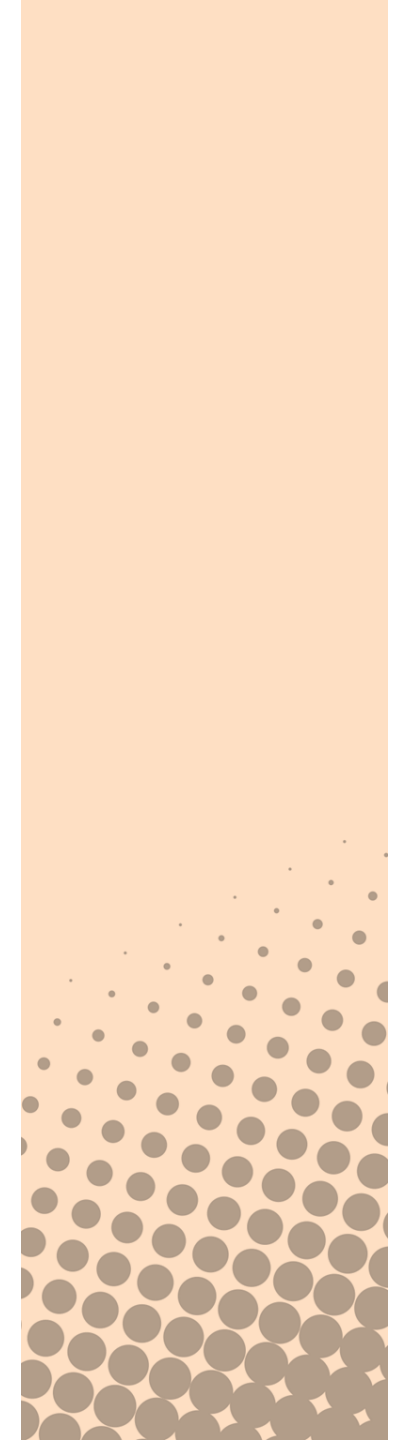
Visualizing and Communicating Data



Beth Heitkemper, PhD, RN

Assistant Professor, School of Nursing

University of Texas at Austin



Agenda

- Review of Day 1
- Data visualization for decision making
 - Mini review
 - Activity: bringing more context into data visualizations
 - Activity: making an infographic
- Wrap-up of the two days

Day I Summary

- Data can support decision-making that advances health equity
- Using data & a prioritization matrix can help identify strategies to support populations with greatest need
- The homework you completed allowed you to explore the SHARE-NW dashboard & become familiar with its features and functions

Visualization for Decision-Making

Review of Visualization Module

What do we need to keep in mind when creating/viewing visualizations?

- What is the purpose?
 - Understand: graphs with context
 - Persuade/communicate: infographics
- Who is the audience?
 - What would they use the data for?
 - Internal PH agency: understand what is going on in the community & inform internal decisions
 - Public: educate & inform behavior change
 - Policy-makers: inform policies & funding
 - Community stakeholders: inform initiative & outreach development
 - Funders: inform & persuade to award funds

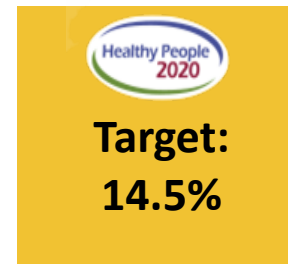
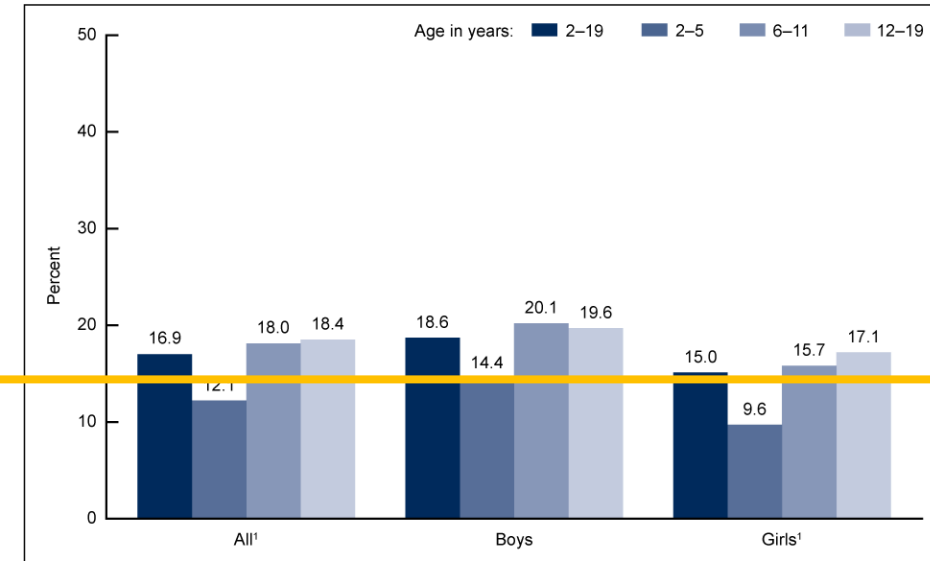


Figure 2. Prevalence of obesity among children and adolescents aged 2–19, by sex and age: United States, 2009–2010



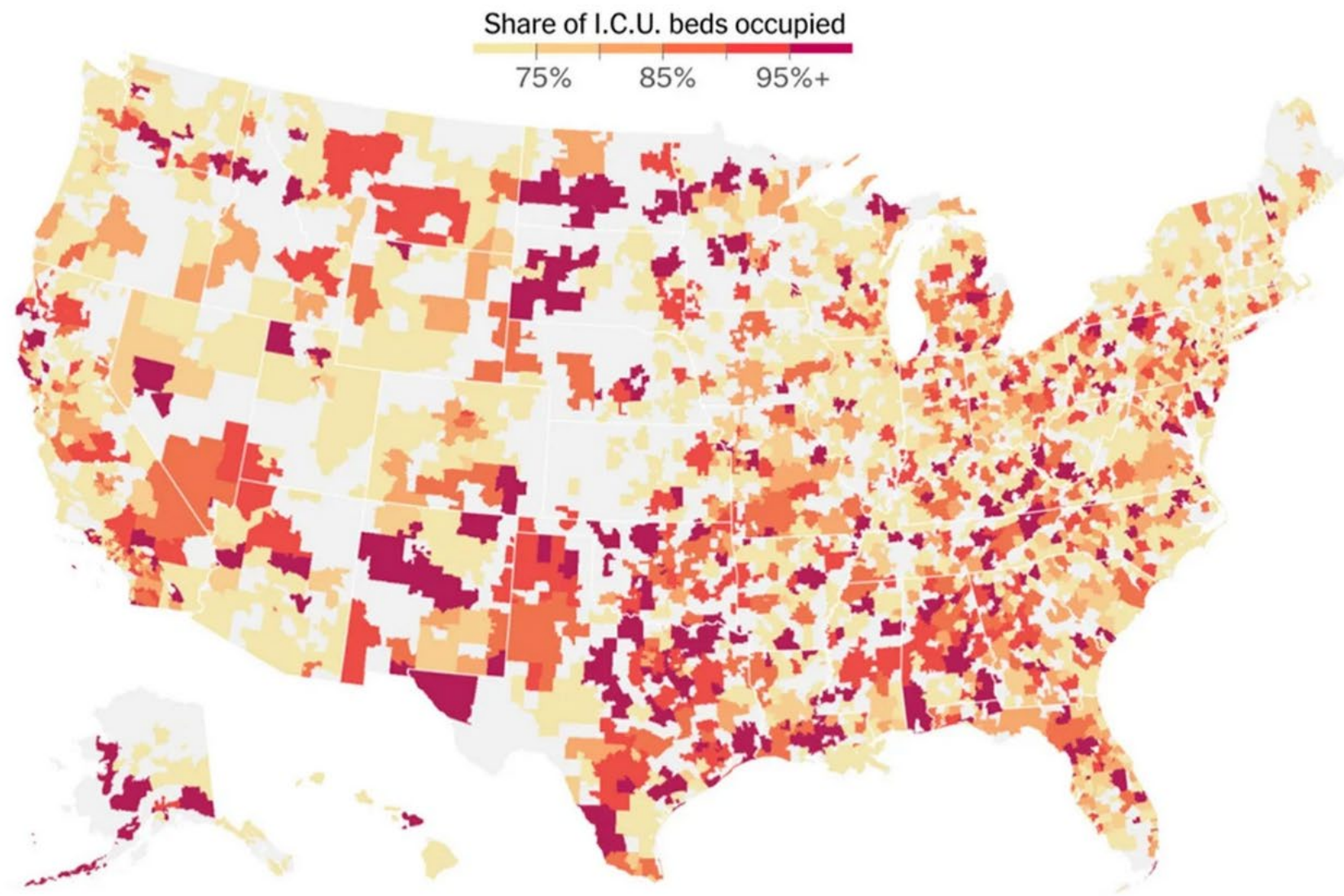
¹Significant increasing linear trend by age ($p < 0.005$).
SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2009–2010.



Review of Visualization Module

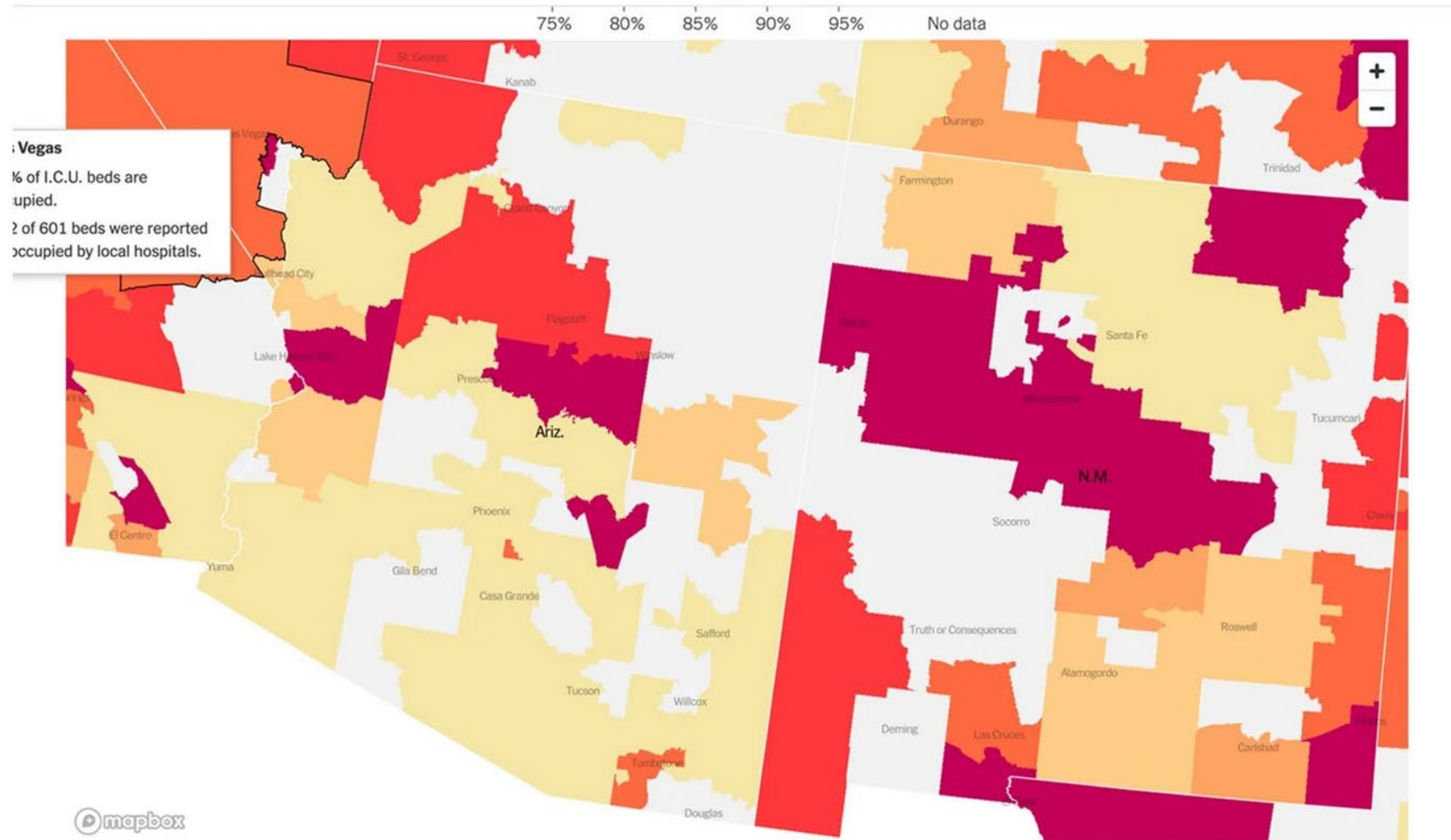
What do we need to keep in mind when creating/viewing visualizations?

- Potential for:
 - Misrepresenting or misunderstanding the data
 - Misalignment of visual representation with audience
 - Causing offense and/or harm
 - Upholding and exacerbating stereotypes, stigma, bias, & racism



‘There’s No Place for Them to Go’: I.C.U. Beds Near Capacity Across U.S. More than a third of Americans live in areas where hospitals are running critically short of intensive care beds.

The New York Times



Source: New York Times analysis of U.S. Department of Health and Human Services [data](#). Note: Shows 7-day average patient count by hospital service area.

Review of Visualization Module

- Is there any bias in this visualization?
 - Bias in design
 - Bias with what is and isn't shown
- Further, what is missing from the visualization that impacts our understanding of disparities and ability to inform action?

Image of eating a hamburger related to obesity:

Infers obesity is primarily due to individual behaviors



Perpetuates stigma of obese individuals



Missing:

Socio-political, economic, & structural factors that make healthy food options and safe physical activity inaccessible

Infographic makes it hard to understand
(1) if certain groups are impacted more by barriers to food/PA
(2) how to act to support obesity reduction

Example Dashboard

The SHARE-NW dashboard has visualizations that bring in context to help inform understanding.

Example dashboard bringing in comparisons that help provide context

- Food insecurity dashboard that has state data to compare: Food Insecurity tab

Example dashboard that has information about missing data that can impact understanding of disparities

- Demographics dashboard with pop up when hovering over the bar: Sex measure

Let's go to these dashboards and see how these additions to the dashboard help bring more meaning and context to the graph

Scenario

Scenario that is driving the activities:

- We have heard that drug-related deaths are high during covid-19 but the official rate data aren't available yet
- So, how can we look at historical data to see what we can apply to today's situation?
- Let's say that in your prioritization work, your team identified that the highest priority for addressing this opioid uptick is by acting on a source of opioids that public health officials can readily do something about--opioid prescriptions

Activities Overview

What you'll be doing:

- Find and review data related to opioid prescriptions
- Think about additional data and contextual information that you'd want to bring in to make more meaning of the data
- Think about how to take data from the dashboard and share it in a way to communicate with policymakers and the public to deal with addressing high prescription rates

Lets go to the SHARE-NW [mental health dashboard](#) (link is in your worksheet) to find the county that consistently had the highest prescription rates because they might be especially struggling during covid

Breakout Activity I

Now, let's do some teamwork! In groups, take the next 25 - 30 minutes to:

- **Consider the scenario**
- **Move on to the discussion questions**

See pages 1- 3 of your workbooks for instructions.

Afterward, we'll discuss your responses as a larger group.

Let's pull up the worksheet to see what we'll be doing

Breakout Activity I: Debrief

1. **What comparisons did you choose, and why?**
2. **What do these prescription rate data & comparisons tell you about health disparities? And what don't they tell you?**
3. **What other information or context do you need to bring more understanding about opioid rates, opioid deaths, and related health disparities in order to support decision-making as a task force?**

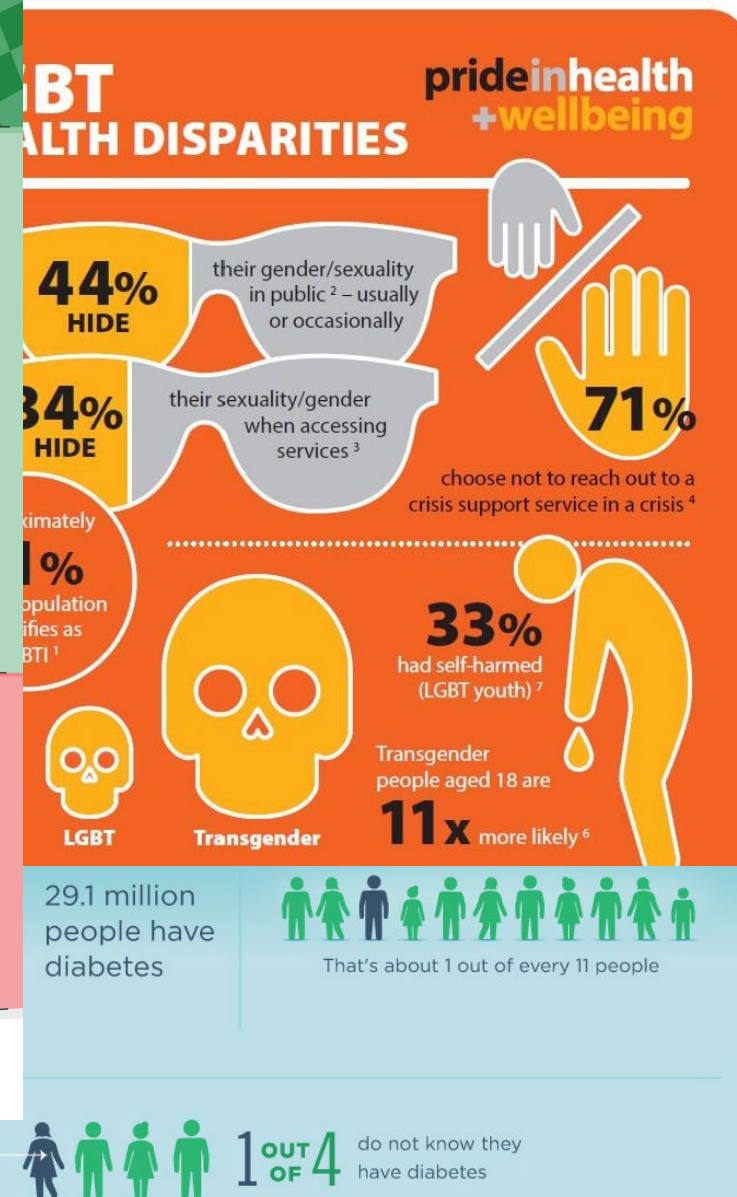
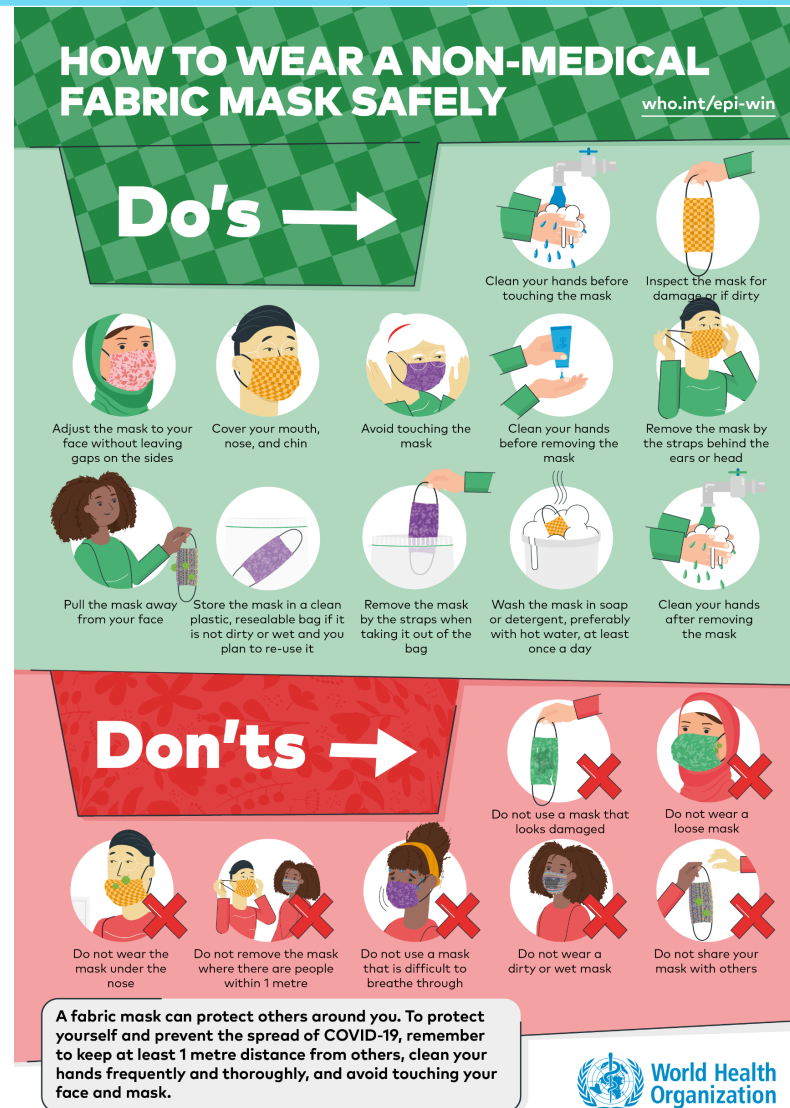
Share your answers in the Zoom chat



BREAK

Infographics: The Basics

- Infographics:
 - Combine text images, charts, graphs, diagrams, illustrations, etc., to present complex information in a striking way
- Infographics often:
 - Use simple visual elements like icons, illustrations, basic charts/graphs
 - Have text and visualizations work together to convey the same point
 - Text is just as prominent as visual elements, but is bite-sized
 - Share statistics



Breakout Activity II

Now, let's do some teamwork! In groups, take the next 30 - 35 minutes to:

- **Consider the scenario**
- **Work on your own infographic**
- **Move on to the discussion questions**

Let's pull up the worksheet to see what we'll be doing

See pages 4-5 of your workbooks for instructions.

Afterward, we'll discuss your responses as a larger group.

Breakout Activity II: Debrief

1. What did you learn about the process of understanding data?
2. What did you learn about making decisions on representing data in a way that supports understanding and action?

Share your answers in the Zoom chat

Visualization Wrap-Up

- ✓ Visualizations can be used to help understand disparities and inform action
- ✓ Graphs alone may lack the important information you need for understanding and action
- ✓ Get in the habit of being a critical, intentional, purposeful user of visualizations in order to fully leverage those visualizations for your needs & identify potential bias in the design
- ✓ The similar/same data can be visualized different ways based on the purpose and your audience



Training Wrap-Up

Wrap-Up: Day 1

- ✓ Building a culture of integrating data into your decision-making and communication
- ✓ Finding that 'sweet spot' between data limitations and using what's available

Discussion Question

- Write one action that you can take in your agency or work, toward building a culture that uses data to address inequities

Share your answers in the Zoom chat

Wrap-Up: Day 2

- ✓ Don't be a passive user of data
 - Don't take data and visualizations at face value
 - Be purposeful and intentional using graphs and visualizations to bring context which can inform action

Discussion Question

- Write one action that you can take to make more out of visualizations that you use in your work

Share your answers in the Zoom chat

Evaluation

Please take a few minutes to complete a post-Day 2 evaluation.

Thank you!

