

Risk Communication Slides

Vincent T. Covello, Ph.D.

Director

Center for Risk Communication

29 Washington Square West, Suite 2A

New York, New York 10011

Tel.: 646-654-1679; Fax.: 212-749-3590

email: vincentcovello@ix.netcom.com

web site: www.centerforriskcommunication.org

copyright 2002

Risk Communication

“A Science-based Approach for Communicating Effectively in:

- ✦ High-Concern, High Stress**
- ✦ Emotionally Charged, or**
- ✦ Controversial Situations”**

Definition of Risk:

“The probability of loss of that which we value.”

First Steps

- Anticipate questions and concerns by listening
- Prepare accurate, well crafted, relevant, ethical, consistent , understandable messages
- Practice delivery



Risk Communication Research:

Example: Sound bites

Risk Communication

Sound bite research:

**Assumption: national news,
controversial topic**

- **7 to 9 seconds (21-27 words, 30 words max.)**
- **3 messages**
- **9 second knowledge/trust window**

Risk Communication:

Overarching Key Messages

- **Limited message duration**
- **Limited message content**
- **Enhanced knowledge/trust**

Message Map
Stakeholder:
Question/Concern

Key Message/Fact

1.

Key Message/Fact

2.

Key Message/Fact

3.

Keywords:
Supporting
Fact 1.1

Keywords:
Supporting
Fact 2.1

Keywords:
Supporting
Fact 3.1

Keywords:
Supporting
Fact 1.2

Keywords:
Supporting
Fact 2.2

Keywords:
Supporting
Fact 3.2

Keywords:
Supporting
Fact 1.3

Keywords:
Supporting
Fact 2.3

Keywords:
Supporting
Fact 3.3

Challenge

“Ethical Communication”

Versus

“Spin”

Spin:

“...making things appear to be that which they are not.”

Risk Communication

Three Primary Goals

- ✦ **Increased Knowledge and Understanding**
- ✦ **Enhanced Trust and Credibility**
- ✦ **Enhanced Dialogue to Resolve Disagreements**

Additional Challenges 1

“There is virtually no correlation between the ranking of hazards by experts and the ranking of those same hazards by the public”

PERCEPTIONS OF RISK (Outrage Factors)

Lower Perceived Risk

1. Trustworthy sources
2. Substantial benefits
3. Voluntary
4. Controllable
5. Fair/equitable
6. Natural origin
7. Familiar
8. Not dreaded
9. Certain
10. Children not as victims

Higher Perceived Risk

- Untrustworthy sources
- Few benefits
- Involuntary
- Not controllable
- Unfair/inequitable
- Human origin (man made)
- Unfamiliar/exotic
- Dreaded
- Uncertain
- Children as victims

PERCEPTION OF RISK (Outrage) (cont...)

Lower Perceived Risk

- 11. Not memorable
- 12. Moral/ethical
- 13. Clear non-verbal message
- 14. Responsive
- 15. Random/scattered
- 16. Little media attention
- 17. Victims statistical
- 18. Immediate effects
- 19. Effect reversible
- 20. Scientifically well understood

Higher Perceived Risk

- Memorable
- Immoral/unethical
- Mixed non-verbal message
- Unresponsive
- Catastrophic
- Much media attention
- Victims identifiable
- Delayed effects
- Effect irreversible
- Non scientifically well understood

Risk Perception (Outrage) Factors

Amplification Weights

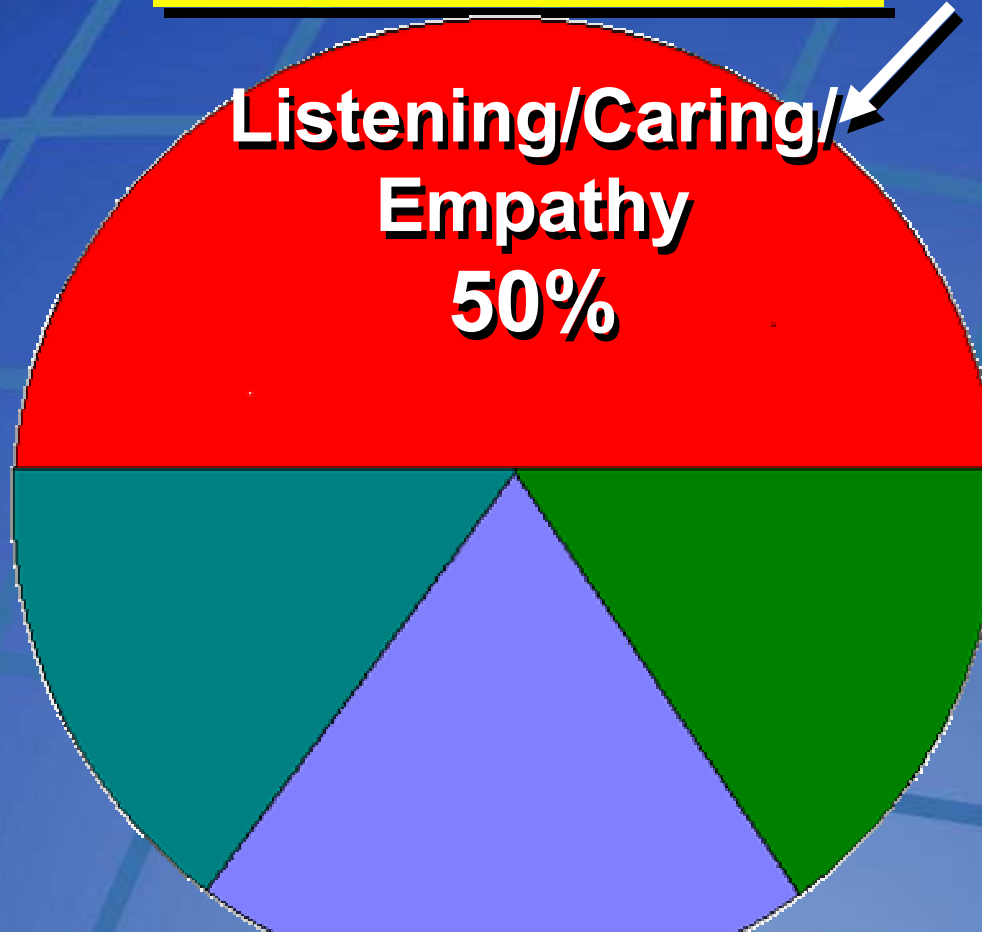
| <u>Factor</u> | <u>Weight</u> |
|----------------|---------------|
| Trust..... | 2000 |
| Control..... | 1000 |
| Benefits | 1000 |

Additional Challenge 2

In High Concern Situations, People Want to Know That You Care Before They Care

What You Know

Assessed
in first 9-
30 seconds



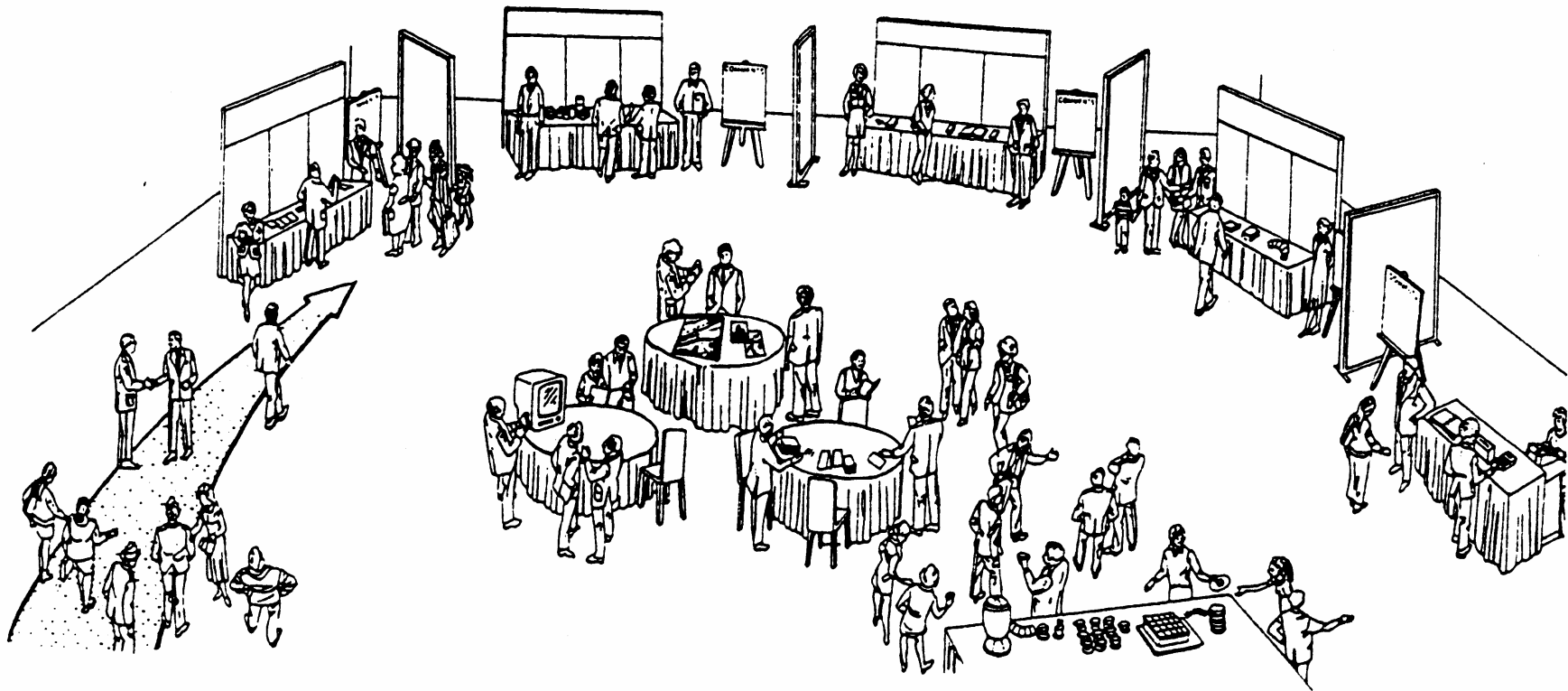
Additional Challenges 3

$$1 \text{ N} = 3 \text{ P}$$

**One negative equals three
positives**

Public Exhibit and Discussion

(Poster Exhibits / Public Availability Session)



Risk Communication

Sound Bite Construction Exercise

Definition of Risk:

“The probability of loss of that which we value.”

Risk Communication

Part of everyday life:

- ✦ at work**
- ✦ at home**
- ✦ in the community**

At Work: Job Interview Questions

- **Why are you the best candidate?**
- **What are your greatest weaknesses?**
- **Where do you see yourself in five years?**

Values at Risk

- **Safety**
- **Security**
- **Economic**
- **Health**
- **Quality of Life**
- **etc.**

First Steps

- Identify key audiences and stakeholders.
- Anticipate questions and concerns
- Prepare accurate, well crafted, well delivered messages

First Steps

- **What are the three most important things you would like your audience to know**
- **What are the three most important things your audience would like to know**
- **What are the three most important things your audience is most likely to get wrong unless they are emphasized**

Examples

Message Map
Stakeholder:
Question/Concern

Key Message/Fact

1.

Key Message/Fact

2.

Key Message/Fact

3.

Keywords:
Supporting
Fact 1.1

Keywords:
Supporting
Fact 2.1

Keywords:
Supporting
Fact 3.1

Keywords:
Supporting
Fact 1.2

Keywords:
Supporting
Fact 2.2

Keywords:
Supporting
Fact 3.2

Keywords:
Supporting
Fact 1.3

Keywords:
Supporting
Fact 2.3

Keywords:
Supporting
Fact 3.3

Smallpox Questions

- **How contagious is smallpox?**
- **Is there enough vaccine?**
- **What are the signs and symptoms of smallpox?**

Question: How contagious is smallpox?

- ✦ **Key Message 1: Spreads slowly**
- ✦ **Key Message 2: Time to contact**
- ✦ **Key Message 3: Vaccination**

Smallpox Questions: CDC Message Mapping Project

- ◆ **Over 60 draft maps prepared**
- ◆ **Sources for questions**
- ◆ **Focus group testing**

Message Map
Question: How
contagious is smallpox

Key Message/Fact 1.

Keywords: Spreads
Slowly

Key Message/Fact 2.

Keywords: Time to
Contact

Key Message/Fact 3.

Keywords: Vaccination
Within Days

Keywords:
Supporting
Fact 1.1

...

Keywords:
Supporting
Fact 2.1

...

Keywords:
Supporting
Fact 3.1

...

Keywords:
Supporting
Fact 1.2

...

Keywords:
Supporting
Fact 2.2

...

Keywords:
Supporting
Fact 3.2

...

Keywords:
Supporting
Fact 1.3

Keywords:
Supporting
Fact 2.3

Keywords:
Supporting
Fact 3.3

.....

Job Interview Questions

- **Why are you the best candidate?**
- **What are your greatest weaknesses?**
- **Where do you see yourself in five years?**

Message Map
Stakeholder:
Question/Concern

Key Message/Fact

1.

Key Message/Fact

2.

Key Message/Fact

3.

Keywords:
Supporting
Fact 1.1

Keywords:
Supporting
Fact 2.1

Keywords:
Supporting
Fact 3.1

Keywords:
Supporting
Fact 1.2

Keywords:
Supporting
Fact 2.2

Keywords:
Supporting
Fact 3.2

Keywords:
Supporting
Fact 1.3

Keywords:
Supporting
Fact 2.3

Keywords:
Supporting
Fact 3.3

Message Mapping

Follow-up Questions

Stakeholder: Construction Workers

Question/Concern/Issue:

*Worker Exposure to
silica dust*

Key Message/Fact 1.

Keywords:
Personal protection

Key Message/Fact 2.

Keywords:
Health screening /
monitoring

Key Message/Fact 3.

Keywords:
Engineering /
administrative controls

Keywords:
Supporting
Fact 1.1

Environment /
equipment

Keywords:
Supporting
Fact 2.1

Baseline
physical exams

Keywords:
Supporting
Fact 3.1

Dust source
reduction

Keywords:
Supporting
Fact 1.2

Hazard
communication

Keywords:
Supporting
Fact 2.2

Periodic
screening /
surveillance

Keywords:
Supporting
Fact 3.2

Dust
suppression

Keywords:
Supporting
Fact 1.3

Education /
awareness
program

Keywords:
Supporting
Fact 2.3

Workplace air
monitoring

Keywords:
Supporting
Fact 3.3

Limited
exposure times

Risk Communication

Origins of the Field

Risk Communication

“A Science-based Approach for Communicating Effectively in:

- ✦ High-Concern**
- ✦ Emotionally Charged, , or**
- ✦ Controversial Situations”**

Risk Communication

Origins of the Field

- **Deep Historical Roots**
 - **Mental Noise Theory**
 - **Trust Determination Theory**
- **More Recent Roots**
 - **Risk Perception Theory**

Risk Communication

“...in high concern...”

**High Concern
Low Trust
(essential)**

**High Concern
High Trust
(essential)**

**Low Concern
Low Trust
(recommended)**

**Low Concern
High Trust
(optional)**

Risk Communication

Origins of the Field

- **Deep Historical Roots**
 - **Mental Noise Theory**
 - **Trust Determination Theory**
- **More Recent Roots**
 - **Risk Perception Theory**

Risk Communication

Origins of the Field

- **Deep Roots**
 - **Mental Noise Theory**
 - **Trust Determination Theory**
-

Mental Noise Theory

When people are stressed or upset, they have difficulty :

- hearing information**
- understanding information**
- remembering information**

Mental Noise Theory: Verbal Messages Implications -- Core

- **Limited time (e.g., attention span)**
- **Limited content (e.g., 3 messages)**
- **Clear (e.g., 6th grade)**

Mental Noise Theory: Verbal Message Implications -- Add-Ons

- Repetition (e.g., internal and external)
- Prioritized (e.g., first and last)
- Visuals (graphics, demos)
- $1N = 3P$

Mental Noise Theory:

Non-Verbal Messages

- ✦ Provides up to 50-75% of message content
- ✦ Noticed intensely and negatively interpreted
- ✦ Overrides verbal communication

Risk Communication

Origins of the Field

- **Deep Roots**
 - **Mental Noise Theory**
 - **Trust Determination Theory**
-

Trust Determination Theory

When people are stressed or upset, they often distrust that others are:

- listening, caring, empathy**
- honest, open**
- competent, expert**

Trust Determination Theory

Mirroring

Question: Genetically Modified Food and Allergies

Key Message 1: Tested

Key Message 2: Conventional

Foods

Key Message 3: Identify Gene

Risk Communication

Origins of the Field

- **More Recent Roots**
 - **Risk Perception Theory**

PERCEPTIONS OF RISK (Outrage Factors)

Lower Perceived Risk

1. Trustworthy sources
2. Substantial benefits
3. Voluntary
4. Controllable
5. Fair/equitable
6. Natural origin
7. Familiar
8. Not dreaded
9. Certain
10. Children not as victims

Higher Perceived Risk

- Untrustworthy sources
- Few benefits
- Involuntary
- Not controllable
- Unfair/inequitable
- Human origin (man made)
- Unfamiliar/exotic
- Dreaded
- Uncertain
- Children as victims

PERCEPTION OF RISK (Outrage) (cont...)

Lower Perceived Risk

11. Not memorable
12. Moral/ethical
13. Clear non-verbal message
14. Responsive
15. Random/scattered
16. Little media attention
17. Victims statistical
18. Immediate effects
19. Effect reversible
20. Scientifically well understood

Higher Perceived Risk

- Memorable
- Immoral/unethical
- Mixed non-verbal message
- Unresponsive
- Catastrophic
- Much media attention
- Victims identifiable
- Delayed effects
- Effect irreversible
- Non scientifically well understood

Risk Perception (Outrage) Factors

Amplification Weights

| <u>Factor</u> | <u>Weight</u> |
|----------------|---------------|
| Trust..... | 2000 |
| Control..... | 1000 |
| Fairness | 500 |

Control Factors

✦ **Choice**

✦ **Voice**

✦ **Knowledge**

Risk Communication

Three Primary Goals

- ✦ **Increased Knowledge and Understanding**
- ✦ **Enhanced Trust and Credibility**
- ✦ **Enhanced Dialogue to Resolve Disagreements**