



## Risk Communication

Presented by:

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## Learning Objectives

**After this tutorial you will be able to...**

- Recognize challenges to effective risk communication
- Understand the importance of managing public outrage
- Employ strategies resulting in more effective risk communication

## Introduction to Risk Communication

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*"...the major public health challenges since 9/11 were not just clinical, epidemiological, technical, issues. **The major challenges were communication.** In fact, as we move into the 21st century, communication may well become the **central science** of public health practice."*

-Edward Baker, MD, MPH, Assistant US Surgeon General

## Risk Communication Is...

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- An interactive process of exchange of information and opinions among individuals, based on:
  - Shared knowledge
  - Informed, ethical decision making
  - Trust



## Risk Communication

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- Communicating with the public and the media presents unique challenges:
  - People want to know you care
  - People want information and answers
  - But they have difficulty hearing, understanding, and remembering information

## Risk Communication

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- The overarching goal is to avoid communication regret
- Specific goals:
  - Knowledge and understanding
  - Trust and credibility
  - Constructive dialogue



## Understanding Risk

- Risk perception is:

$$\text{Risk} = \text{Hazard} + \text{Outrage}$$

- Perceptions based on combination of:
  - Understanding the hazard (e.g., mortality, morbidity)
  - How an event upsets people emotionally
  - Knowledge of both essential for effective risk communication
- Levels of public outrage are affected by:
  - Perceptions of familiarity
  - Level of control
  - Amount of uncertainty associated with the event

## Understanding Risk: Public Outrage

- The more outrage people feel, the more likely they are to perceive the risk as being greater than it is
- **Low outrage** events usually are familiar, naturally occurring, & distributed “fairly” among the population
  - Measles outbreaks, earthquakes, Norovirus outbreaks
- **High outrage** events tend to be perceived as caused by others, unknown, and affecting one group more than another:
  - Food poisoning of children from school cafeteria
  - Contamination of the water supply by a toxic spill
  - Terrorist attacks

## Effective Risk Communication

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- Like everything else in public health, communication is an art and a science
- Know your audiences
- Be careful about comparing one risk to another
  - If you try to reassure the public that a high-outrage, low-hazard risk such as bioterrorism is less likely than a low-outrage, high-hazard car accident, it probably won't have much meaning for people
- Help the public prepare
  - For specific disasters and crises *before they happen*

## Three Rules for Messages

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- **#1: 95% rule**
  - “95% of all questions and concerns that will be raised by any stakeholder in any controversy can be predicted in advance”



## Three Rules for Messages

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- **#2: rule of three:**
  - Create action steps in threes; create rhymes or acronyms
  - People are better at retaining up to three simple directions or information that is catchy
    - Example: “Stop, drop, and roll”

## Three Rules for Messages

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- **#3: Message Clarity rule**
  - Average Grade Level Minus 4 (AGL-4)
- Exceptions:
  - Words defined in clear language
  - Words that would be well understood by the particular audience

## Two Types of Risk Communication

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- **Care Communication**

- Examples

- Safety – Bicycle helmet use
    - Health – Regular breast exams
    - Environment – Pesticide Disposal

- **Crisis Communication**

- Examples

- Safety – Industrial Accident
    - Health – Disease Outbreaks
    - Environment – Natural Disasters

## Challenges for Risk Communication

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- Mental Noise
- Negative Dominance
- Literacy Levels
- Reaction to Crisis

# Challenges for Risk Communication

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## 1. Mental Noise

- Ability to process information is severely impaired when a significant threat is perceived
- High levels of emotional arousal or mental agitation create mental noise, and people may be unable to hear, understand, or remember information

## Getting past Mental Noise

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- Produce clear and concise messages based on sound risk communication principles.
- Provide extensive communication training and practice opportunities in advance of a crisis event.





## Challenges for Risk Communication

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### 2. Negative Dominance

- During a crisis, people tend to process negative information more readily than positive information.
- People tend to pay more attention to and remember longer messages that contain negatives (e.g., the words *no*, *not*, *never*, *nothing*, *none*, and other words with negative connotations).

### Getting past negative dominance

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- Avoid absolutes (e.g., *never*) and repeating untrue negatives
- Balance bad news with positive (i.e., constructive) news
  - A negative message ideally should be counterbalanced by a larger number of positive or solution-oriented messages
  - Focus on what is being done rather than on what is not being done

## Challenges for Risk Communication

### 3. Literacy levels

- People's ability to understand risk communications depends on their ability to process written messages
  - Ability to comprehend numerical data
  - Level of scientific literacy



### Getting past literacy levels

- Use multiple delivery forms (print, audio, visual) to enable as many people as possible to receive and understand messages
  - Avoid jargon
  - Appropriate reading level
- Translate scientific and technical information into language that can be easily understood



## Challenges for Risk Communication

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### 4. Reaction to crisis

- Anger, fear, misery, empathy, uncertainty
- Denial
- Stigmatization
- Vicarious rehearsal
  - People removed from the crisis may act prematurely, demand services they don't need



### Question

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- People commonly panic during a public health crisis. **True or False?**



## **FALSE:** **True panic is relatively rare**

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- But keep in mind that people do feel highly emotional during emergencies
  - They want to take action to protect themselves
  - They want information
- To reduce panic, risk communicators can:
  - Channel people's desire to take productive steps by giving them a choice of actions
  - Explain why unwanted behaviors are harmful to individuals and the community
  - Call on people's sense of community to help them resist individual grabs for protection

## **Final Thoughts**

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- Messages will be judged by:
  - Content
  - Messenger
  - Method of delivery
- People will find their own solution unless directed to do otherwise

## References

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