

# Risk Communication Strategies

Katherine A. McComas, Ph.D.

University of Maryland



JOINT INSTITUTE FOR FOOD SAFETY AND APPLIED NUTRITION  
**Food Safety Risk Analysis Clearinghouse**

[www.foodriskclearinghouse.umd.edu](http://www.foodriskclearinghouse.umd.edu)

# What This Tutorial Covers

- Traditional risk communication strategies and their assumptions
- Factors to consider when communicating risk information to the public
- Alternative strategies for risk communication
- Reactive vs. proactive risk communication

# Traditional Risk Communication

- Traditional models of risk communication rest on three assumptions (Scherer, 1991, pp. 91-93):
  1. “Science alone can provide ‘objective’ truths.”
  2. “Scientific and technical experts are the only possible sources of ‘correct’ risk information.”
  3. “The public is a passive receiver of risk information. If only the public would be willing to learn about risk issues, they would understand and accept risk information.”

# Traditional Risk Communication, cont'd.

- But these assumptions of traditional risk communication can be challenged. For example:
  - Assumption 1: “Science alone can provide ‘objective’ truths.”
    - *Challenge: Aren't scientific judgments liable to error?*
  - Assumption 2: “Scientific and technical experts are the only possible sources of ‘correct’ risk information.”
    - *Challenge: What about the way that people perceive risks?*
  - Assumption 3: “The public is a passive receiver of risk information. If only the public would be willing to learn about risk issues, they would understand and accept risk information.”
    - *Challenge: What if the public doesn't trust the messengers?*

# Question to Consider

- Why do risk communicators need to understand how risk information might be received?
  - *“No matter how accurate it is, risk information may be misperceived or rejected if those who give information are unaware of the complex, interactive nature of risk communication and the various factors affecting the reception of the risk message.”* (Fessenden-Raden et al., 1987, p. 100)

# Factors to Consider When Communicating Risk Information

- Fessenden-Raden et al. (1987) found that audience, message, and messenger characteristics influenced reactions to risk information.
  - Audience Characteristics:
    - The community
      - Local conditions at the time of the risk’s discovery
        - » i.e., What else is going on in the community that might influence how this information is received?
      - Attitudes toward local, state, and federal agencies
        - » e.g., Has the community had previous interactions with the agencies?
      - Local identity and community self-perception
        - » e.g., How does the community identify with the hazard?
      - Attitudes toward the organization held responsible for the risk
        - » e.g., Is the organization local? How integrated is the organization into the “fabric” of the community?

# Additional Factors to Consider

- Audience Characteristics, cont'd.
  - The individual
    - Past experiences with the topic and sources
      - e.g., Has the individual ever had food poisoning?
      - e.g., Has the individual ever had interactions with the health agency?
    - Prior knowledge about the topic
      - e.g., To what extent is the individual knowledgeable about the topic?
    - Health of individual and family members
      - e.g., Has the individual, or a member of his or her family, suffered from health problems that individuals may attribute to the risk?

# Additional Factors to Consider

- Messenger Characteristics:
  - There may be multiple messengers providing risk information.
    - Who are the official messengers (e.g., state health agency)? Are there also unofficial messengers (e.g., friends, neighbors, activist groups, media)?
      - Do their messages conflict?
      - Do citizens know what to believe?
  - Different messengers may hold different perspectives of the situation.
    - What happens when the official messengers have conflicting perspectives, much less the official and unofficial messengers?
  - Untrained messengers can introduce confusion.
    - Official messengers must consider their ability to communicate effectively, or the messages may be unclear.



# Additional Factors to Consider

- Message Characteristics:
  - Complexity
    - Official risk messages must manage...
      - The simplification of technical information;
      - The inherent uncertainty of risk assessment; and
      - The aggregate nature of risk messages.
        - » e.g., How does the most recent risk message confirm, contradict, or clarify previous risk messages?
  - Conflicting information
    - Unofficial risk messages may conflict with official risk messages.
  - Unintentional risk messages
    - e.g., When risk communicators say that there is no risk to public health and safety from a local hazard, yet workers show up in “moon suits” to visit the hazard, people may become understandably confused.

# Alternative Models of Risk Communication

- An alternative to traditional risk communication is “interactive” risk communication (Scherer, 1991).
- Rather than the one-way transfer of risk information from experts to lay audiences, interactive risk communication involves a *dialogue* about risk.
  - Its underlying tenet is that everyone affected by the risk has a right to be involved in the resolution of the risk issue.
    - Its implementation requires a democratic mechanism that allows for the free exchange of information among policy makers and the public about risk problems, information, and appropriate solutions.

# Deciding When to Communicate

- Risk communication can be reactive or proactive (Scherer, 1991).
  - Reactive Strategies
    - They do not call attention to a particular risk. Instead, they wait until there is already considerable public and media attention about a risk issue.
      - Advantage:
        - » Reactive strategies allow the public to vent about the issue.
      - Disadvantages:
        - » Science may be less relevant when issues become highly emotionally charged.
        - » They place the communicator in a defensive position.
        - » People may not believe information that is delayed.

# Deciding When to Communicate, cont'd.

- Proactive strategies
  - Proactive strategies call attention to a risk issue – both potential and existing – before people are aware of it. (The issue does not have to be a crisis.)
  - Rather than reacting to a situation, proactive strategies suggest the agenda for discussion and provide mechanisms for information exchange
    - Disadvantages:
      - Proactive strategies may alert people to something of which they are not already aware and, if not well managed, could precipitate a controversy.
    - Advantages:
      - They allow for a much more meaningful discussion of risk.
      - They generate a more balanced discussion of the issues.

# References

- Fessenden-Raden, J., Fitchen, J. M., & Heath, J. S. (1987). Providing risk information in communities: Factors influencing what is heard and accepted. *Science, Technology, and Human Values*, 12, 94-101.
- Scherer, C. (1991). Strategies for communicating risks to the public. *Food Technology*, 45, 110-116.