



Risk Communication: Principles, Tools, and Techniques

- Risk communication is central to informed decision-making.
- Guidelines exist to help programs and providers present risk information clearly and effectively.
- People under stress typically want to know that you care before they care about what you know.
- People under stress typically have difficulty hearing, understanding, and remembering information.

Background on Topic

Risk communication is the two-way exchange of information about threats, including health threats such as avian influenza, severe acute respiratory syndrome (SARS), and HIV/AIDS. The goals of risk communication are to enhance knowledge and understanding, build trust and credibility, encourage dialogue, and influence attitudes, decisions, and behaviors. These goals apply to all four major types of risk communication: 1) information and education; 2) behavior change and protective action; 3) disaster warning and emergency notification; and 4) joint problem-solving and conflict resolution.

To communicate risks effectively, programs should prepare a written communication plan in advance. Deciding ahead of time about many of the necessary communication decisions and activities allows for a quick and effective response during an emergency. Key elements include answering questions such as: What needs to be done? Who needs to know? Who is the spokesperson? And who needs to act? For more information on components to include in a communication plan, see Annex 1 at http://www.paho.org/English/AD/PAHO_CommStrategy_Eng.pdf

Programmatic Considerations

There are seven cardinal rules for effective risk communication:

1. **Accept and involve the receiver of risk information as a legitimate partner.**
People have the right to participate in decisions that affect their lives.
2. **Plan and tailor risk communication strategies.**
Different goals, audiences, and communication channels require different risk communication strategies.
3. **Listen to your audience.**
People are usually more concerned about psychological factors, such as trust, credibility, control, voluntariness, dread, familiarity, uncertainty, ethics, responsiveness, fairness, caring, and compassion, than about the technical details of a risk. To identify real concerns, a risk communicator must be willing to listen carefully to and understand the audience.
4. **Be honest, frank, and open.**
Trust and credibility are among the most valuable assets of a risk communicator.
5. **Coordinate and collaborate with other credible sources.**
Communications about risks are enhanced when accompanied by referrals to credible, neutral sources of information. Few things hurt credibility more than conflicts and disagreements among information sources.
6. **Plan for media influence.**
The media plays a major role in transmitting risk information. It is critical to know what messages the media delivers and how to deliver risk messages effectively through the media.
7. **Speak clearly and with compassion.**
Technical language and jargon are major barriers to effective risk communication. Abstract and unfeeling language often offends people. Acknowledging emotions, such as fear, anger, and helplessness, are typically far more effective.

Lessons Learned

A fundamental concept of risk communication is that people experiencing stress typically: (1) have difficulty hearing, understanding, and remembering information, and (2) want to know that you care before they care about what you know. A central theorem of risk communication is that people's perceptions of the magnitude of risk are influenced by factors other than numerical data (see Table 1 below). Dr. Peter Sandman, a risk communication expert, has pointed out that there is low correlation between the technical seriousness of a risk (for example, how many people die from the risk) and its cultural seriousness (for example, how many people the risk upsets and how badly it upsets them). In research studies, the correlation hovers around 0.2, accounting for a tiny four percent of the variance. This often results in two problems: (1) risks that are likely to harm people do not upset them so they fail to take appropriate precautions, and (2) risks that are not likely to harm people do nonetheless still upset them so they take unnecessary precautions.

Table 1: Characteristics of Risks That Influence People's Perception of the Risks

Risk Characteristics That Prompt People to Be More Accepting and Less Fearsome of the Risk	Risk Characteristics That Prompt People to Be Less Accepting and More Fearsome of the Risk
Voluntary	Coerced/Imposed
Has clear benefits	Has little or no benefit
Under an individual's control	Controlled by others
Fairly distributed	Unfairly distributed
Part of an open, transparent, and responsive risk management process	Part of a secretive, unresponsive process



Global Health Technical Briefs

Natural	Manmade or industrial in origin
Statistical and diffused over time and space	Catastrophic
Generated by trustworthy, honest, and concerned individuals or organizations	Generated by untrustworthy, dishonest, or unconcerned individuals or organizations
Affect adults	Affect children
Familiar	Unfamiliar or exotic

Many of the obstacles to effective risk communication derive from the complexity, incompleteness, and uncertainty of data. In addressing uncertainty, the following guidelines can help:

- Acknowledge – do not hide – uncertainty.
- Explain that risks are often hard to assess and estimate.
- Explain how the risk estimates were obtained and by whom.
- Announce problems and share risk information promptly, with appropriate reservations about uncertainty.
- Tell people that what you believe either (a) is certain; (b) is nearly certain; (c) is not known; (d) may never be known; (e) is likely; (f) is unlikely; or (g) is highly improbable; and also tell them (h) what can be done to reduce uncertainty.
- Tell people that what you believe now may turn out to be wrong later.

One of the most important tools for preparing clear and effective risk communication messages is the “message map” (see Table 2, below). A message map contains detailed, hierarchically organized information designed to respond to anticipated questions or concerns. It is a visual aid that provides, at a glance, the messages to be delivered. Message maps allow risk communicators to develop messages in advance. Once developed, messages can be tested through focus groups and other methods. As an example, Table 2 contains one of 65 message maps developed by the U.S. Department of Health and Human Services for avian influenza and pandemic influenza (see www.pandemicflu.gov for all 65 maps).

Table 2: Pre-Event Risk Communication Message Map for Pandemic Influenza

Stakeholder: Public and Media		
Question or Concern: How is pandemic influenza different from seasonal flu?		
Key Message 1:	Key Message 2:	Key Message 3:
Pandemic influenza is caused by an influenza virus that is new to people.	The timing of an influenza pandemic is difficult to predict.	An influenza pandemic is likely to be more severe than seasonal flu.
Supporting Fact 1-1:	Supporting Fact 2-1:	Supporting Fact 3-1:
Seasonal flu is caused by viruses that are already among people.	Seasonal flu occurs every year, usually during winter.	Pandemic influenza is likely to affect more people than seasonal flu.
Supporting Fact 1-2:	Supporting Fact 2-2:	Supporting Fact 3-2:
Pandemic influenza may begin with an existing influenza virus that has changed.	Pandemic influenza has happened about 30 times in recorded history.	Pandemic influenza could severely affect a broader set of the population, including young adults.
Supporting Fact 1-3:	Supporting Fact 2-3:	Supporting Fact 3-3:
Fewer people would be immune to a new influenza virus.	An influenza pandemic could last longer than the typical flu season.	A severe pandemic could change daily life for a time, including limitations on travel and public gatherings.

References:

- Covello, V.T. and Allen, F. (1988) *Seven Cardinal Rules of Risk Communication*. Washington, D.C.: U.S. Environmental Protection Agency. Policy Document OPA-87-020.
- Covello, V.T. (2006) *Risk Communication and Message Mapping: A New Tool for Communicating Effectively in Public Health Emergencies and Disasters*. Journal of Emergency Management, 4(3): 25-40.
- Hyer, R.N. and Covello, V.T. (2007) *Effective Media Communication During Public Health Emergencies: A World Health Organization Handbook*. Geneva: World Health Organization Publications
- Sandman, P.M. (1989) *Hazard versus outrage in the public perception of risk*. In: Covello, V.T., McCallum, D.B., Pavlova, M.T., Eds. *Effective Risk Communication: The Role and Responsibility of Government and Non-government Organizations*. New York: Plenum Press, pp. 45-49.
- Slovic, P. (1987) *Perception of Risk*. Science. 236: 280-285.

Other technical briefs can be found at: www.maqweb.org/techbriefs/

Last Revised: 2/27/08

Produced in association with The Maximizing Access and Quality Initiative

Designed and produced by: The INFO Project at the Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs.
Published with support from the United States Agency for International Development (USAID), Global, GH/PRH/PEC, under the terms of Grant No. GPH-A-00-02-00003-00.



USAID
FROM THE AMERICAN PEOPLE