The EPA's Seven Cardinal Rules of Risk Communication

(Adapted by Dr. Vincent T. Covello from the 1988 EPA Seven Cardinal Rules of Risk Communication)

Rule 1. Accept and involve the public as a legitimate partner.

Two basic tenets of risk communication in a democracy are generally understood and accepted. First, people and communities have a right to participate in decisions that affect their lives, their property, and the things they value. Second, the goal of risk communication should not be to diffuse public concerns or avoid action. The goal should be to produce an informed public that is involved, interested, reasonable, thoughtful, solution-oriented, and collaborative.

Guidelines: Demonstrate respect for the public by involving the community early, before important decisions are made. Clarify that decisions about risks will be based not only on the magnitude of the risk but on factors of concern to the public. Involve all parties that have an interest or a stake in the particular risk in question. Adhere to highest moral and ethical standards: recognize that people hold you accountable.

Rule 2. Listen to the audience.

People are often more concerned about issues such as trust, credibility, control, benefits, competence, voluntariness, fairness, empathy, caring, courtesy, and compassion than about mortality statistics and the details of quantitative risk assessment. If people feel or perceive that they are not being heard, they cannot be expected to listen. Effective risk communication is a two-way activity.

Guidelines: Do not make assumptions about what people know, think or want done about risks. Take the time to find out what people are thinking: use techniques such as interviews, facilitated discussion groups, advisory groups, toll-free numbers, and surveys. Let all parties that have an interest or a stake in the issue be heard. Identify with your audience and try to put yourself in their place. Recognize people's emotions. Let people know that what they said has been understood, addressing their concerns as well as yours. Recognize the "hidden agendas," symbolic meanings, and broader social, cultural, economic or political considerations that often underlie and complicate the task of risk communication.

Rule 3. Be honest, frank, and open.

Before a risk communication can be accepted, the messenger must be perceived as trustworthy and credible. Therefore, the first goal of risk communication is to establish trust and credibility. Trust and credibility judgments are resistant to change once made. Short-term judgments of trust and credibility are based largely on verbal and nonverbal communications. Long term judgments of trust and credibility are based largely on actions and performance. In communicating risk information, trust
and credibility are a spokesperson's most precious assets. Trust and credibility are difficult to obtain. Once lost they are almost impossible to regain.

**Guidelines:** State credentials; but do not ask or expect to be trusted by the public. If an answer is unknown or uncertain, express willingness to get back to the questioner with answers. Make corrections if errors are made. Disclose risk information as soon as possible (emphasizing appropriate reservations about reliability). Do not minimize or exaggerate the level of risk. Speculate only with great caution. If in doubt, lean toward sharing more information, not less - or people may think something significant is being hidden. Discuss data uncertainties, strengths and weaknesses - including the ones identified by other credible sources. Identify worst-case estimates as such, and cite ranges of risk estimates when appropriate.

**Rule 4. Coordinate and collaborate with other credible sources**

Allies can be effective in helping communicate risk information. Few things make risk communication more difficult than conflicts or public disagreements with other credible sources.

**Guidelines:** Take time to coordinate all inter-organizational and intra-organizational communications. Devote effort and resources to the slow, hard work of building bridges, partnerships, and alliances with other organizations. Use credible and authoritative intermediaries. Consult with others to determine who is best able to answer questions about risk. Try to issue communications jointly with other trustworthy sources such as credible university scientists, physicians, citizen advisory groups, trusted local officials, and national or local opinion leaders.

**Rule 5. Meet the needs of the media.**

The media are a prime transmitter of information on risks. They play a critical role in setting agendas and in determining outcomes. The media are generally more interested in politics than in risk; more interested in simplicity than in complexity; and more interested in wrongdoing, blame and danger than in safety.

**Guidelines:** Be open with and accessible to reporters. Respect their deadlines. Provide information tailored to the needs of each type of media, such as sound bites, graphics and other visual aids for television. Agree with the reporter in advance about the specific topic of the interview; stick to the topic in the interview. Prepare a limited number of positive key messages in advance and repeat the messages several times during the interview. Provide background material on complex risk issues. Do not speculate. Say only those things that you are willing to have repeated: everything you say in an interview is on the record. Keep interviews short.

Follow up on stories with praise or criticism, as warranted. Try to establish long-term relationships of trust with specific editors and reporters.

Technical language and jargon are useful as professional shorthand. But they are barriers to successful communication with the public. In low trust, high concern situations, empathy and caring often carry more weight than numbers and technical facts.

*Guidelines:* Use clear, nontechnical language. Be sensitive to local norms, such as speech and dress. Strive for brevity, but respect people's information needs and offer to provide more information. Use graphics and other pictorial material to clarify messages. Personalize risk data: use stories, examples, and anecdotes that make technical data come alive. Avoid distant, abstract, unfeeling language about deaths, injuries and illnesses. Acknowledge and respond (both in words and with actions) to emotions that people express, such as anxiety, fear, anger, outrage, and helplessness. Acknowledge and respond to the distinctions that the public views as important in evaluating risks. Use risk comparisons to help put risks in perspective; but avoid comparisons that ignore distinctions that people consider important. Always try to include a discussion of actions that are under way or can be taken. Promise only that which can be delivered, and follow through. Acknowledge, and say, that any illness injury or death is a tragedy and to be avoided.


Different goals, audiences, and media require different risk communication strategies. Risk communication will be successful only if carefully planned and evaluated.

*Guidelines:* Begin with clear, explicit objectives - such as providing information to the public, providing reassurance, encouraging protective action and behavior change, stimulating emergency response, or involving stakeholders in dialogue and joint problem solving. Evaluate technical information about risks and know its strengths and weaknesses. Identify important stakeholders and subgroups within the audience. Aim communications at specific stakeholders and subgroups in the audience. Recruit spokespersons with effective presentation and human interaction skills. Train staff - including technical staff - in communication skills: recognize and reward outstanding performance. Pretest messages. Carefully evaluate efforts and learn from mistakes.