

# **Risk Communication Primer**

**New Jersey Department  
of Health**



## Principles of Risk Communication in a Crisis

### **Be first. Be right. Be credible.**

In a crisis, people make decisions differently. They simplify, and cling to current beliefs. They remember what they see or have previously experienced, which means that first messages carry more weight. So in a crisis, we initially communicate:

- Simply
- Timely
- Accurately
- Repeatedly
- Credibly
- Consistently.

We can build trust and credibility by expressing:

- Empathy and caring
- Competence and expertise
- Honesty and openness
- Commitment and dedication.

### **Be careful with risk comparisons.**

The true risk and the perceived risk can be quite different. The source of the risk can be as troubling as the degree of risk.

Don't compare a high outrage, low hazard risk to a low outrage, high hazard risk. Bioterrorism is, for most people, high outrage and low hazard. It can't be compared with a low outrage, high hazard risk like driving a car.

Here's a risk comparison that could work: "Research indicated that, in Hawaii, a person is 10 times more likely to be killed by brain damage from a falling coconut than to be killed by a shark." In this case, the risks are both natural in

origin, fairly distributed, exotic, and outside the control of the individual.

### **Don't over-reassure.**

A high estimate of harm modified downward is much more acceptable to the public than a low estimate of harm modified upward. Tell people how scary the situation is; even though the actual numbers are small, and watch them get calmer.

### **Put the good news in subordinate clauses.**

One good approach is to put the good news in subordinate clauses, with the more alarmist side of the ambivalence in the main clause. Example: "It's too soon to say we're out of the woods yet, even though we haven't seen a new anthrax case in X days."

### **Acknowledge uncertainty.**

Acknowledging uncertainty is most effective when the communicator both shows his or her distress and acknowledges the audience's distress: "How I wish I could give you a definite answer on that."

### **Stop trying to allay panic.**

Bad news doesn't cause panic. Panic comes from conflicting message from those in authority.

### **Recognize the difference in your audiences.**

The person who's removed from the real danger – but anticipates the high risk – is much more likely to respond inappropriately than the person in the heat of the battle who is primed to act on the information and doesn't have time to mull it over. The vicarious rehearsal can be overwhelming in an emergency.

### **Acknowledge people's fears.**

When people are afraid, the worst thing to do is pretend they're not. The second worst is to tell them they shouldn't be afraid. Allow people the right to feel fear.

### **Give people things to do.**

Anxiety is reduced by action and a restored sense of control. There are three types of actions:

- Symbolic behaviors, like going to a candlelight vigil
- Preparatory behaviors, like buying water and batteries
- Contingent "if, then" behaviors, like creating an emergency family communication plan)
- Ask more of people, to share the risk. Recommend a three-part action plan:
  - You must do X
  - You should do Y
  - You can do Z.

### **Crafting the initial message.**

Go forward as quickly as possible with what you do know. Explain the process of discovering what you don't know. Use these tips:

- Be short
- Be relevant
- Be repetitive
- Give positive action steps
- Avoid all jargon
- Don't be judgmental
- Don't use humor
- Don't make promises that can't be kept.

### **Dealing with rumors.**

Rebut a rumor without really repeating it. Limit the rebuttal to the places where the rumor exists.

### **Prepare to answer these questions:**

- Are my family and I safe?
- What can I do to protect myself and my family?
- Who is in charge here?
- What can we expect?
- Why did this happen?
- Were you forewarned?
- Why wasn't this prevented?
- What else can go wrong?
- When did you begin working on this?
- What does this information mean?

### **As a spokesperson:**

- Know your organization's policies
- Stay within the scope of responsibilities
- Tell the truth
- Embody your agency's identity.

### **Stay on message:**

- What's important is to remember..."
- "I can't answer that question, but I can tell you..."
- Before I forget, I want to tell your viewers..."
- "Let me put that in perspective..."

***Seven Cardinal Rules of Risk Communication  
(Covello and Allen 1988)***

1. **Accept and involve the public as a partner.**  
Your goal is to produce an informed public, not to defuse public concerns or replace actions.
2. **Plan carefully and evaluate your efforts.**  
Different goals, audiences, and media require different actions.
3. **Listen to the public's specific concerns.**  
People often care more about trust, credibility, competence, fairness, and empathy than about statistics and details.
4. **Be honest, frank, and open.**  
Trust and credibility are difficult to obtain; once lost, they are almost impossible to regain.
5. **Work with other credible sources.**  
Conflicts and disagreements among organizations make communication with the public much more difficult.
6. **Meet the needs of the media.**  
The media are usually more interested in politics than risk, simplicity than complexity, danger than safety.

7. **Speak clearly and with compassion.**

Never let your efforts prevent your acknowledging the tragedy of an illness, injury, or death. People can understand risk information, but they may still not agree with you; some people will not be satisfied.

## Factors Affecting Risk Perception

People's perception of risk may be influenced by factors other than its magnitude.

The following factors may have more affect on the acceptability of risk than the estimated magnitude of either the individual or population risk.

1. **Voluntariness.** Risks perceived to be voluntary are more acceptable than risks perceived to be imposed.
2. **Controllability.** Risks perceived to be under an individual's control are more accepted than risks perceived to be controlled by others.
3. **Benefits.** Risks perceived to have clear benefits are more accepted than risks perceived to have little or no benefit.
4. **Equity.** Risks perceived to be fairly distributed are more accepted than risks perceived to be unfairly distributed.
5. **Understanding.** Risks perceived to be poorly understood are less readily accepted and perceived to be greater than risks from activities perceived to be well understood or self-explanatory.
6. **Uncertainty.** Risks perceived as relatively unknown or that have highly uncertain dimensions are less readily accepted than risks that are relatively known to science.
7. **Dread.** Risks that evoke fear, terror or anxiety are less readily accepted and perceived to be greater than risks that do not arouse such feelings or emotions.
8. **Trust in institutions.** Risks associated with institutions or organizations lacking in trust and credibility are less readily accepted and perceived to be greater than risks associated with trustworthy and credible institutions and organizations.
9. **Reversibility.** Risks perceived to have potentially irreversible adverse effects are less readily accepted and perceived to be greater than risks perceived to have reversible adverse effects.
10. **Personal stake.** Risks perceived by people to place them personally and directly at risk are less readily accepted and perceived to be greater than risks that pose no direct or personal threat.
11. **Ethical/Moral nature.** Risks perceived to be ethically objectionable or morally wrong are less readily accepted and

perceived to be greater than risks  
perceived not to be ethically objectionable  
or morally wrong.

12. **Human vs. Natural Origin.** Risks perceived to be generated by human action are less readily accepted and perceived to be greater than risks perceived to be caused by nature or "acts of God."
13. **Victim identity.** Risks that produce identifiable victims are less readily accepted and perceived to be greater than risks that produce statistical victims.
14. **Familiarity.** Risks perceived to be familiar are more accepted than risks perceived to be exotic.
15. **Adults vs. children.** Risks perceived to affect adults are more accepted than risks perceived to affect children.
16. **Catastrophic Potential.** Risks that produce fatalities, injuries and illness grouped spatially and temporally are less readily accepted and perceived to be greater than risks that have random, scattered effects.

### **Mental Noise Theory**

When people are stressed,

- they often have difficulty hearing, understanding and remembering information.
- they often lose as much as 80 percent of the information that is communicated to them.

## Risk Communication Templates

### Rule of 3 template

- Three key messages
- Key message repeated three times
- Each message supported by three supporting messages

### Primacy/Recency template

People tend to remember the first and most recent information they hear  
When establishing three points, state the most important first, least important second and the second most important last

### 27/9/3 template or sound bite rule

27 words, 9 seconds, 3 messages

### IDK (I don't know) template

Repeat question (except negative)  
Say you don't know/Can't answer/Wish you could answer  
Give the reason(s) why you don't know or can't answer  
Indicate follow up with deadline  
Bridge to what you can say, such as core messages

### AGL-4 template

Simplify the message so that all audiences can Understand it.

### 1N=3p template

one negative = three positives

### CCO template

Compassion, Conviction, Optimism

### Guarantee Template

"What I can tell you is..."

### Interrogation Template

Round One: Offer 27/9/3 response  
Round Two: Say "Let me repeat"  
Round Three: Bridge to more details, to another topic, or ask if there are more questions

### False Allegation Template

Don't repeat the allegation  
Indicate that the opposite of the allegation is valuable to you  
Bridge to three facts that relate to the opposite

### Worst Case Template

<b>Avoid</b> No Not Never Nothing None
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75 percent of communication is non-verbal
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## **Risk and Crisis Communication: 77 Questions Commonly Asked by Journalists During a Crisis**

*(Reprinted from: Covello, V.T., Keeping Your Head In A Crisis: Responding To Communication Challenges Posed By Bioerrorism And Emerging Infectious Diseases. Association of State and Territorial Health Officers (ASTHO), 2003 in press)*

**Journalists are likely to ask six questions in a crisis (who, what, where, when, why, how) that relate to three broad topics:**

- (1) What happened;**
- (2) What caused it to happen;**
- (3) What does it mean.**

**Specific questions include:**

1. What is your name and title?
2. What are your job responsibilities?
3. What are your qualifications?
4. Can you tell us what happened?
5. When did it happen?
6. Where did it happen?
7. Who was harmed?
8. How many people were harmed?
9. Are those that were harmed getting help?
10. How certain are you about this information?
11. How are those who were harmed getting help?
12. Is the situation under control?
13. How certain are you that the situation is under control?
14. Is there any immediate danger?
15. What is being done in response to what happened?
16. Who is in charge?
17. What can we expect next?
18. What are you advising people to do?
19. How long will it be before the situation returns to normal?
20. What help has been requested or offered from others?
21. What responses have you received?
22. Can you be specific about the types of harm that occurred?
23. What are the names of those that were harmed?
24. Can we talk to them?
25. How much damage occurred?
26. What other damage may have occurred?
27. How certain are you about damages?
28. How much damage do you expect?
29. What are you doing now?
30. Who else is involved in the response?
31. Why did this happen?
32. What was the cause?
33. Did you have any forewarning that this might happen?
34. Why wasn't this prevented from happening?
35. What else can go wrong?
36. If you are not sure of the cause, what is your best guess?

37. Who caused this to happen?
38. Who is to blame?
39. Could this have been avoided?
40. Do you think those involved handled the situation well enough?
41. When did your response to this begin?
42. When were you notified that something had happened?
43. Who is conducting the investigation?
44. What are you going to do after the investigation?
45. What have you found out so far?
46. Why was more not done to prevent this from happening?
47. What is your personal opinion?
48. What are you telling your own family?
49. Are all those involved in agreement?
50. Are people over reacting?
51. Which laws are applicable?
52. Has anyone broken the law?
53. How certain are you about whether laws have been broken?
54. Has anyone made mistakes?
55. How certain are you that mistakes have not been made?
56. Have you told us everything you know?
57. What are you not telling us?
58. What effects will this have on the people involved?
59. What precautionary measures were taken?
60. Do you accept responsibility for what happened?

61. Has this ever happened before?
62. Can this happen elsewhere?
63. What is the worst case scenario?
64. What lessons were learned?
65. Were those lessons implemented?
66. What can be done to prevent this from happening again?
67. What would you like to say to those that have been harmed and to their families?
68. Is there any continuing the danger?
69. Are people out of danger? Are people safe?
70. Will there be inconvenience to employees or to the public?
71. How much will all this cost?
72. Are you able and willing to pay the costs?
73. Who else will pay the costs?
74. When will we find out more?
75. What steps need to be taken to avoid a similar event?
76. Have these steps already been taken? If not, why not?
77. What does this all mean?

## Message Maps

### Eight Important Risk Communication Goals

1. Identify stakeholders early in the communication process
2. Anticipate stakeholder questions and concerns before they are raised
3. Organize our thinking and develop prepared messages in response to anticipated stakeholder questions and concerns
4. Develop key messages and supporting information with a clear, concise, transparent and accessible framework
5. Promote open dialogue about messages both inside and outside the organization
6. Provide user-friendly guidance and direction to spokesperson
7. Ensure the organization has a central repository of consistent messages
8. Encourage the organization to speak with one voice

## Message Mapping Step 1 – Identify Stakeholders

Stakeholders could be

Victims	Victim families
Directly affected individuals	Emergency response personnel
Public health personnel (local, county, state, national)	Law enforcement personnel
Hospital personnel	Families of emergency response, law enforcement and hospital personnel
Government agencies at all levels	Politicians/legislators
Unions	The media
Legal professionals	Contractors
Consultants	Suppliers/vendors
Ethnic/minority groups	Groups with special need, like the elderly, disabled and homebound
Health agency employee	Advisory panel
NGOs	Educators
Scientific community	Religious community
Business community	Professional societies
General public	

## Message Mapping Step 2 – Identify Specific Concerns

Develop a complete list of specific concerns, typically through research, for each important stakeholder group. Use this list of resources to conduct the research.

Media content analysis (print, radio, television, blogs)

- Websites
- Document review, including meeting records, public hearing records and legislative transcripts
- Review of complaint logs, hot line logs, toll-free number logs, and media logs
- Interviews with subject matter experts
- Facilitated discussion sessions with individuals that are intimately familiar with the issue
- Focus groups
- Surveys

## Message Mapping Step 3 – Analyze the specific concerns to identify common sets of underlying general concerns

Sample List of General Concerns

Health  
Safety  
Ecological/environmental  
Economic  
Quality of life  
Equity/Fairness  
Cultural/symbolic  
Legal/regulatory  
Basic information – who, what, when, where, why, how  
Openness/transparency/access to information  
Accountability  
Options/alternatives  
Control  
Effects on children/future generations  
Irreversibility  
Ethics/morality  
Unfamiliarity  
Changes in the status quo  
Voluntariness  
Benefits  
Expertise  
Honesty  
Listening/caring/empathy  
Trust

#### **Message Mapping Step 4 – Develop Key Messages**

The fourth step in message map construction is to develop key messages in response to the generated list of underlying stakeholder concerns and specific stakeholder questions.

Key messages are typically developed through brainstorming sessions with a message mapping team. The message mapping team typically consists of a subject matter expert, a communication specialist, a policy expert, and a facilitator. The brainstorming session produces a message narrative, which in turn is reduced to key messages and entered on the message map.

Key message construction by the message mapping team is based on principles derived from one of the main theories of risk communication -- mental noise theory. Mental noise theory states that when people are upset they often have difficulty hearing, understanding, and remembering information. Mental noise can reduce a person's ability to process information by over 80 percent.

The challenge for risk communicators, therefore, is

(1) to overcome the barriers that mental noise creates and

(2) to produce accurate messages for diverse audiences; and

(3) to achieve maximum communication effectiveness within the constraints posed by mental noise.

Solutions to mental noise theory that guide key message development specifically, and message mapping generally, include:

Developing a limited number of key messages: ideally 3 key messages or one key message with three parts for each underlying concern or specific question (conciseness);

Keeping individual key messages brief: ideally less than 3 seconds or less than 9 words for each key message and less than 9 seconds and 27 words for the entire set of three key messages (brevity).

Developing messages that are clearly understandable by the target audience: typically at the 6<sup>th</sup> to 8<sup>th</sup> grade readability level for communications to the general public (clarity).

Additional solutions include:

Placing messages within a message set so that the most important messages occupy the first and

last positions.

Developing key messages that cite credible third parties.

Using graphics and other visual aids to enhance key messages.

Balancing negative key messages with positive, constructive, or solution oriented key messages.

Avoiding unnecessary uses of the words no, not, never, nothing, none.

### **Step 5 – Develop Supporting Facts**

The fifth step in message map construction is to develop supporting facts and proofs for each key message. The same principles that guide key message construction should guide the development of supporting information.

#### Guidelines for Using Message Maps

Use one or all of the three key messages on the message map as a media sound bite.

Present the sound bite in less than 9 seconds for television and less than 27 words for the print media.

When responding to specific questions from a

reporter or stakeholder regarding a key message, present the supporting information from the message map in less than 9 seconds or 27 words.

If time allows, present the key messages and supporting information contained in a messages map using the “Triple T Model”: (1) Tell people what you are going to tell them, i.e., key messages; (2) Tell them more, i.e., supporting information; (3) Tell people again what you told them, i.e., repeat key messages.

Study and practice the use of message maps.

Stay on the prepared messages in the message map; avoid “winging it.”

Take advantage of opportunities to reemphasize or bridge to key messages.

Keep messages short and focused.

Be honest: tell the truth.

In conclusion, message maps are a viable tool for risk communicators. They ensure that risk information has the optimum chance of being heard, understood, and remembered. Importantly, they encourage public health agencies to develop a consistent set of messages and speak with one voice.

## Draft Sample Message Maps

<b>Draft Message Map</b> <b>Stakeholder: General Public</b> <b>Question: How contagious is smallpox?</b>		
<b>Key Message 1</b>	<b>Key Message 2</b>	<b>Key Message 3</b>
Smallpox spreads slowly compared to measles or the flu	This allows time for us to trace contacts and vaccinate those people who have come in contact.	Vaccination within 3 to 4 days of contact will generally prevent the disease
<b>Supporting Fact 1-1</b>	<b>Supporting Fact 2-1</b>	<b>Supporting Fact 3-1</b>
People are only infectious when the rash appears and they are ill	The incubation period for the disease is 10-14 days	People who have never been vaccinated are the most important ones to vaccinate
<b>Supporting Fact 1-2</b>	<b>Supporting Fact 2-2</b>	<b>Supporting Fact 3-2</b>
It requires hours of face-to-face contact	Resources for finding people are available.	Adults who were vaccinated as children may still have some immunity to smallpox
<b>Supporting Fact 1-3</b>	<b>Supporting Fact 2-3</b>	<b>Supporting Fact 3-3</b>
There are no asymptomatic carriers	Finding people who have been exposed and vaccinating them is the successful approach	Adequate vaccine is on-hand and the supply is increasing

<b>Draft Message Map</b>		
<b>Stakeholder: General Public</b>		
<b>Question: Can everyone be vaccinated?</b>		
<b>Key Message 1</b>	<b>Key Message 2</b>	<b>Key Message 3</b>
Only people possibly exposed to smallpox should be vaccinated	Vaccination is safe for most people	Some people are more likely to experience side effects than others
<b>Supporting Fact 1-1</b>	<b>Supporting Fact 2-1</b>	<b>Supporting Fact 3-1</b>
Focused vaccination is the strategy	The majority of people of all ages and races experience the expected reactions	Weakened immune systems
<b>Supporting Fact 1-2</b>	<b>Supporting Fact 2-2</b>	<b>Supporting Fact 3-2</b>
Anyone possibly exposed regardless of health status should be vaccinated	Normal reactions to the vaccine include fever, soreness, itching, and tiredness.	Skin conditions such as eczema
<b>Supporting Fact 1-3</b>	<b>Supporting Fact 2-3</b>	<b>Supporting Fact 3-3</b>
In those potentially exposed the benefits of vaccination out weigh the risks.	These reactions are a good sign that the vaccine is working	Not recommended for pregnant women

**Draft Message Map Stakeholder: General Public Question: What are the signs and symptoms of smallpox?**

<b>Key Message 1</b>	<b>Key Message 2</b>	<b>Key Message 3</b>
High fever and too sick to move around	The rash generally appears 2-3 days after the fever starts	The rash changes its appearance over 10-14 days
<b>Supporting Fact 1-1</b>	<b>Supporting Fact 2-1</b>	<b>Supporting Fact 3-1</b>
Too sick for normal activities	When the rash appears the disease can be spread	The way the rash changes makes diagnosis easy
<b>Supporting Fact 1-2</b>	<b>Supporting Fact 2-2</b>	<b>Supporting Fact 3-2</b>
Can't spread the disease before the rash appears	Tests can prove the illness is smallpox	Healthcare workers are trained to diagnose smallpox
<b>Supporting Fact 1-3</b>	<b>Supporting Fact 2-3</b>	<b>Supporting Fact 3-3</b>
High fever is uncommon for chickenpox	Testing for smallpox is easy	Photos of smallpox are available on the CDC website