



Risk Communication Guide for State and Local Agencies



**October 2001
(reissued April 2006)**

Arnold Schwarzenegger
Governor
State of California

Henry R. Renteria
Director
Governor's Office of Emergency Services



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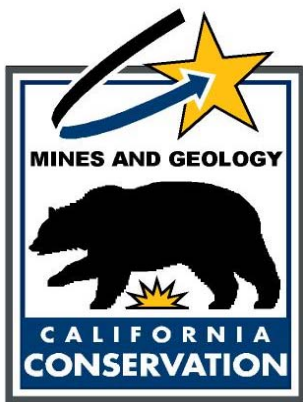
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1.0 EXECUTIVE SUMMARY

Importance of risk communication

The field of risk assessment and risk management has advanced considerably in the past few decades. It has been found that the manner in which the community was informed of the associated risks before, during and after an incident, can directly affect whether the event is perceived as being handled successfully or not.

Although risk communication has been an integral part of the hazardous material industry, it is becoming more widespread in its application to other disasters. The emergency management community is responding to media and public inquiries more than ever before. **Risk communication** has become a key factor in emergency management programs.

Purpose

The intent of this guide is to provide basic information to emergency management professionals in state and local agencies so they may establish a risk communication program to effectively communicate risk issues with the community. It is not intended to provide state and local government public information officers with methods of "spin control." It is directed towards the emergency management professionals who may be called upon before, during and after an incident to make presentations to the public as to how this incident may affect them.

There are many publications on this subject. Although many of them are for private industry/hazardous material audiences, their basic principles can be applied to governmental agencies/general disasters as well. A list of references and resources is included in Section 9.

Potential emergency management risk examples

Examples of potential risks that may need to be addressed from the emergency management perspective include:

- man-made facilities such as:
 - dams
 - nuclear power plants
 - chemical plants

 - natural phenomena such as:
 - earthquakes
 - wildfires
 - floods

 - other events such as:
 - fires
 - explosions
 - toxic releases
 - terrorist activities
-

1.0 EXECUTIVE SUMMARY, continued

Benefits of effective risk communication

Having an effective risk communication program in place could result in the following benefits to your agency:

- improved ability of the community to act on requests for emergency actions (shelter-in-place, evacuation).
- improved community perception and understanding of potential risks.
- improved community understanding and support of emergency preparation activities.
- reduced impact in the event of an emergency or disaster.
- decreased potential for legal action by the community to enforce what it considers to be an equitable risk balance (this has occurred^{[8]*}).

A key point to consider: if a risk to the community exists, the community deserves to be informed and consulted.

* Superscript numbers refer to the corresponding number in Section 9.0.

Organization of this Risk Communication Guide

There are many resources that provide risk communication guidance; however, most focus on environmental risk communication. This guide adapts the best available guidance for emergency management use, provides a compendium of useful communication tips, and focuses on risk communication of emergency/disaster issues. It is not designed to replace training or more comprehensive tutorials on risk communication.

The sections of this guide are partitioned into practical steps for implementing a risk communication program. They include:

General Risk Perception/Communication Issues

Before undertaking the development of a risk communication program, it is important to have a general understanding of potential risk communication challenges (i.e., general risk issues of interest to the community and outrage factors).

Possible Objectives of a Risk Communication Program

Defining clear goals and objectives is one of the most important initial activities because it provides a platform for the risk communication program to be more effective, better focused, and more likely to achieve the desired benefit.

1.0 EXECUTIVE SUMMARY, continued

Organization of this Risk Communication Guide, continued

Trust and Credibility Factors

These parameters lay an important foundation for successful risk communication.

Effective Vehicles for Risk Communication

This section identifies some common and effective mechanisms for risk communication that can be used once your goals are defined and an appropriate platform for success exists.

Effective Communication Strategies in Public Forums

A public forum can be an effective (and often necessary) mechanism for communicating “high profile” risk issues. Ensuring that the appropriate risk communication strategies are applied is critical.

Resources for Effective Public Forum Risk Communication

When directly interacting with the community, having the proper resources available can make the difference between success and failure. This section provides tips on choosing your representative, developing an appropriate message, and presenting your message to improve risk communication

Explaining Risk

This section contains useful tips for conveying an understanding of risk to the stakeholder.

References and Resources

This section provides a list of several useful, supplemental guidance documents. Although primarily focused on environmental risk issues, many of the concepts are adaptable to emergency/disaster risk issues.

Quick Summary Checklists

These checklists provide key summary points to consider when developing a risk communication program. A copy of the checklist may be extracted to facilitate risk communication planning within your organization.

Guidelines for Meeting with the Media

Copies of this page may be duplicated for distribution.

1.0 EXECUTIVE SUMMARY, continued

Perspective

The authors recognize key decisions are made by the risk communicator before undertaking the risk communication task:

- What is the real nature of the hazard - modest or serious?
- If a modest hazard, is the objective to reassure?
- If a serious hazard, is the objective to alert? Even if the hazard is serious, there is a need to reassure - panic benefits nobody.

Even if an agency views itself as “informing” its community, rather than alerting or reassuring it, a fundamental distinction in risk communication is deciding whether people are likely to be more concerned than considered appropriate (overreact) or be less concerned than considered appropriate (underreact). Generally, the public will tend to overreact. In such cases, emergency management agencies must focus much of their energies for handling an event by trying to:

Before	Reduce the anxiety about potential emergencies that the agency considers unlikely.
During	Prevent panic in mid-crisis.
After	Prevent or reduce outrage about prior agency actions (or inaction).

Most agencies are most familiar with providing information that alerts people to serious hazards. Therefore, the focus of this guide is on the more challenging task of providing neutral/balanced information and reassuring the public about non-serious hazards.

2.0 GENERAL RISK PERCEPTION/COMMUNICATION ISSUES

Before undertaking the development of a risk communication program, it is important to have a general understanding of potential risk communication challenges. This chapter discusses the types of issues most communities are concerned about and factors that contribute to community "outrage", including those circumstances that can cause controversy, anger, distrust, and still greater concern among the individuals in the community.

Chapter content	2.1 Key Risk Issues Often of Interest to the Community
	Table 2-1: Key Risk Communication Parameters
	2.2 Factors Contributing to Community Outrage

2.1 Key Risk Issues Often of Interest to the Community

Importance of understanding the community's interests

To effectively communicate the risk issues to a community, you must first understand what issues are important to them. Often, it is not necessarily the technical issues that are the most important to them. However, it is usually necessary to present some technical information. The person presenting the technical aspects of the event must do so simply and clearly. Once the technical information is presented, the issues of interest to the community can then be addressed in as much detail as necessary.

Key general risk issues

General Emergency/Disaster Risk Issues of Interest to the Community

- **Consequences of Worst-Case/Alternative Scenarios and Emergency/Disaster Likelihood** (How bad is it? Can it happen?) - Although the emergency management professional spends many hours trying to determine the possibility of a disaster occurring and how bad it would probably be, the public usually doesn't give it much thought. Typical questions from the public about natural and man-made hazards might include the following:
 - "What is the worst thing that can happen?"
 - "What is the likelihood of a major earthquake?"
 - "How many people could be killed?"
 - "How much hazardous material is located at the plant?"
 - "I live one block away, would I survive if this dangerous chemical is released?"
 - "Are there any long-term health impacts?"
 - "How do I know my child is safe in this school?"
 - "Would you live here?"
 - "When developing your worst-case scenario, is sabotage considered?"

The emergency management professional must address these issues directly and use the opportunity to present information about emergency mitigation systems and other safety features in the simplest possible language.

2.1 Key Risk Issues Often of Interest to the Community, continued

Key general risk issues, continued

- **Probabilistic Approach vs. Precautionary Principle**

Recently, there have been two basic ways to address risk issues:

- **Probabilistic Approach** - develops an understanding of consequences and likelihood and uses that understanding to make decisions.
- **Precautionary Principle** – an expectation that agencies will take steps to prevent high-magnitude, low-probability disasters.

The probabilistic approach has become less important. Now it is more common to apply the Precautionary Principle to risk decision-making.

The specification of “tolerable risk” (how safe is safe enough?) has a significant dependency on the outrage factor (see Section 2.2). When outrage is low, sizeable risks are perceived as tolerable; when outrage is high, even tiny risks are felt to be intolerable.

- **Natural Phenomena Hazards** - Individuals tend to become less outraged when it comes to worst-case natural phenomena hazards (e.g., earthquakes, floods, tsunamis, storms, tornadoes) than they do when it comes to man-made hazards. The public will often want to know what magnitude earthquake a man-made structure or facility can withstand, asking such questions as: “Can its failure impact my business or my family?” “Can it be made earthquake-proof?”
 - **Community Emergency Response Actions** - Emergency response agencies and personnel are chartered with being equipped and trained to handle emergencies. However, community members will typically want to know how to protect themselves and their families during an emergency/disaster, and the question, “What should I do if an emergency occurs?” will usually be asked.
 - **Community Notification Systems** - Community notification systems are usually in place if there is a need for them. However, new (and even long-time) residents may not be aware of the notification procedures. Therefore, emergency notification, warning, and response plans and procedures should always be addressed as part of the risk communication process.
-

2.1 Key Risk Issues Often of Interest to the Community, continued

Key general risk issues, continued

- **Perceived Risks Reported by the Media** - In today's world, the community will most likely hear about emergency issues through the news media. Therefore, key issues and concerns raised by the media will need to be addressed. In addition, some issues and concerns may have to be clarified or corrected.
 - **Use of Standards and Accepted Practices** - If terms like "standards" or "accepted practices" are used, it should be explained why they are acceptable in their community.
-

Key industrial facility-based risk issues

Industrial Facility-Based Emergency/Disaster Risk Issues of Interest to the Community

- **Safety (“threshold”) limits** - Often various threshold limits have been identified during the risk assessment process. The public will typically be interested in what these limits are and how they compare to the risk of fatality.
 - **Dispersion, release, and other consequence models** - Models may have been used for risk assessment. Providing the community with information regarding these model scenarios may be helpful.
 - **Community confidence in crediting safety/mitigation systems** - Public concern over the need for a facility to emphasize safety over profit, adhere to safe operating practices, and maintain the proper functionality of mitigation systems may be key issues.
 - **The following safety features are ranked in increasing order of difficulty in terms of inspiring public confidence:**
 - passive safety/mitigation features
 - active safety/mitigation features
 - alarms (especially if they can be disabled)
 - safety features that involve continuous adjustment (especially if they are a potential contradiction to efficient plant operations)
-

2.1 Key Risk Issues Often of Interest to the Community, continued

Other risk issues of interest to the community

Other Potential Considerations when Communicating Risk Information

- The community will typically be less interested in the science behind risk assessment than the risk communicator.
 - Financial impact, business impact, and real estate values are often important issues to the community when discussing emergency/disaster risk issues.
 - Human nature ensures that individual community members are going to be focused on their safety and how an emergency/disaster will impact them.
 - Past events will often be a focus for the vocalizing of community concerns and should be addressed by the risk communicator.
 - When considering personal safety and risk, the cost-effectiveness of solutions is typically not the public's first consideration. Similarly, the public is typically not highly sensitive to governmental, or business challenges associated with emergency issues.
-

2.2 Factors Contributing to Community Outrage

The concept of “Community Outrage”

By their nature, emergency management professionals must focus on the technical issues associated with emergency preparation and response, whereas the public considers many other factors. It is generally true that what the public sees as the risk and their related fears often have no correlation to the technical issues. In risk management and communication circles, these non-technical factors are often referred to as the “outrage” dimension of risk.

Key factors that underlie the public’s perception of risk

The person who communicates with the public must be aware that the public is usually more concerned with the outrage issues than the technical aspects, and their perception of the risk(s) is likely to be very different from the agency’s assessment.

Some actions that are guaranteed to raise the level of hostility between community members and agency representatives and may ultimately stand in the way of successful risk communication include:

- Ignoring the variables that influence community risk perception.
- Labeling the variables as irrational and then discounting them.

Some key variables that can underlie community perception of risk:

- **Voluntary risks are accepted more readily than those that are imposed.** When communities feel coerced into accepting risks, they tend to feel anger and resentment. As a result, the community may pay far less attention to a substantive risk issue because a less serious coerced risk generates more controversy.
 - **Natural risks seem more acceptable than artificial risks.** An act of nature, such as an earthquake or tornado, is more acceptable than one caused by people, such as a chemical leak or airplane crash. Natural disasters provide no focus for anger because there is no one to blame, whereas man-made disasters can usually be attributed to human error and thus become a focal point for public anger.
 - **Risks under individual control are accepted more readily than those subject to industry or government control.** Most people feel safer dealing with risks under their own control. For example, most of us feel safer driving than riding as a passenger. Our feeling has nothing to do with our driving record versus the driving record of others.
-

2.2 Factors Contributing to Community Outrage, continued

Key factors that underlie the public's perception of risk, continued

- **Risk information that comes from a trustworthy source is more readily believed than information from an untrustworthy source.** If a mechanic with whom you have quarreled in the past suggests he can not find a problem with a car that seems faulty to you, you will respond quite differently than if a friend delivers the same news. You are more apt to demand justification from the mechanic rather than ask neutral questions.
- **Exotic risks seem more dangerous than familiar risks.** A cabinet full of household cleansers, for example, generates much less concern than a high-tech chemical facility that makes the cleansers.

Importance of understanding outrage factors

The greater the number and seriousness of outrage factors, the greater the likelihood of public concern about the risk, regardless of the technical data. As government agencies have seen many times, the risks that elicit public concern may not be the same ones that scientists have identified as most dangerous. When officials dismiss the public's concern as misguided, the result is controversy, anger, distrust, and still greater concern. None of this is meant to suggest that people disregard scientific information and make decisions based only on the other variables (the outrage factors). However, it does suggest that outrage also matters, and that by ignoring the outrage factors, agencies skew the balance and cause people to become even more outraged. This logic leads to the following guideline:

Pay as much attention to outrage factors and to the community's concerns as to scientific data. At the same time, do not underestimate the public's ability to understand technical information.

2.2 Factors Contributing to Community Outrage, continued



Benefits of proactively considering and addressing community outrage factors

Emergency management professionals too often focus on the scientific data and ignore the outrage factors. In a democracy, controversial issues are not those solely determined by technical experts. If outrage factors and people's concerns are not addressed from the outset, you will often be forced to attend to them later, after angering the public - a far more challenging situation.

Some primary benefits of considering and addressing community outrage factors, as well as technical issues, from the beginning are:

- If you merely convey technical information and ignore the outrage factors, you will enrage the public. As a result, risks the agency deems minimal will become battlegrounds. Addressing the outrage factor reduces this likelihood.
- Data is not always complete and management options are rarely perfect. Including other concerns raised by the public may lead to better technical solutions.

This table provides some key risk communication parameters that reflect community outrage factors:

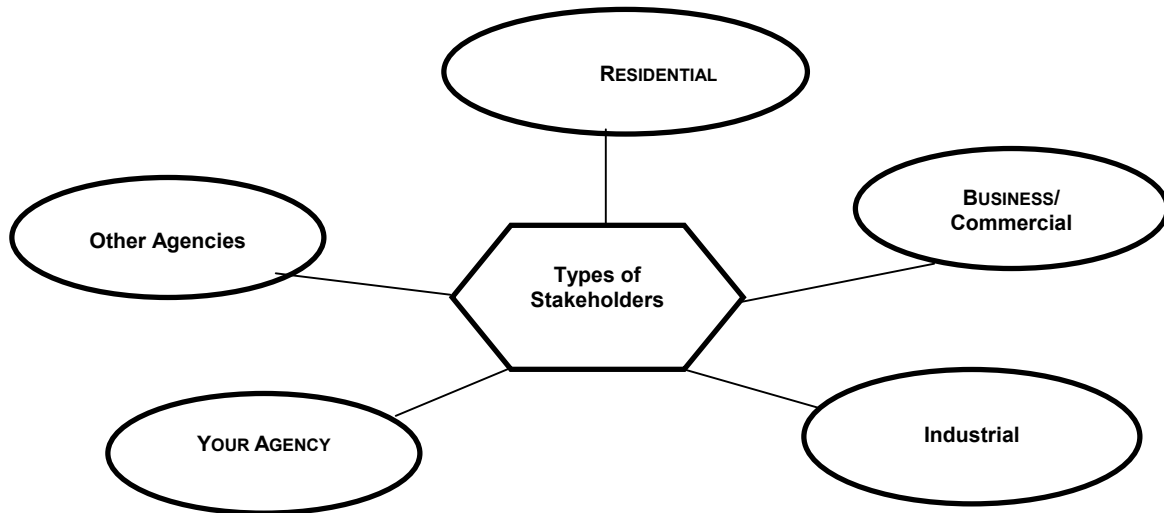
Table 2-1 Key Risk Communication Parameters^[29]	
	<p>Reassurance Factors - <u>Reduce</u> Fears</p> <ul style="list-style-type: none"> • Show commitment, openness, knowledge, empathy • Give respect - Treat others as they want to be treated. • Provide early notification • Discuss and negotiate • Secure permission
	<p>Scare and Anger Factors - <u>Increase</u> Fears</p> <ul style="list-style-type: none"> • Lie • Trivialize • Keep secret • Failure to involve the community • Provide no choices

3.0 POSSIBLE OBJECTIVES OF A RISK COMMUNICATION PROGRAM

Defining clear goals and objectives is one of the most important initial activities because it provides a platform for the risk communication program to be more effective, better focused, and more likely to achieve the desired benefit.

Chapter content	3.1 Defining the Target Audience
	3.2 Pre-Incident Objectives and Information Priorities
	3.3 Objectives and Information Priorities During and After an Incident
	3.4 Potential Enhancements to Community Emergency Response

3.1 Defining the Target Audience



Importance of stakeholder identification

In order to design an effective risk communication program, identifying the stakeholders is a critical initial task. It is necessary to anticipate or assess their varying interests because how the potential hazard impacts them (personally or professionally) will be their primary interest.

General types of stakeholders

As indicated in the diagram above, the general types of stakeholders can include, but are not limited to:

- Residential Community
- Business/Commercial Community
- Industrial Community
- Your Agency
- Other Agencies

3.1 Defining the Target Audience, continued

General types of stakeholders, continued

Residential Community

The residential community is typically composed of a wide spectrum of individuals, including a mixture of:

- lay people
- business people
- professionals

The interests of the residential community stakeholders will vary.

- Some may have a scientific background, many will not.
- Some may have more time and interest in getting involved in community matters.
- Most will have a personal or familial interest in safety and health or “quality-of-life” issues (including what they believe are the appropriate actions that are needed in the event of an emergency/disaster)
- Residents may be of many different backgrounds and cultures.
- Most will be concerned about property values.

Taking all these factors into consideration makes designing a risk communication program all the more challenging.

Business/Commercial Community

As with the residential community, the business community is typically composed of a wide spectrum of individuals.

Business community interests will include:

- personal safety interests
 - business issues (loss of revenue, business interruption, infrastructure availability, physical accessibility during or after an event, liability, property values, etc.)
 - protection of its employees (e.g., shelter-in-place, evacuation, respiratory protection)
-

3.1 Defining the Target Audience, continued

General types of stakeholders, continued

Industrial Community

Industrial community stakeholders have interests similar to the business/commercial community. In addition, the potential for an emergency/disaster that could impact their site and amplify the emergency or precipitate other problems (an earthquake that could result in damage to chemical tanks or chemical releases that could cause adverse chemical interactions) may be a key issue to industrial community stakeholders.

Your Agency

Even the agency responsible for addressing and communicating risk issues may have various stakeholders in management and other divisions that may need to be part of the risk communication activities. These stakeholders may also have varying interests and technical knowledge.

Other Agencies

Other stakeholders (special districts, local or state government) will likely have a wide range of interests, consistent with their responsibilities to the various communities in their jurisdiction. Many of these interests may have to be addressed, but a key additional issue is a requirement to sufficiently characterize the risk, so that they can clarify their responsibilities for emergency/disaster response. The risk communicator should also realize that intra- and inter-agency politics may affect the perspective and actions of their representatives. For agency stakeholders, the risk communication program should be able to be understood by individuals with a moderate familiarity with risk issues.

3.1 Defining the Target Audience, continued

Risk communication priorities

The level of stakeholder interest is a driving force in the assignment of risk communication priorities. For any risk controversy, risk communication specialists often categorize stakeholders into four main groups (in order of decreasing interest level):

- **Activists** (highly concerned people) - a subset of extremely involved individuals and groups that dominate the risk controversy
- **Attentives** - individuals who follow the issue closely
- **Browsers** - individuals following the issue casually
- **Inattentives** - the largest number of individuals who are paying little or no attention to the issue

Risk communication professionals must decide how to deal with these stakeholders. The following suggestions have been found to be effective in most cases:

Low hazard situations

- Leave the **inattentives** uninvolved.
- Keep the **browsers** informed through the media.
- Let the **attentives** watch.
- Focus on interacting with the **activists**.

High hazard situations

Where attention is desired, the key challenge is getting the uninvolved to pay attention in order to protect themselves.

3.2 Pre-Incident Objectives and Information Priorities

General strategy

Properly identifying and understanding the objectives of all stakeholders often enhances the effectiveness of risk communication.

Even the best risk communication activities can be ineffective if they:

- do not address the issues
 - do not provide information that is of interest to the audience
 - are presented to the wrong audience
-

Possible pre-incident objectives

Possible pre-incident objectives of risk communication include:

- **Inform the community.** If a risk to the community exists, the community deserves to be informed and consulted.
 - **Seek input or feedback from the community useful to the agency.** Often input from the community can help the agency make better decisions. Those who are affected by a problem bring different perspectives to the problem-solving equation.
 - **Clarify the probability and consequences of a potential risk to provide an improved risk perspective for the stakeholder.** Instill a greater degree of comfort by furnishing information about proactive preparedness. Involvement in the process and understanding risk can help the various stakeholders accept risk. If some members of the community advocate zero risk tolerance, the agency may have to clarify that a certain amount of risk is inherent and cannot be reasonably avoided.
 - **Address an existing controversy or concern of the stakeholder.** A good example of effective risk communication is getting the public to accept a controversial location for construction of a new dam.
 - **Provide a forum for discussion.** Communication is as much listening as it is speaking. Absorbing criticism, identifying problems or concerns, and letting people “blow off steam” should often be on the agency’s list of communication objectives.
 - **Improve the stakeholder's understanding and ability to support effective emergency response.**
 - **Satisfy regulatory requirements for risk communication related to emergency events.**
-

3.2 Pre-Incident Objectives and Information Priorities, continued

Possible pre-incident objectives, continued

- **Warning vs. reassuring.** Even an agency that is deeply committed to seeing itself as a neutral information source, must decide if it is trying to mobilize or demobilize the community.

However, while fulfilling its mission, it is important for the agency to:

- understand the risks
 - ensure that appropriate steps are taken to apply contemporary technologies to reduce the risk to a minimal level
 - ensure that emergency/disaster planning and resources are in-place to address/handle the risk
 - satisfy regulatory requirements concerning emergency events
-

Importance of research and addressing objectives

The agency should research the risk issues with the stakeholders to gather sufficient information to define the most important objectives. Understanding the objectives helps to ensure that risk communication addresses concerns important to the stakeholders.

Importance of community involvement

To the extent possible, involve the community in the decision-making process. Agencies typically spend considerable effort developing a risk management strategy, announcing it to the community, and then defending the strategy against the onslaught that is often a reaction to the agency's failure to involve those affected. Instead, particularly with issues that are apt to provoke controversy, the agency needs to identify the community's role in the risk decision-making process from the beginning.

Consider involving the community at the earliest stage possible. Meaningful input is easier to acquire and implement before agency staff feel committed to a particular course of action. Communities are more likely to be responsive to agency ideas when they are involved early in the decision-making process. **However, a recognized paradox of community involvement is the harder you work to involve people, the less interested they are in being involved.**

Key reasons for involving stakeholders in your program include:

- secures input from people who know something you need to know
 - gives people a chance to tell you what they feel you need to know
 - ensures that everyone is aware that they are welcome to get involved
-

3.2 Pre-Incident Objectives and Information Priorities, continued

Intrinsic benefits of pre-incident risk communication

As well as specifically addressing the above objectives, there are other intrinsic benefits resulting from the application of risk communication:

- increased credibility
 - improved risk decision-making
 - fewer battles that erode public confidence and agency resources (e.g., facilitated permits, improved public meetings, less time is spent dealing with adversarial issues)
 - enhanced community perception of risk issues
-

3.3 Objectives and Information Priorities During and After an Incident

General strategy

In general, defining the target audience (Section 3.1) and identifying the objectives and priorities (Section 3.2) apply equally well during and after an incident. Key potential differences include:

- The level of interest of all potential stakeholders is likely to be heightened.
 - One of the objectives will likely be “to address an existing controversy or concern.”
 - Instead of fielding questions such as “Can this happen?”, the emergency management professional is likely to receive questions such as “How did this happen? How can we keep this from happening again?”
-

Possible post-incident objectives

Some potentially important objectives and information priorities during and after an incident include:

- retaining credibility and trust (See Section 4.4)
 - clarifying how the incident compares to the assessed risk
 - providing clear information regarding incident causes, effects, and lessons-learned (this includes agency responsibilities for having identified, assessed, or responded to the emergency/disaster)
 - identifying how these lessons-learned will be used to decrease the likelihood or consequences of the risk in the future
-

Don't over-respond to perceived concerns

The agency should not underestimate the ability of community members to keep risks in perspective even after an incident. The agency should still research the issues with the community and other stakeholders (including groups that may be unhappy about how the event was handled) to ensure that the appropriate risk communication objectives are identified and addressed. After an incident, it is easy to address perceived concerns that may not accurately reflect actual stakeholder issues.

3.4 Potential Enhancements to Community Emergency Response

Importance of risk communication in community emergency response

Typically, the emergency response organization tends to consider the protection of the community as the responsibility of the emergency responder. It is important for the emergency response organization to plan and to have sufficient resources to address a potential emergency. However, it is important to note that, when it comes to the protection of the community, there are many things that the community can and cannot do to support a more desirable outcome of the emergency. There are specific, direct benefits of effective risk communication that result in improved community emergency response.

Desirable community emergency/ disaster response actions

Effective risk communication can lead to desirable community emergency response actions that include:

- **Contacting the appropriate municipal emergency responders**
An understanding of potential hazards can help the community understand the importance of quickly contacting municipal emergency responders. This may be helpful for any emergency situation by reinforcing the citizen's role and responsibility of reporting incidents.
- **Remaining calm during the emergency**
Risk communication can provide the community with an improved understanding of potential risks. This often can turn a potential for panic into useful response actions during an emergency.
- **Proper application of shelter-in-place**
Risk communication can include shelter-in-place background information. For many types of emergencies, shelter-in-place is often the most effective community emergency response action.
- **Evacuation**
Effective risk communication can stress the usefulness of evacuation if directed by the municipal emergency response agency.

In general, individuals who understand a potential risk will be motivated to be prepared to protect their families, homes, and businesses.

4.0 TRUST AND CREDIBILITY FACTORS

The success of any risk communication effort is highly dependent on the history of the relationship between the stakeholders. If the history consists of a trusting and interactive relationship, the risk communication effort also has a good foundation for success. If the history consists of confrontation and distrust, the risk communication effort can be very difficult. Trust and credibility lay an important foundation for successful risk communication.

Chapter content	4.1 Pre-Incident Agency Actions to Build Trust and Credibility
	4.2 Agency Actions
	4.3 Timing of Information Releases
	4.4 Trust and Credibility Issues During and After an Incident

4.1 Pre-Incident Agency Actions to Build Trust and Credibility

Importance of trust and credibility In order to facilitate a two-way exchange of information, the emergency management professional must first establish trust and credibility. People do want information, but they want understanding and empathy too. If people do not trust you or do not think that you care about their community, they will not be interested in your facts^[22].

Achieving trust Trust is achieved, in large part, by being consistently competent, caring, and honest. If you communicate with honesty and fairness, your audience will often respond the same way. On the other hand, slick packaging with a veneer of honesty is easy to see through and more likely to undermine trust than to build it. Acting trustworthy is no guarantee that people will ultimately trust you. But if you fail to be credible, you will virtually guarantee community opposition in the form of both disagreement with technical information and resentment of the agency.

Suggestions for building trust and credibility include:

Emphasize factors that inspire trust. Trust in an agency depends, in large part, on whether the agency:

- portrays competence
- appears to be caring
- encourages meaningful public involvement
- appears honorable and honest
- takes into account the "outrage factors" (Section 2.2) which influence the perception of risk

Instead of pushing the public to trust them, agencies should strive toward acting consistently trustworthy.

Pay attention to agency process. Community opposition focuses not only on agency action (or inaction), but also on the manner in which the agency proceeded toward that action. Whenever possible, involve affected communities in determining your action.

Explain organizational procedures. Communities need to understand that internal processes dealing with risk and safety issues operate in some logical manner.

4.1 Pre-Incident Agency Actions to Build Trust and Credibility, continued

Achieving trust, continued

Be forthcoming with information and involve the community from the outset. If you fail to disclose information or involve the public early, the community is apt to mistrust the agency. The agency will then be put on the defensive.

Focus on building trust as well as generating good technical information. A person's judgment of risk is seldom based solely on scientific information, but rather on a combination of the data, his/her perception of the risk based on other variables, and his/her feelings about the agency.

Provide information that meets people's needs. It is critical to identify key stakeholders and query their interests (via formal surveys, in response cards, in dialog at the start of meetings). In addition to queries to known stakeholders, anticipate what the community wants to know and what they will need to know even if they do not ask for it. Take some time to develop a list of problems, issues, and needs the community might have and prepare responses that address them. Keep in mind that different organizations and types of people will have different information needs.

Get the facts straight and avoid mixed messages. Risk issues are sufficiently confusing that any potential inconsistencies can negatively impact the risk communication process. Although agency representatives work hard to provide accurate information, sometimes facts get jumbled or key information is left out which may make people feel misled. Try to spot areas in advance where confusion might occur and make an extra effort to be clear. If the effort fails, correct the misimpression as quickly as possible.

Only make promises you are sure you can keep. It is often tempting to make unrealistic promises when pressed by the community, or to promise something you genuinely expect to deliver, only to find out later you can not. Consider explaining the goals and the process(es) needed to accomplish the goals rather than promising firm dates. To facilitate this, take notes at public meetings regarding commitments and send out written descriptions of the actions taken to make the promises happen. Providing regular progress reports can be very helpful. If you find you cannot follow through on a promise you have made, explain fully as soon as possible rather than hoping people will forget because they probably won't.

Follow through. Whenever you make a commitment always follow through. You may forget, but those you made the promises to usually will not. Make every effort to get back to people to ensure your promises are becoming reality.

4.1 Pre-Incident Agency Actions to Build Trust and Credibility, continued

Achieving trust, continued

Coordinate information within your organization and with other responsible groups. Lack of coordination creates confusion and an impression of organizational ineptness. When groups have honest differences, acknowledge them. Meeting and working with other affected agencies, municipal emergency response groups, and those officials who assist with coordination of emergency risk issues and community concerns can be very effective in coordinating the risk message and broadening the platform of trust with the community.

Listen to what various community groups are telling you. Try to foster mutual respect and consideration with all stakeholders when dealing with an issue. Avoid offending any community group, including activists. Agencies tend to overestimate the power of activist groups. While these groups rarely create the initial outrage, they may (and frequently do) nurture existing outrage.

Work together with organizations that have credibility in communities. Groups that have local credibility can be involved in helping to explain risks. However, this approach cannot replace forthrightness or more extensive community involvement. The following individuals, or organizations are usually credible in a community:

- Firefighters
- Law enforcement/public safety
- Medical Professionals
- Scientists/University Professors
- Environmental Groups
- Facility Non-Management Employees
- Private non-profit
- Industry/business
- Government agencies

Consider working with critics. By working closely with those organizations looking to find fault with your agency, you can make sure you are addressing their major concerns. When a critic says you're doing it right, it adds a great deal of credibility to your effort. Neutral third parties help a little; moderate opponents help more; and extreme opponents help the most in this approach.

Avoid "closed" meetings. Most meetings held by a state or local government agency are open to the public. Private meetings are likely to cause distrust and should be avoided.

4.1 Pre-Incident Agency Actions to Build Trust and Credibility, continued

Dealing with low trust situations

If you are dealing with a situation in which trust is already low, consider taking the following steps:

- Try to reduce the reasons for distrust by sharing information and involving the public in developing solutions.
- Indicate what steps you plan to take to prevent the trust-eroding actions from happening again: "In order to make sure you get information as quickly as possible, I am going to send bi-weekly updates about the status of the situation."
- Ask those who distrust you what *they* feel would make them more likely to trust you. To the extent possible, implement their suggestions.
- Respond on a personal level, when appropriate.
- Be patient. Do not expect all the people to trust you all the time, even if you feel you are totally trustworthy.
- If mistrust exists, it helps to acknowledge its validity and its source.

Because it may take a lot of effort to recoup trust, expect to go out of your way for people. If you are the person who aroused the distrust, acknowledge your mistakes.

Maintaining trust

The following issues should be considered when maintaining an atmosphere of trust:

- Trust is usually not difficult to maintain when initially warning people. However, reassurances later are not as easily believed.
- Trust is greatly damaged if the agency has to amend its risk or damage estimates in the "more-serious-than-we-thought" direction, but only modestly damaged when amending it in the "less-serious-than-we-thought" direction. Therefore, make sure that early risk estimates do not turn out to have been excessively reassuring.
- Trust relies on transparency, not mere honesty. It is not enough that everything you say is true. **The standard is that everything that is true, you say.**

Sometimes, trust may be an unachievable goal. Therefore, agencies should aim for accountability instead of trust. This may involve arranging for critical stakeholders to be actively involved in all activities prior to, during and after an incident.

4.2 Agency Actions

Contrasting agency trust and credibility actions

The previous section identified state and local agency actions to build trust and credibility. The majority of these actions apply equally well to private companies that may be involved in an emergency situation.

There is merit to having all those involved, private companies, state and local agencies, emergency responders, and critics, located at the same spot to provide consistent information to the community. However, during press conferences, it is very important to carefully preserve the difference in roles.

Build a lasting and trusting relationship with your community

Risk management and communication issues are a reality and must be dealt with by state and local government agencies. Thus, the prudent approach for all agencies is to build lasting and trusting relationships with their communities through frequent interaction. **People react more favorably to someone they have previously seen and/or talked to personally, rather than a stranger, especially during an incident.**

Provide an opportunity for non-management staff to play a key role in risk communication

Having non-management staff actively involved in the risk communication program^[23] can have potential benefits including:

- improves implementation of the risk management process
 - generates feedback that provides valuable insights into risk communication messages before presenting to the community
 - allows staff to become ambassadors to the community
-

4.3 Timing of Information Releases

Importance of timing and agency perspective

Perhaps no other aspect of risk communication is so closely related to the state and local government credibility as its decision about when to share information with the community. Government agencies sometimes fear that releasing information early may lead to undue alarm or lead to disclosure of incorrect or misinterpreted data. Therefore, they may hold onto information while developing risk management options rather than enlisting concerns and ideas from the community.

Community perspective

Sometimes what agencies view as responsible caution, communities see as a cover-up or as bureaucratic inflexibility. When there is a potential danger to public health or safety, communities find it difficult to accept any justification for withholding information. Community anger over the agency's process may block the possibility for establishing a constructive dialogue regarding the risk itself. As previously noted, waiting to release information until the agency has made its management choices reduces the chance for community participation in the risk management process and thereby lessens the chance of developing a solution that is acceptable to both the agency and the community.

Guidance for the timing of information releases

The following suggestions provide guidance about deciding when to communicate with the community and steps to take if you decide to delay release of information:

- **If people are at risk, do not wait to communicate (and to act on) the available risk information.** If a hazard is putting people at immediate risk, the agency should follow its mandate to protect the health and safety of the public without hesitation.
 - **If the agency is investigating a potential risk that people are not aware of, consider making known what you are doing and why.** When an agency announces findings from an investigation the public did not know had taken place, the agency is forced to defend its delay in announcing the investigation and to justify why people may have been exposed to a risk longer than necessary. As a result of its anger over not being told, the community is more likely to overestimate the risk and far less likely to trust any recommendations that the agency makes concerning the risk itself.
-

4.3 Timing of Information Releases, continued

Guidance for the timing of information releases, continued

- **If it seems likely that the media or someone else may release the information before you are ready, release it yourself.** When information is leaked, agencies lose the ability to shape the issues. Instead they become engaged in playing “catch up” at the expense of their credibility and the accurate portrayal of information.
- **If it is likely that the media will “fill in” the missing facts with information for an on-going story while they are waiting for you to speak, speak first.** When you wait to communicate about an issue that has already made the news, the press will shape the issue without consulting you. This could cause you to spend more time defending your views and your credibility.
- **If you do not yet have a high degree of confidence in the results, talk to the community about your procedures, but don’t release the results.** Do not release poor or confusing information. However, be up-front and tell the community the current status and when they will be able to get some results.
- **If initial investigations do show a problem (and you are fairly confident of the results), release the results, but explain that they are preliminary.** If you are fairly confident that the initial information identifies a problem, then holding onto the results for any length of time is likely to be considered unconscionable. This will leave the agency vulnerable to charges of cover-up later on and risks creating a great deal of anger.
- **Before deciding to wait to communicate (especially if the news is bad), consider the effect on the credibility of the agency representative dealing with the community.** Because credibility can be a scarce commodity and difficult to build, you may want to make it a major variable in deciding when to release information. In particular, take into account the effect of your decision on the staff who deal with the community.
- **Release information while the risk management options are tentative.** If not consulted during the decision-making process, people are likely to resent decisions that affect their lives. Consider, instead, giving people risk management options, not decisions, when you release the data. Then work with them to develop risk management decisions.

4.3 Timing of Information Releases, continued

Guidance for the timing of information releases, continued

- **If you feel the information will not make sense unless it is released with other relevant information that is not currently available, wait to release it all at once.** If piecemeal release of information would seriously disrupt the agency's program or the community's understanding, then consider delay. But take a hard look at whether explanations really need to wait or just need to be handled better. If you wait, be sure you are clear about your reasons for the delay and explain when the information will be available.
 - **If you wait until the results are quality-assured to release them, use the time (and the preliminary results) to develop management options and advise the community on interim actions.** While the agency may choose not to release the results until the evaluation is complete, the preliminary results can still be used to guide discussions about the risk and possible mitigation efforts.
 - **If you are waiting to communicate results or information for some other reason, do not say you are waiting for the “evaluation to undergo quality assurance”.** Use this rationale only when it is the real reason. Agencies lose credibility when they tell half-truths or remain silent and let others fill in the information gaps (often incorrectly). If you need to delay the release of information, it is generally better to be forthright.
 - **Avoid saying “No comment”.** Instead, use the phrases “I’m not sure” or “I don’t know”. Never be afraid to say that you do not have all the answers. But, assure the audience that you will get the information to them as soon as possible.
-

4.4 Trust and Credibility Issues During and After an Incident

General principles The underlying principles for building trust and credibility prior to an incident also apply during and after an emergency event.

Risk communication during an incident To provide important safety information and to minimize the potential for backlash, key actions to consider using during an incident include:

- **Maintain open channels of communication.**
 - **Provide critical information promptly.** During an event, if there is a potential danger to the community, this should be reported along with identifying any emergency response actions that should be taken by the community (boil water, shelter-in-place, evacuation). Once the potential danger has been abated, this should also be promptly communicated.
 - **Ensure the public receives a clear message that the emergency responders are taking appropriate actions to mitigate the event.**
-

Risk communication after an incident Key actions to consider implementing after an incident include:

- **Provide resource(s) for the public to secure additional information through a website email address, a "community hotline" or the administrative offices.**
 - **Take appropriate steps to promptly investigate the cause(s) of the event.**
 - **Ensure the public receives a clear message explaining that incident investigations were performed and appropriate actions were identified for implementation.**
 - **Provide appropriate follow-up information and follow through with any commitments to the community.**
-

5.0 EFFECTIVE VEHICLES FOR RISK COMMUNICATION

The risk communication effort is a continuous, dynamic process that must be nurtured and maintained. Effective and proactive risk communication programs not only provide the community with useful hazard assessment and emergency response information, but also lead to improved safety and risk management programs.

The purpose of this section is to review the effectiveness of several common vehicles for risk communication and to provide some guidance for selection. Section 7.2 contains information regarding suggested communication resources and the level and quantity of technical information to provide to the public.

Chapter contents	5.1 Effective Pre-Incident Risk Communication Vehicles
	Table 5-1: Risk Communication Vehicles
	5.2 Defining Effective Risk Communication Vehicles During and After Incidents

5.1 Effective Pre-Incident Risk Communication Vehicles

Pamphlets/Flyers

Pamphlets and flyers are cost-effective and appropriate for short-term, one-message communication efforts that cover one aspect of the risk communication process. Because they are short, they attract those individuals who are discouraged by lengthy informational materials. The following key points should be considered when developing pamphlets and flyers for risk communication:

- **Focus these short communication tools on meeting specific needs.** By nature, they have limited space. Consider focusing each pamphlet/flyer on one subject. Community information needs will determine which subjects should be addressed.
- **Make pamphlets and flyers self-contained.** They should be designed to pick up, carry away, and read quickly. Although information on who to contact and ways to get additional information should be part of the message, the community should need nothing more than the pamphlet/flyer to understand the risk communication message.
- **Distribute pamphlets and flyers where your audience lives.** A direct mail approach is workable, but do not overlook the power of placing packets in locations where your audience is likely to pick them up and read them. Medical offices, libraries, local businesses, community centers, local chambers of commerce, or even utility offices are places where your audience may be able to see your message.

It is worth noting that the preparation of multilingual materials may be useful, or even necessary.

5.1 Effective Pre-Incident Risk Communication Vehicles, continued

Newsletters

Newsletters are effective for delivering information on long-term projects to a relatively stable audience interested in the project/risk being described. Each issue of a newsletter can consist of a series of articles about a specific risk issue. While the exact content of a newsletter will depend on the audience and the nature of the risk, some general rules apply:

- **Allow time in your schedule for necessary approvals.** Because a newsletter often serves as a reflection of the organization over a long period of time, this form of risk communication often requires a number of approvals before the first issue can be published, and sometimes for subsequent issues.
 - **Develop and maintain mailing lists.** Include as many members of your audience as possible in your distribution. In each issue include a form/coupon for requesting to be added to or removed from the newsletter distribution. Maintain an accurate mailing list by updating names and addresses at least quarterly. If your audience is already hostile, spelling names wrong, sending information to the wrong address, or forgetting some members entirely, certainly will not help. To broaden distribution, consider electronic mailing of the newsletter and maintaining an accurate electronic mailing list.
 - **Avoid the use of acronyms and abbreviations.**
 - **Use compelling headlines and graphics to encourage reading of the newsletter.** Like newspapers, newsletters are seldom read straight through from front to back. The reader will usually pick stories and headlines of interest.
 - **Provide your audience with a consistently high quality newsletter.** One of the advantages of using newsletters is that subsequent issues will be sent to the same audience. Use the same words to describe the same place or situation. For consensus communication efforts involving a decision process, show readers the process each time with the current stage highlighted. Also, watch the content. If an issue mentions the installation of a community alert siren in April, do not forget to follow-up in April with an article on the start-up. Lack of consistency can lead to lack of credibility for the entire effort.
-

5.1 Effective Pre-Incident Risk Communication Vehicles, continued

Internet

The Internet has become an unparalleled resource for disseminating information on a global level. Although there can be negative ramifications in making risk information about a particular emergency widely accessible, it can be a powerful tool, if properly used.

This medium is not only inexpensive to produce with nearly free distribution, but the quality and options for color, graphics, and animation rank its potential as a risk communication tool as highly effective. This medium also allows for the audience to select risk topics of interest and to provide direct feedback to the risk communicator. This communication vehicle is also very friendly to the environment (practically no resources are used or waste produced).

Several significant drawbacks limit application of the Internet as a risk communication medium:

- **Busy individuals may need another mechanism to trigger their attention and to get them to participate in the risk communication process.**
- **The audience is limited to those who have invested money and time to be able to access the Internet.** Although a significant number of people have the tools for accessing the Internet available to them and know how to use it, it is likely that does not represent the entirety of your risk communication audience.
- **A major concern regarding the dissemination of worst-case scenario data on the Internet is the potential for misuse of this information.**

Regarding risk communication issues, there may be merit to having a website that also links to critics to the extent practical. The objective should be for the Internet site to be the best site for finding information on all sides and all concerns related to the risk issue. It is also the best forum for adding the agency's own position or concerns. If the agency website is sufficiently broad, the opposing site becomes redundant.

5.1 Effective Pre-Incident Risk Communication Vehicles, continued

Public forums

Public forums can be very effective mechanisms for communicating risk issues; however, there is questionable value in conducting large-scale public meetings as a way to engage the community in constructive dialogue. Large public meetings may lead to posturing on both sides rather than to problem-solving or meaningful dialogue.

When appropriate, develop alternatives to public hearings, such as smaller, more informal meetings. Instead of waiting until a formal meeting is necessary, consider other options for exchanging information such as drop-in hours at the local library for questions, newsletters, telephone hot lines, e-mail, information booths, advisory committees, etc. Most importantly, attempt to hold informal meetings with interested parties and maintain contact on a routine basis. The more controversial the issue, the wiser it is to meet with the affected groups frequently, separately, and informally.

- **If you cannot avoid a large public meeting, the logistics should be developed so that both the agency and the community are treated fairly.** Structure the meeting so people do not get upset by having to wait a long time to speak.
- **Consider breaking larger groups into smaller ones.** This approach can be helpful for question and answer sessions or discussion groups.
- **Be clear about the goals for the meeting. If you cannot adequately fulfill a citizen request for a meeting, propose alternatives.** Come prepared so that you can attain the goals of the meeting and meet citizen concerns. If you do not know or cannot address those concerns, meet informally to discuss community needs and then develop a meaningful process to address those needs.
- **In certain situations one-on-one communication is more effective.**

Researching and understanding the stakeholder is critical. Often the emergency management professional is faced with a situation where there may be long-standing embitterment and lack of trust by stakeholders. Research will reveal this type of situation and allow for proper preparation before meeting with the stakeholders.

5.1 Effective Pre-Incident Communication Vehicles, continued

This table lists a wide spectrum of risk communication vehicles:

Table 5-1 Risk Communication Vehicles^[13]	
Written or Audio-Visual Materials	
<ul style="list-style-type: none"> • Pamphlets • Letters • Postcards • Newsletters • Periodic updates • Displays • Fact sheets • Flyers • Door-hangers 	<ul style="list-style-type: none"> • Educational materials • Question and answer sheets • Placards in mass transit • Videos • Slide shows • Audio tapes • Articles in organization’s newsletters • Inserts in mass mailings • Polls
Person-to-Person	
<ul style="list-style-type: none"> • Presentations at meetings • Drop-in or availability sessions • Public hearings/meetings • Informal meetings • “Open” work meetings • Workshops • Advisory committees 	<ul style="list-style-type: none"> • Special events • Conferences • Courses • Door-to-door • Brainstorming • Suggestion boxes • Telephone/conference calls
Mass Media	
<ul style="list-style-type: none"> • News conferences • News releases • Letters to the editor • Talk shows • Call-in shows • Internet 	<ul style="list-style-type: none"> • Feature articles • Press briefings • Public service announcements • Advertisements in newspapers • Legal notices

5.2 Defining Effective Risk Communication Vehicles During and After Incidents

Contrast with pre-incident risk communication activities

In general, the risk communication vehicles discussed in Section 5.1 (pamphlets, flyers, newsletters, internet, and public forums) apply here. If an incident occurred that did not impact, or was not noticed by, the public, the same techniques apply. If an incident was noticed by the public or impacted the public, the key differences are:

- **Time is of the essence in providing information to the community.**
- **Several other communication media will be readily available, but not necessarily controllable, like newspapers, radio, television, technical journals.**
- **Community interest will most likely not have to be encouraged.**

Big meetings are likely to be important and unavoidable during and after incidents. Public meetings may be necessary for efficiency in reaching many people at once, for urgency when people need to know what to do in mid-crisis, and for providing additional help in transitioning into the recovery stage.

Community paradigm

A key perspective that must be considered during and after an incident is that the community will gauge the success of the incident investigation efforts and control of causal factors by how much information is communicated.

Timing of information releases

Good timing of the release of information is critical to maintaining credibility and the trust of the community. Section 4.3 discusses “timing of information releases,” and also identifies many reasons why information should be released early. Section 4.4 discusses “trust and credibility issues during and after an incident.”

5.2 Defining Effective Risk Communication Vehicles During and After Incidents, continued

Effective risk communication activities during an incident

During the incident, consider doing the following (to the extent that it does not detract from emergency response efforts):

- **If there is a high degree of uncertainty, focus the risk communication efforts on what is being done to control the emergency.** Keep communication channels open and provide additional facts as they become available. The general posture should be focused more on managing the hazard than communication. Warning people at risk takes precedence over reassuring people who are upset. Key topics of potential interest to the public include
 - Who will be impacted?
 - What are the health and environmental impacts?
 - What exactly is happening?
 - What is the agency doing about it?
 - What should the public do?
 - How prepared was the agency to deal with the emergency?
 - **Contact news media to announce the event and begin to provide them with information.** If you take the first step, and are seen by the news media as a useful and reliable source for helping them get their job done, they will not be inclined to seek less accurate information elsewhere. This task is more challenging if an ongoing relationship with news media was not previously established. An additional impetus for cooperating with the news media is that if they feel you are hiding something, that feeling will be conveyed to the public. Local and regional newspapers, radio, and television are key outlets for disseminating information to the public.
 - **If there is uncertainty with respect to the chronology of the event or cause, release information that is properly identified as preliminary, but states that the agency will provide additional facts as soon as they are available.**
 - **Consider implementing the following key actions:**
 - maintain open channels of communication
 - provide critical information promptly
 - ensure that the public receives a clear message that the emergency responders are taking appropriate actions to mitigate the event
 - **Never go “off-the-record”**
-

5.2 Defining Effective Risk Communication Vehicles During and After Incidents, continued

Effective risk communication activities after an incident

After an incident, consider implementing the following actions:

- Ensure that any preliminary information provided during the course of the incident is verified, clarified, or modified, as necessary, so that future references to the incident will have factual information.
- Follow-up with the media to verify key information and to provide a close-out process for the event.
- Be honest and candid with the public regarding incident events, potential public impacts, and follow-up investigation corrective actions.
- Consider implementing the following key actions:
 - provide a resource for the public to contact to secure additional information
 - provide appropriate follow-up information and follow through with any commitments to the community

After an incident, it has been found that if the agency is defensive about its actions, the stakeholders will be critical. However, if the agency is self-critical, then the stakeholders will be forgiving. Therefore, it may be more helpful to point out what was done wrong, and then let the public note how much the agency did right.

When communicating these “lessons learned”, ensure that broader lessons, in addition to the lessons directly relevant to the particular incident, are brought out. This is a common oversight.

6.0 EFFECTIVE COMMUNICATION STRATEGIES IN PUBLIC FORUMS

A public forum can be an effective, and often necessary, method of communicating “high profile” risk issues. Ensuring that the appropriate risk communication strategies are applied is critical.

Chapter content	6.1 Understanding the Risk Communication Needs of Different Audiences
	6.2 Dealing with Values and Feelings
	6.3 Responding Personally
	6.4 Other Communication Strategies

6.1 Understanding the Risk Communication Needs of Different Audiences

Importance of identifying the needs of the stakeholders

Identify and respond to the needs of different audiences. Although the term “community” is used throughout this guide, in fact there are many communities or stakeholders, each affected differently by an issue. Depending on the issue, the emergency management professional may need to communicate with:

- industry representatives
- civic organizations
- sporting or recreational associations
- local government agencies and elected officials
- local businesses
- property owners
- realtors
- professional organizations
- non-profit organizations

General strategies

Identify key stakeholders who are affected by the situation at the beginning and meet with them informally. This involves a networking process that should include the following steps:

- make a list of the aspects of the issue and types of organizations that might be interested
- contact groups with which you are familiar
- ask those groups for the names of others and then contact them as well
- continue to expand the range of constituencies to ensure that you have consulted all those affected

Recognize the strengths and weaknesses of citizen advisory groups. Citizen advisory groups can be a good resource of public input by:

- involving people in meaningful ways
- representing the affected public

Define the role of the group from the outset. Make it very clear what is expected from the participants and what the process will be for accepting or rejecting their suggestions. Make it understood that their suggestions will be considered, but not always accepted.

Treat all groups equally and fairly. Do not give any group information that you refuse to give another. Don't play one group against another. This type of treatment will invariably create an atmosphere of distrust and cause more problems during an actual event.

6.2 Dealing with Values and Feelings

Contrasting the perspectives of agencies vs. the community

Emergency management professionals, who are chartered to make balanced decisions that involve emergency response and safety and health issues, may become de-sensitized to how people feel about a particular emergency situation. People within communities, on the other hand, focus on how a particular situation may affect their lives.

Technical personnel tend to focus more on data than on feelings. Agencies would like communities to pay more attention to the technical issues. The community would like agencies to listen to their concerns. By listening to the community's values and feelings and taking the first step to neutralize outrage, agencies may help the community become more receptive to technical information.

Ways to address values and feelings

- **Recognize that people's values and feelings are a legitimate aspect of public health and safety issues, and that such concerns may convey valuable information.** Feelings are not “right” or “wrong.” However, they are an important consideration, because they may contain valuable information about:
 - what is important to people
 - technical aspects of the problem, such as emergency response logistics
 - creative approaches to solving the problem
 - **Provide a forum for people to air their feelings.** People will become more frustrated when an agency squelches their attempts to communicate. Provide mechanisms for them to express their feelings, such as telephone hotlines, e-mail, small meetings, and one-on-one communication.
 - **Listen to people when they express their values and feelings.** In order to establish two-way communication, you need to show that you are listening to people's concerns. If people believe that their values and feelings are being ignored, their anger and outrage can keep them from paying attention to anything you have to say.^[22] Section 6.4 summarizes key “active listening” skills.
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6.2 Dealing with Values and Feelings, continued

Ways to address values and feelings, continued

- **Acknowledge people's feelings about an issue.** Try restating what people have said so that they know you have heard them^[22]:
 - “I think you have a right to be concerned ...”
 - “Looking at this issue from your point of view, I think I can understand why you asked about ...”
- **When people are speaking emotionally, respond to their emotions.** Do not merely respond with data. Do not use scientific data in an attempt to refute feelings or concerns. Instead, acknowledge their feelings and respond to their concerns in addition to providing relevant information.
- **Show respect by developing a system that responds promptly to calls from community members.** Put answering calls from the community toward the top of the priority list and develop mechanisms for your program to handle them efficiently.
- **Recognize and be honest about the values incorporated in agency decisions.** Communities sense when there is more going on than science, and the agency loses credibility unless it acknowledges those issues.
- **Acknowledge agency politics and dissension.** This is very difficult to persuade management to do; however, it is very clear that agencies gain far more than they lose when they acknowledge what everyone already knows anyway.

Possible impact of the personal perspectives of the risk communicator

Be aware of your own values and feelings about an issue and the effect they have on you. Emergency management professionals also become vested in positions or feel strongly about issues. Recognize when your own feelings cause you to resist modifications to a project or to react strongly to a community group.

6.2 Dealing with Values and Feelings, continued

Deal proactively with values and feelings

Three good reasons for an agency to deal proactively with values and feelings are:

- Taking community concerns into account improves the agency's ability to safeguard public health and safety. Ignoring such concerns can:
 - lead to stress on the part of the community
 - ultimately undermine the agency's ability to implement risk management decisions
- Communities often provide valuable insight into problems and creative approaches to solutions. Public response to risk is not always related to the technical aspects, but involves values and feelings. In many cases, agency risk management decisions are also based on values, not merely technical factors. In many cases, if you do not involve the public, the subsequent outrage may lead to less logical risk management decisions.
- Although involving the public in decision making can be labor-intensive, it can be far more efficient than the alternative. Some actions suggested in this guide seem like they would take extra time and money to address, which is not always the case. Generally if the public is involved in the decision, they are more likely to be more cooperative and more accepting of the final decision. As a result, it usually takes no more time to listen to people's feelings than it does to argue with them if they oppose the decision.

Effective non-verbal communication

Empathetic words will be effective only if your tone of voice, body language, and demeanor reinforce what you are saying. The following points are adapted from Reference 22:

- **Do maintain eye contact.**
 - **Do maintain an “open,” non-defensive posture.**
 - **Do not retreat behind physical barriers such as podiums or tables.**
 - **Do not frown or show anger or disbelief through facial expression.**
 - **Do not dress in a way that emphasizes the differences between you and your audience.**
-

6.3 Responding Personally

Importance of responding personally

Prepare responses to personal questions about risk. Agencies are typically focused on public health and safety, but individuals are usually most interested in how an emergency issue specifically affects them and their families. Anticipate and prepare honest responses to personal questions, including those asking you what you would do in a similar situation: "Would you live near this hazard?" Personal responses are particularly important when the situation is not clear-cut and people need some context for their own decisions.

General strategies

- **When you speak at a public meeting, tell people who you are, what your background is, and why you are there.** Give people a sense of why you are qualified to discuss a topic and what you can and cannot do for them.
 - **Let people see you are human.** People will treat you as a person if you act like one. If you act like a bureaucrat, you will be treated accordingly. It is often appropriate to express values, feelings, compassion, and concern - "My heart goes out to you. I can't imagine how awful it must have been for you." Risk communicators who work hard not to seem human have no one to blame but themselves when they are treated as if they were not.
 - **When speaking personally, put your views into the context of your own values, and urge your audience to do the same.**
 - **If your personal position does not agree with agency policy, do not misrepresent yourself or mislead the community.** Instead, try modifying the agency position, have the task reassigned, or find a way of acknowledging the lack of consensus within the agency. Misrepresenting the situation or dodging questions about your position will obviously reduce your and the agency's credibility.
-

6.3 Responding Personally, continued

General strategies, continued

- **People are accustomed to assimilating information by the sharing of experiences. “Storytelling” can be a very effective mechanism for risk communication that can have a strong personal content.**

The following points were adopted from Reference 22:

- When possible, use dramatized accounts describing individuals making decisions about risk.
 - Personalize your discussions of risk by describing your own experiences.
 - Use clear, vivid examples that can be easily understood.
 - Sources for stories can include conversations with family or friends, educational or life experiences, and professional experiences.
-

6.4 Other Communication Strategies

Active listening

Active listening - the process of paraphrasing both the intended meaning and the feeling of the sender's message, letting the sender know that both the intended meaning and the feeling of his message have been understood and accepted.^[31]

Active listening may be very important to the successful outcome of any public forum. If you are a good listener, you will notice that others are drawn to you. Listening is a commitment to understanding how other people feel and how they see their world. Active listening says, "I care about what is happening to you. Your life and experience are important."

Effective listening requires a number of simultaneous activities^[30]:

- paraphrasing
- clarifying
- encouraging
- reflecting
- summarizing
- being open/non-judgmental

Emphasizing your conclusions

The most important part of your message is clearly communicating your conclusions. Conclusions should be briefly stated at the beginning of the presentation and also emphasized at the end. The following key points are adopted from Reference 22:

- The concluding statement should address the audience's underlying concern and also represent or reinforce the main message of the presentation.
- Remember that the conclusion's purpose is not to provide every piece of information you have, but to facilitate the audience's understanding.
- Link to the central point for emphasis.
- The conclusion should be concise and focused.
- Be "positive." Avoid negative words.
- Reaffirm the commitment to the community. Note that angry stakeholders may not be receptive to replacing their accusations with euphemisms and your insistence that your agency cares deeply about their welfare.
- Set the conclusion apart through gestures or voice tone.

6.4 OTHER COMMUNICATION STRATEGIES, continued

Often misunderstood behaviors

The following summary of often misunderstood behaviors is adopted from Reference 30:

- appearing “too chummy” with the other side
 - smiling and laughter - it may be nervousness on your part, but it could be interpreted as “uncaring” at best, and belittling at worst
 - glib statements such as:
 - “It might make you puke, but it won’t hurt you.”
 - “There’s a greater chance of a meteor hitting you than you being hurt by our process!”
 - technical vocabulary, even if accurate, may alienate
 - wearing your expertise on your sleeve - there is a difference between confidence and arrogance.
 - being “too sure” that you are right - there is a difference between being “right” and being “effective.”
-

7.0 RESOURCES FOR EFFECTIVE PUBLIC FORUM RISK COMMUNICATION

When directly interacting with the community, having the proper resources available can make the difference between success and failure.

Chapter contents	7.1	Choosing the Right Representatives
	7.2	Developing the Message
		Table 7-1, Risk Management Checklist
	7.3	Effective Communications
	7.4	Other Considerations

7.1 Choosing the Right Representatives, continued

Desired characteristics of representatives, continued

- **Communication** - Although adequate technical support is paramount and technical representatives should receive at least minimal risk communication training, it is unusual to find individuals with strong technical skills who are also exceptional communicators. For most public forums, the presence of a risk communication professional with an understanding of the community's concerns is an asset for better addressing light technical and personal issues. Any participating technical experts must be able to communicate their messages in terms the audience can understand.
- **Authority** - During public forums, the community is often interested in what can and will be done to address the potential emergency concern. This must be addressed authoritatively, and at least one representative should have a clear understanding of what the agency can commit to doing about the issue.

Each public forum risk communication challenge (as well as the capabilities of individual representatives) is unique, and the appropriate selection of one or more representatives to provide adequate coverage of the above elements is critical.

- **If possible, use the same agency representative throughout the life of the issue.** Trust takes time to build. It is also important that the agency representative have a good grasp of the history behind the issues. A change in representative may result in a loss of momentum because you may have to re-establish trust and/or you may have to play "catch-up" until the new representative is familiar with the community's concerns.
 - **In some situations a non-agency representative may be more useful than someone from inside the agency.** Consider using academic experts, local community people, and representatives of civic organizations to present information. This needs to be done with care so that such groups are not perceived as "agency fronts".
-

7.1 Choosing the Right Representatives, continued

Primary and back-up technical resources

Although the above mix of skills is important, ensure that sufficient technical resources (back-up technical data and individuals) are provided to address the community's interests adequately. If all the information is not readily available, it is fair to provide some follow-up information to the community (reliable follow-up is critical - see Section 4.1). However, the agency should be prepared to answer all questions and address all foreseeable issues. At a public forum, it is better to err on the side of having too much information available in the form of additional technical experts or back-up technical data. Having additional information available to answer specific issues brought up by the community shows forethought and that the agency is properly concerned with the health and safety of the community. Having additional technical experts available as resources provides a positive indication that the agency takes the health and safety as well as the issues raised by the community, seriously.

7.2 Developing the Message

General information **Choosing the right representatives to get your message across is very important.** However, if the message is not well developed, then it does not matter who presents it. The following Risk Message Checklist will help you develop an effective presentation.

"If we have not gotten our message across, then we ought to assume that the fault is not with our receivers."

*Baruch Fischhoff
Department of Engineering and Public Policy
Carnegie-Mellon University
1985*

Risk Message Checklist

(National Research Council, 1989)

Information about the nature of risks

1. What are the hazards of concern?
 2. What is the probability of exposure to each hazard?
 3. What is the distribution of exposure?
 4. What is the probability of each type of harm from a given exposure to each hazard?
 5. What are the sensitivities of different populations to each hazard?
 6. How do exposures to this hazard interact with exposures to other hazards?
 7. What are the characteristics of the hazard?
 8. What is the total population at risk?
-

Information about the nature of benefits

1. What are the benefits associated with the hazard?
 2. What is the probability that the projected benefit will actually follow the activity in question?
 3. What are the qualities of the benefits?
 4. Who benefits and in what ways?
 5. How many people benefit and how long do the benefits last?
 6. Which groups get a disproportionate share of the benefits?
 7. What is the total benefit?
-

Information on alternatives

1. What are the alternatives to mitigating the hazard in question?
 2. What is the effectiveness of each alternative?
 3. What are the risks and benefits of alternative actions and of not acting?
 4. What are the costs and benefits of each alternative and how are they distributed?
-

Uncertainties in knowledge about risks

1. What data was used to develop the estimates?
 2. What are the weaknesses of available data?
 3. What are the assumptions on which estimates are based?
 4. How sensitive are the estimates to changes in assumptions?
 5. How sensitive is the decision to changes in the estimate?
 6. What other risk and risk control assessments have been made, and why are they different from those being offered?
-

Information management

1. Who is responsible for making the decision?
 2. Which issues have legal importance?
 3. What constrains the decision?
 4. What resources are available?
-

7.3 Effective Communications

General strategies

So far you have determined who should say what. The next step is to decide *how* that information is presented. **Professional communication media are critical. However, effective communication media for public forums do not necessarily mean expensive, extravagant, or flashy.** If the presentation is too extravagant, it can relay a negative impression that the emergency management professional is trying to sell the community on the issue. The community's level of interest is already reflected by their attendance. They have probably also brought specific questions or a need to be appraised about risk and safety issues. Therefore, communication media do not necessarily have to draw interest or get attention, but they do have to clearly communicate the key issues of interest to the community.

Examples of commonly-used, effective presentations

Following are some of the presentation media that have been identified as effective:

- **LCD Projector** - This communication medium (equipment) provides high quality, professional presentations. The equipment can be quickly setup and can provide excellent presentation quality and versatility with a wide range of software.

Advantages of this medium include:

- significant versatility
- integration of text, graphics, photographs, and animation
- ability to communicate draft presentations to peers quickly
- ability to make changes to the presentation easily and quickly
- handouts can be printed from the frames allowing the audience to use them as a reference after the presentation

This medium reflects a high degree of professionalism and is readily accepted. One caution is to not overwhelm the audience with too many frames.

- **Posters and Flip Charts** - Although not as “high tech” or as versatile as a LCD Projector, these may be better received by an audience that is expecting more of a personal and “low key” presentation. It may be very effective for community meetings, where “high-tech gadgets” might be perceived as further distancing the emergency management professional from the “common person”.
 - **Overhead Transparencies & Slides** - These are effective “middle-ground” communication media that are generally accepted by a very wide range of audiences. These are a relatively low-cost option.
-

7.3 Effective Communications, continued

Examples of commonly-used, effective presentations, continued

- **Television** - This medium can be a high-cost option; however, it is widely accepted by the public, and its combination of video and audio information has been demonstrated to be a very effective mechanism for communicating concepts and ideas.
- **Displays, Models, Objects, Demonstrations** - Many people (especially those who are more comfortable with solid objects than abstract concepts) respond well to this type of communication media. Especially for those who have not had an opportunity to see community alert sirens, fire-fighting equipment, personal protective equipment, etc., the use of physical objects can enhance risk communication.
- **Verbal Presentation** - Direct verbal communication between the risk communicator and the community (even without using other risk communication media) can be very effective. This is especially true for small audiences where there may be merit to keeping the interaction informal.

Match the communication medium with the information needs of the community

There are some wonderful things that can be done with today's information technology. Match the community's information needs with the appropriate medium, but avoid the temptation to over-use high-tech communication media. Also, be aware that what may have been considered high-tech yesterday may be considered "standard" today.

Use of visuals and graphics

The above information should assist you with planning and ensuring that the appropriate resources are available. Specific guidelines for the presentation of the technical message are identified in Section 8.2. The following are some thoughts regarding the pictorial representation of risk^[12] (photos, pictures, illustrations, graphs, charts, tables, etc.).

Benefits of using visuals for assisting in risk communication:

- Well-chosen visuals can help people understand and think about risks.
 - Visuals help people understand and remember content.
 - Carefully chosen pictures can make information transmission more rapid, realistic, and accurate than is possible with purely verbal messages.
 - Visuals help clarify abstract concepts, which often are inherent in risk-related information.
 - Beyond improving comprehension and recall, visuals can help people put facts into context.
-

7.3 Effective Communications, continued

Use of visuals and graphics, continued

When deciding what risk information to portray and present, the following are key factors to consider:

- Analyze the audience's information needs to determine what people want to know.
- Determine what risk information the community needs to know.
- Determine where and how the pictorial information will be used (printed informational materials, posters and displays, presentations, mass media).

The following key universal considerations are appropriate when using pictorials:

- The complexity of the pictorial information must match the amount of time the community has to digest the information (additional detail can be provided in written flyers).
- Graphics should be clearly legible at whatever distance the stakeholder will likely be located.
- The message of the graphic should be quickly apparent. Simple, uncluttered graphics can often be the most effective.
- The information on the graphic should be tailored to the background, knowledge, and interests of the majority of the audience members.

Sensible application of visuals and graphics

Not every kind of risk issue lends itself to pictorial representation. One of the challenges to the risk communicator is deciding when and what type of graphics to use to facilitate communication. Each graphic must be tailored to the needs of the interested individuals or groups.

7.4 Other Considerations

Meeting room configuration

The following points regarding the setup of the meeting room are adopted from Reference 22:

- Set up the room in a way that makes people feel comfortable talking.
- Do not allow for a large space between you and your audience.
- Do not hide behind physical barriers.
- Introduce everyone who is speaking with you.
- Provide refreshments. Arrive early and stay late to allow for some casual mingling with the audience.
- Plan some means of facilitating discussion such as the use of a moderator, question and answer cards, circular seating arrangement, etc.

Starting off on the right foot

Start each meeting with a brainstorming discussion of issues, questions, and concerns, followed by an agenda review. This allows the group to endorse the agenda or modify it, if appropriate. This activity also helps to organize information based on the audience's learning objectives by integrating the agency's teaching objectives into that structure.

8.0 EXPLAINING RISK

Emergency management professionals sometimes believe that if they could only find a way to explain the data more clearly, communities would accept the risks scientists and engineers define as minimal and take seriously those risks they see as serious. However, simply finding ways to explain the numbers more clearly is not the panacea risk management practitioners might hope for. While searching for the magic formula that will help people calm down about the small risks and wake up about the big ones, emergency management professionals may overlook key variables that influence public perception of risk.

Although skills in explaining risk are relevant, the emergency management professional's attitude toward and interaction with the public are key variables in successfully explaining risk.

Chapter contents	8.1 Avoiding Outrage When Explaining Risk
	8.2 Presenting and Explaining Technical Information
	8.3 Dealing with Uncertainty

8.1 Avoiding Outrage When Explaining Risk

Consider community outrage factors when explaining risk

In order to avoid upsetting people you must first understand what upsets them. Although some of the factors that contribute to community anger are not under the control of the emergency management professional, other factors can be influenced, such as how fair a risk is or the extent to which the community can exert control over the risk. If the agency is forthright in its communications and involves the public, public perception of the risk is more likely to be on-target.

Tips on avoiding community outrage

Give as much consideration as possible to community concerns and feelings. Many people make their decisions based on their feelings, their perception of the agency, their sense of justice, etc. Technical data alone will rarely sway them. Also, be aware that the community has a vested interest in emergency risk issues. What may be reduced to graphics and statistics to the risk professional are friends, neighbors, and family to the community audience.

"Health matters raise very strong fears, concerns, and emotions among people. To treat it as a technical analysis and not to recognize the extent to which people feel strongly, not to acknowledge their concerns and fears and attempt to deal with them is a fatal mistake...."
Vincent Covello, Director of Risk Assessment, National Science Foundation^[1]

Be sensitive to related issues that may be more important to many people than the risk itself. Sometimes the actual risk is secondary to people's other concerns, such as property values. Regardless of whether the agency sees these concerns as important or within the scope of the agency's authority, they can critically influence a community's views. Try to identify and address these concerns. If you cannot address them, at least consider acknowledging them and explaining why your agency cannot deal with them.

Community Outrage Factors are further identified in Section 2.2.

8.2 Presenting and Explaining Technical Information

Find out what risk information people want and in what form

Regardless of the agency's sophistication in explaining risk, people's perception of the risk will be influenced by far more than scientific risk data. There may be differences between what information the risk information technical representatives and regulators think communities should have and the information communities actually want. Before presenting risk information, understand community concerns by meeting with the community or developing a checklist of likely concerns based on agency experience with similar situations.

Anticipate and respond to people's concerns about their personal risk

Be prepared to respond on a personal level. Although emergency management professionals are concerned with the overall picture, in a risk communication situation, they are dealing with individuals who are most concerned about the risk to themselves and their families. The agency representative must be prepared to respond to personal concerns such as "Am I in danger living near this dam?".

Take care to give adequate background when explaining risk numbers

Most audiences will not be very knowledgeable about the risk issues and may need some background to put the risk in perspective.

- **If you are explaining numbers derived from a risk assessment, explain the risk assessment process *before* presenting the numbers.** Some practitioners have held workshops to explain the process even before the risk assessment was completed.
 - **Put data in perspective.** Instead of presenting risk numbers as a flat figure, attempt to explain risk numbers in ranges. To provide context for one community's data, you might show how it relates to similar data or compares it to other regulatory action levels.
 - **Express risks in several different ways, making sure not to evade the community's concerns.** People whose minds are not already made up are very influenced by how data is presented. Because no presentation of risk is entirely objective, it may help to present the risk in a variety of ways. Express it both in terms that might make the risk seem larger and in other terms that might make the risk seem smaller. This approach also reduces the tendency of agencies to minimize the risk, which is likely to be viewed with skepticism by those outside the agency.
-

8.2 Presenting and Explaining Technical Information, continued

Take care to give adequate background when explaining risk numbers, continued

- **Explain the agency's protective approach to risk assessment and standard setting.** People are not aware of the extent to which buffers are built into risk assessments to ensure that they err on the side of caution. Because the word "conservative" has other connotations that may be misleading, substitute "protective," "cautious," or "overestimated."
-

Take care when comparing health and safety risks to other risks.

- **Avoid health and safety comparisons that ignore "outrage factors".** The least useful and most inflammatory comparisons agencies can use are those that ignore "outrage factors". Beware of comparisons of everyday activities people do of their own accord (such as smoking) to imposed risks. These comparisons backfire most often when used to reassure people; they can be used a bit more freely when you are trying to alert people to risk.
- **Avoid health and safety comparisons that seem to minimize or trivialize the risk.** It is generally not useful to compare the risk to the chance of being hit by a meteor.
- **Consider developing health and safety comparisons of similar situations or substances.**
 - Use comparisons of the same risk for different time periods.
 - Compare with examples of clearly acceptable risks.
 - Compare with estimates of the same risk coming from different sources.

Be cautious because risk comparisons may result in negative misinterpretations.

Take even greater care presenting technical information than presenting other information

Many of the techniques for presenting technical information are the same as those for presenting other information, but are often overlooked.

- **Know your audience and gear your presentation to its level.** Consider:
 - what the audience already knows
 - what the audience wants to know
 - what you want the audience to know
 - **Prepare thoroughly.** Practice and role-playing can also help.
-

8.2 Presenting and Explaining Technical Information, continued

Take even greater care presenting technical information than presenting other information, continued

- **Present the information most important to convey.** Include:
 - facts your agency wants people to know about a situation
 - additional facts needed so the audience will not get misimpressions
 - identify three main ideas you want to convey and provide details to support them, rather than obscuring them by sheer volume
 - address people's concerns rather than just giving the facts
 - **Be sure to give people sufficient background.** Do not assume that condensing information is the same as making it clearer.
 - **Use down-to-earth language.** Do not use acronyms.
 - **Beware of the tendency to oversimplify and to only give data that support your point.** People know when you are using biased information to support your argument as opposed to presenting all relevant information.
 - **Choose supporting graphics that illustrate your message clearly and simply.**
 - be cautious about using the same graphics for the general public that you used for technical audiences
 - ill-conceived graphics can be worse than none
 - well-executed graphics will not go over well if they do not deal with the audience's concerns
 - **As well as presenting points that support your conclusions, include negative information too.** This is essential to maintaining credibility. If the risk communicator offers a summary and leaves out details that lean in the other direction, critics will discover those details and challenge both the integrity and competence of the agency. You can leave out the details that support your conclusion, but you can't leave out the details that seem to undercut it.
 - **Be aware of body language and other signals your audience gives you that they are lost.** Slow down, back up, or let them ask questions.
 - **Have background material available at meetings.**
 - **Always have question-and-answer periods after presentations.**
 - **Critique your presentation afterward, so you can learn from the things you did right as well as those you did wrong.**
-

8.3 Dealing with Uncertainty

Importance of acknowledging uncertainty

Acknowledge uncertainty. The community is usually aware that uncertainties exist for many health and safety issues. Many uncertainties can be readily explained. Obscuring uncertainties makes you extremely vulnerable to charges of inaccuracy at best, or "cover up" at worst. You are better off leading with an explanation of the uncertainty rather than waiting to be confronted with it.

Presenting issues pertaining to uncertainty - Make it a presentation of uncertainty, not an uncertain presentation

Give people background on the inevitable uncertainty of science. Help people understand uncertainty so that they do not assume something is amiss if the agency says it does not know.

Be specific about what you are doing to find answers. To avoid people thinking that you are hiding something or acting incompetently, explain the process you are using to find the information. Do not be afraid to explain why it is not possible to find all the answers.

If possible, consider involving the community in resolving the uncertainty. It is easier for people to accept uncertainty if they can play a role in its resolution. This approach is likely to be perceived as equitable and may lead to better solutions.

Stress the caution built into setting standards and developing risk assessments. Even though people do not like the idea that the emergency management professional is not sure, they are relieved to know that you are taking a protective approach in response to the uncertainty.

If people are demanding certainty, pay attention to values and other concerns, not just the science. When people demand certainty, the underlying issue is often a question of values and process, not merely science. The demand for absolute certainty can result from frustration because agency representatives failed to involve people, did not listen to their concerns, etc. When confronted by a demand for certainty, back up and listen to the concerns behind the demand. Do what you can to address those concerns.

Acknowledge the policy disagreements that arise from uncertainty. Attempt to explain and clarify the areas of disagreement. When the disagreements are about judgment calls or management options, rather than science, it is usually not helpful merely to argue the science. In addition, agency credibility is likely to suffer from highlighting the limitations of "opposing" scientists. Arguing issues can be productive, but attacking individuals is likely to elicit hostility from those who respect them.

8.3 Dealing with Uncertainty, continued

Discussing certainty may be more useful than uncertainty.

When presenting uncertainty, the emergency management professional must be cautious that suspicious and angry members of the community do not conclude that the risk must be high because the presenter focused heavily on uncertainties. A pointed discussion of **certainty** rather than uncertainty may be more appropriate. It is important to explain what you know, not just what you do not know. Sometimes a discussion highlighting uncertainty, no matter how understandable, may not be able to reassure the audience.

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10.0 GLOSSARY

Active Listening	The process of paraphrasing that lets the sender know that both the intended meaning and the feeling of the sender's message have been understood and accepted.
Community	Condition of living with others; the public; people with similar interests
Hazard	A chance; accident; danger
Outrage	Great anger; indignation; to offend or insult
Risk	The possibility of suffering harm or loss
Risk Assessment	To estimate or evaluate
Risk Communication	A science based approach for communicating effectively in high concern, controversial, or emotionally charged situations.
Risk Management	The act or art of handling, controlling, or directing

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 2 GENERAL RISK PERCEPTION/COMMUNICATION ISSUES

Key Risk Issues Often of Interest to the Community

Have the following general emergency/disaster risk issues been considered when devising the risk communication program?

- Consequences of worst-case/alternative scenarios and the likelihood/probability of the occurrence of an emergency/disaster
 - Natural phenomena hazards
 - Community emergency response actions
 - Community notification systems
 - Perceived risks reported by the media
 - Use of standards and accepted practices
-

Have the following industrial facility-based emergency/disaster risk issues been considered when devising the risk communication program?

- Safety (threshold) limits
 - Use and acceptance within the technical community of the dispersion, release, and other consequence models that may have been used for risk assessment
 - Community confidence in crediting safety/mitigation systems
 - Other potential considerations (financial/business impact and real estate)
-

Factors Contributing to Community Outrage

The following summarizes the key objective in dealing with community outrage:

Pay as much attention to outrage factors, and to the community's concerns, as you do to scientific data. At the same time, do not underestimate the public's ability to understand technical information.

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 2, continued
GENERAL RISK PERCEPTION/COMMUNICATION ISSUES

Have the following potential community outrage factors been considered when devising the risk communication program?

- Voluntary risks are accepted more readily than those that are imposed.
 - Natural risks seem more acceptable than artificial risks.
 - Risks under individual control are accepted more readily than those subject to industry or government control.
 - Risks that seem fair are more acceptable than those that seem unfair.
 - Risk information that comes from trustworthy sources is more readily believed than information from untrustworthy sources.
 - Exotic risks seem more dangerous than familiar risks.
 - Risks that are associated with other memorable events are considered more risky.
 - Risks that are “undetectable” are perceived as more dangerous.
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11.0 QUICK SUMMARY CHECKLIST FOR SECTION 3 POSSIBLE OBJECTIVES OF A RISK COMMUNICATION PROGRAM

Defining clear goals and objectives is one of the most important initial activities because it can provide a platform for the risk communication program to be more effective, better focused, and more likely to achieve the desired benefit.

Defining the Target Audience

Have the following general issues associated with defining the target audience been considered when devising the risk communication program?

- Identifying the stakeholders to anticipate or assess their varying interests, in order to design an effective risk communication program, is a critical initial task.
 - Stakeholders can include:
 - Residential Community
 - Business/Commercial Community
 - Industrial Community
 - Your Agency
 - Other Agencies (local and state government, special districts)
 - The level of stakeholder interest is a driving force in the assignment of risk communication priorities.
-

Pre-Incident Objectives and Information Priorities

Have the following potential pre-incident objectives and information priorities been considered when devising the risk communication program?

- Properly identifying and understanding the objectives of all stakeholders often enhances the effectiveness of risk communication.
- Possible pre-incident objectives of risk communication:
 - inform the community
 - seek input or feedback from the community useful to the agency
 - clarify the probability and consequences of a potential risk to provide an improved risk perspective for the stakeholder
 - address an existing controversy or concern of the stakeholder
 - provide a forum for discussion
 - improve the stakeholder's understanding and ability to support effective emergency response
 - warning vs. reassuring
 - clarify the agency's role in controlling risk
 - coordinate agency emergency response plans with the business/industrial community's emergency response plans
 - satisfy a regulatory requirement for risk communication related to emergency events

Research the issues with the stakeholders to gather sufficient information to identify the most important risk communication objectives to address.

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 3, continued

POSSIBLE OBJECTIVES OF A RISK COMMUNICATION PROGRAM

Objectives and Information Priorities During and After an Incident

Have the following potential post-incident objectives and information priorities been considered when devising the risk communication program?

- Some potentially important objectives and information priorities during and after an incident:
 - retaining credibility and trust (See Section 4.4)
 - clarifying how the incident compares to the previously assessed risk
 - providing clear information regarding incident causes, effects, and lessons-learned (this includes agency responsibilities for having identified, assessed, or responded to the emergency)
 - identifying how these lessons-learned will be used to decrease the likelihood or consequences of the risk in the future
 - providing an updated balance for the stakeholder by validating the assessment of risk, adjusting it as necessary, and re-clarifying the likelihood or consequences

 - The agency should not underestimate the ability of community members to keep risks in perspective even after an incident. The agency should still research the issues with the community and other stakeholders (including potentially small minorities that may be unhappy about how the event was handled) to ensure that the appropriate risk communication objectives are identified and addressed. After an incident, it is easy to address perceived concerns that may not accurately reflect actual stakeholder issues.
-

Potential Enhancements to Community Emergency Response

Have the following potential enhancements to community emergency response been considered for the risk communication program?

- Desirable community emergency response actions (that can be improved with effective risk communication) include:
 - contacting the appropriate municipal emergency responders
 - remaining calm during the emergency
 - proper application of shelter-in-place
 - evacuation
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 4 TRUST AND CREDIBILITY FACTORS

Trust and credibility lay an important foundation for successful risk communication.

Pre-Incident Actions to Build Trust and Credibility

Have the following points been considered when devising the risk communication program?

- Emphasize factors that inspire trust.
 - Pay attention to agency process.
 - Explain organizational procedures.
 - Be forthcoming with information and involve the community from the outset.
 - Focus on building trust as well as generating good technical information.
 - Follow through.
 - Only make promises you are sure you can keep.
 - Provide information that meets people's needs.
 - Get the facts straight and avoid mixed messages.
 - Try to coordinate within your organization and with other responsible groups.
 - Listen to what various community groups are telling you.
 - Work together with organizations that have credibility with communities.
 - Consider working with opponents.
 - Avoid "closed" meetings.
 - The following issues should be considered when maintaining an atmosphere of trust:
 - Alarming communications are inherently more trusted than reassuring communications.
 - Trust is greatly damaged if the agency has to amend its risk estimate or damage estimate in the more-serious-than-we-thought direction, but only modestly damaged when amending it in the less-serious-than-we-thought direction.
 - It helps to acknowledge the fact that mistrust exists (when it is there), its validity, and its sources.
 - Trust relies on transparency, not mere honesty.
 - Trust may be an unachievable goal. Therefore, agencies should aim for accountability instead of trust.
 - Ensure that employees play a key role in risk communication.
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11.0 QUICK SUMMARY CHECKLIST FOR SECTION 4, continued TRUST AND CREDIBILITY FACTORS

Timing of Information Releases

Have the following points been considered when releasing information?

- If people are at risk, do not wait to communicate (and to act on) the available risk information.
 - If the agency is investigating a potential risk that people are not aware of, consider making known what you are doing and why.
 - If it seems likely that the media or someone else may release the information before you are ready, release it yourself.
 - If it is likely that the media will "fill in" the missing facts with information concerning an on-going story while they are waiting for you to speak, so speak first.
 - If you do not yet have a high degree of confidence in the results, talk to the community about your procedures, but don't release the results.
 - If initial investigations do show a problem (and you are fairly confident of the results), release the results, but explain that they are preliminary.
 - Before deciding to wait to communicate (especially if the news is bad), consider the effect on the credibility of the agency representative dealing with the community.
 - Release information while the risk management options are tentative, rather than waiting to develop solutions.
 - If you feel the information will not make sense unless it is released with other relevant information (and you don't have all the information yet), wait to release it all at once (but explain why you are waiting).
 - If you wait until the results are quality-assured to release them, use the time (and the preliminary results) to develop management options and advise the community on interim actions.
 - If you are waiting to communicate results or information for some other reason, do not say you are waiting for the evaluation to undergo quality assurance.
 - If you have decided that you can't communicate right away about the risk, talk to the community about the process you are going through to get the information, etc.
 - Consider the ten key reasons to release information early.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 4, continued TRUST AND CREDIBILITY FACTORS

Trust and Credibility Issues During and After an Incident

Have the following points been considered when communicating risk information during an incident?

- Maintain open channels of communication
 - Provide critical information promptly.
 - Ensure that the public receives a clear message that the emergency responders are taking appropriate actions to mitigate the event.
-

Have the following points been considered when communicating risk information after an incident?

- Provide a resource for the public to call to secure additional information.
 - Take appropriate steps to promptly investigate the cause(s) of the event.
 - Ensure that the public receives a clear message that an investigation of the incident was performed and appropriate actions to prevent a future incident were identified for implementation.
 - Provide appropriate follow-up information and follow through with any commitments to the community.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 5 EFFECTIVE VEHICLES FOR RISK COMMUNICATION

Defining Effective Pre-Incident Risk Communication Activities

Have the following points been considered to communicate key risk issues prior to the occurrence of an incident?

- Pamphlets and flyers are cost-effective and appropriate for short-term, one-message communication efforts that cover one aspect of the risk communication process.**
 - Focus these short communication tools on meeting specific needs.
 - Make pamphlets and flyers self-contained.
 - Distribute pamphlets and flyers where your audience lives.

 - Newsletters are effective for delivering information on long-term projects with a relatively stable audience.**
 - Allow time in your schedule for necessary approvals.
 - Develop and maintain mailing lists.
 - Avoid the use of acronyms and abbreviations.
 - Use compelling headlines and graphics to encourage reading of the newsletter.
 - Provide your audience with a consistently high quality newsletter.

 - The Internet has become an unparalleled resource for disseminating information (e.g., pamphlets, flyers, and newsletters) on a global level.**
 - Several significant drawbacks exist that limit application of the Internet as a risk communication medium:
 - Often busy individuals may need another mechanism to trigger their attention and to get them to participate in the risk communication process.
 - The audience is limited to those who have invested money and/or time to be able to access the Internet.
Note the concern regarding the dissemination of worst-case scenario data on the internet—there is the possibility that it could be misused somewhere else.

 - Public forums can be very effective mechanisms for communicating risk issues. However, there is questionable value in conducting large-scale public meetings as a way to engage the community in constructive dialogue.**
 - When appropriate, develop alternatives to public hearings, such as smaller, more informal meetings.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 5, continued EFFECTIVE VEHICLES FOR RISK COMMUNICATION

Defining Effective Risk Pre-Incident Risk Communication Activities

Have the following points been considered to communicate key risk issues prior to the occurrence of an incident?

- If you cannot avoid a large public meeting, the logistics should be developed so that both the agency and the community are treated fairly.
 - Consider breaking larger groups into smaller ones.
 - Be clear about the goals for the meeting. If you cannot adequately fulfill a citizen request for a meeting, propose alternatives.
 - In certain situations, one-on-one communication is more effective than a group setting.
- Researching and understanding the stakeholder is critical.**
-

Defining Effective Risk Communication Activities During and After Incidents

Have the following been considered to communicate key risk issues during or after incidents?

- If an incident was noticed by the public or impacted the public, the key differences are:**
 - Time is of the essence in providing information to the community.
 - Several communication media will be readily available, but not necessarily controllable, e.g., newspapers, television, radio, technical journals.
 - Community interest will most likely not have to be encouraged.
 - The community will gauge the success of the incident investigation efforts and control of causal factors by how much information is communicated to the community.**
 - During the incident, consider doing the following (to the extent that it does not detract from emergency response efforts):**
 - If there is a high degree of uncertainty, focus the risk communication effort on what is being done to control the emergency. Keep the communication channels open, and provide additional facts as they become available.
 - Contact news media to announce the event (probably not necessary for a major emergency) and begin to provide them with information.
 - If there is uncertainty with respect to the chronology of events or causes of the event, release information prudently and properly identify that the information as preliminary, but that the agency will promptly provide additional facts as soon as they are available.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 5, continued EFFECTIVE VEHICLES FOR RISK COMMUNICATION

Defining Effective Risk Communication Activities During and After Incidents

Have the following been considered to communicate key risk issues during or after incidents?

- Consider implementing the following key actions:
 - Maintain open channels of communication (possibly via the Information Officer).
 - Provide critical information promptly.
 - Ensure that the public receives a clear message that the emergency responders are taking appropriate actions to mitigate the event.
- **Never go “off-the-record.”**
- **After an incident, the following should be considered:**
 - Ensure that any preliminary information provided during the course of the incident is verified, clarified, or modified, as necessary, so that future references to the incident will have actual factual information.
 - Follow-up with local and regional newspapers, radio, or television to verify key information and to provide a close-out mechanism for the event.
 - Be honest and candid with the public regarding incident events, potential public impacts, and follow-up investigation corrective actions.
 - Consider implementing the following key actions outlined in Section 4.4:
 - Provide a resource for the public to contact to secure additional information.
 - Provide appropriate follow-up information and follow through with any commitments to the community.
 - **When communicating “lessons learned”, ensure that broader lessons, in addition to the lessons directly relevant to the particular incident, are brought out.**

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 6 EFFECTIVE COMMUNICATION STRATEGIES IN PUBLIC FORUMS

A public forum can be an effective (and often necessary) mechanism for communicating “high profile” risk issues. Ensuring that the appropriate risk communication strategies are applied is critical.

Understanding the Risk Communication Needs of Different Audiences

Have the following points been considered to identify and respond to the needs of different audiences when communicating in a public forum?

- Try to identify key stakeholders who are affected by the situation at the beginning and meet with them informally.
 - Recognize the strengths and weaknesses of citizen advisory groups.
 - Define the role of the group from the outset.
 - Treat everybody equally and fairly.
-

Dealing with Values and Feelings

Have the following points been considered to recognize that people's values and feelings are a legitimate aspect of public health and safety issues, and that such concerns may convey valuable information when communicating in a public forum?

- Recognize that people's values and feelings are a legitimate aspect of public health and safety issues and that such concerns may convey valuable information.
 - Provide a forum for people to air their feelings.
 - Listen to people when they express their values and feelings.
 - Acknowledge people's feelings about an issue.
 - When people are speaking emotionally, respond to their emotions. Do not merely respond with data.
 - Show respect by developing a system that responds promptly to calls from community members.
 - Recognize and be honest about the values incorporated in agency decisions.
 - Acknowledge agency politics and dissension.
 - Be aware of your own values and feelings about an issue and the effect they have on you.
 - Empathetic words will be effective only if your tone of voice, body language, and demeanor reinforce what you are saying.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 6, continued

EFFECTIVE COMMUNICATION STRATEGIES IN PUBLIC FORUMS

Responding Personally

Have the following points been considered to prepare responses to personal questions about risk when communicating in a public forum?

- When you speak at a public meeting, tell people who you are, what your background is, and why you are there.
 - Let people see you are human.
 - Prepare responses to potential personal questions that you may be asked about the risks before the meeting. This allows you to present a well thought-out answer to commonly asked questions.
 - When speaking personally, put your views into the context of your own values, and urge your audience to do the same.
 - If your personal position does not agree with agency policy, do not misrepresent yourself or mislead the community.
 - If speaking personally makes you uncomfortable, work on it until it gets easier.
 - People are accustomed to assimilating information by the sharing of experiences. “Storytelling” can be a very effective mechanism for risk communication that can have a strong personal content.
-

Other Communication Strategies

Have the following communication strategies been applied when communicating in a public forum?

- Effective listening requires a number of simultaneous activities:**
 - Paraphrasing
 - Clarifying
 - Encouraging
 - Reflecting
 - Summarizing
 - Being Open
 - The most important part of your message is clearly communicating your conclusions.**
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 7 RESOURCES FOR EFFECTIVE PUBLIC FORUM RISK COMMUNICATION

When directly interacting with the community, having the proper resources available can make the difference between success and failure.

Choosing the Right Representatives

Have the following points been considered to choose the right representatives and link them to the appropriate assignments when devising the risk communication program?

- Use field/community relations staff to relay community concerns within the agency.
 - Choose carefully those who represent the agency, and provide appropriate support (e.g., time, training, resources).
 - Technically-qualified people should have a major role in risk communication.
 - For effective communication of emergency risks in a public forum, it is typically important that representatives can effectively address at least the following elements:
 - Technical
 - Communication
 - Authority
 - If possible, use the same agency representative throughout the life of the issue.
 - In some situations a non-agency representative may be more useful than someone from inside the agency.
 - Although the above mix of skills is important, ensure that sufficient technical resources (i.e., back-up technical data and individuals) are provided to address the community's interests adequately.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 7, continued RESOURCES FOR EFFECTIVE PUBLIC FORUM RISK COMMUNICATION

Choosing the right representative to get your message across is very important

Developing the Message

Have you thoroughly covered these topics in your message?

- Information about the nature of risks?
 - Information about the nature of benefits?
 - Information on alternatives?
 - Uncertainties in knowledge about risks?
 - Information management?
-

Effective Communications

Have the following points been considered to ensure that effective communications media are utilized when devising the risk communication program?

- Professional communication media are critical. However, effective communication media for public forums do not necessarily mean expensive, extravagant, or flashy.
 - The following identifies some presentation media that have been effective:
 - LCD Projector
 - Posters and Flip Charts
 - Overhead Transparencies & Slides
 - Television
 - Displays, Models, Objects, Demonstrations
 - Verbal Presentation
 - Match the communication medium with the information needs of the community.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 8 EXPLAINING RISK

Although skills in explaining risks are relevant, the emergency management professional's attitude toward and interaction with the public are key variables in successfully explaining risk.

Avoiding Outrage When Explaining Risk

Have the following potential community outrage issues been considered when explaining risk?

- Be prepared to give people's concerns as much emphasis as the technical data.
 - Be sensitive to related issues that may be more important to many people than the risk itself.
 - Review and consider the Community Outrage Factors identified in Section 2.2.
-

Presenting and Explaining Technical Information

Have the following points associated with the explanation of technical information been considered when explaining risk?

- Find out what risk information people want and in what form.
 - Anticipate and respond to people's concerns about their personal risk.
 - If you are explaining numbers derived from a risk assessment, explain the risk assessment process before presenting the numbers.
 - Put data in perspective.
 - Express risks in several different ways, making sure not to evade the community's risk concerns.
 - Explain the agency's protective approach to risk assessment and standard setting.
 - Avoid health and safety comparisons that ignore "outrage factors".
 - Avoid health and safety comparisons that seem to minimize or trivialize the risk.
 - Consider developing health and safety comparisons of similar situations or substances.
 - Be cautious because risk comparisons may result in negative misinterpretations.
-

11.0 QUICK SUMMARY CHECKLIST FOR SECTION 8, continued EXPLAINING RISK

Presenting and Explaining Technical Information

Have the following points associated with the presentation of technical information been considered when explaining risk?

- Know your audience and gear your presentation to its level.
 - Prepare thoroughly.
 - Present the information that is most important to convey.
 - Be sure to give people sufficient background.
 - Use as down-to-earth language as possible.
 - Beware of the tendency to oversimplify and to only give data that support your point.
 - Choose supporting graphics that illustrate your message clearly and simply.
 - As well as presenting points that support your conclusions, include negative information too.
 - Be aware of body language and other signals your audience gives you that they're lost.
 - Have background material available at meetings.
 - Always have question-and-answer periods after presentations.
 - Critique your presentation afterward, so you can learn from the things you did right as well as those you did wrong.
-

Dealing with Uncertainty

Have the following points associated with the acknowledgement of uncertainty been considered when explaining risk?

- Acknowledge your uncertainty.
 - Give people background on the inevitable uncertainty of science.
 - Be specific about what you are doing to find answers.
 - If possible, consider involving the community in resolving the uncertainty.
 - Stress the caution built into setting standards and developing risk assessments.
 - If people are demanding certainty, pay attention to values and other concerns, not just the science.
 - Acknowledge the policy disagreements that arise from uncertainty.
 - It is important to explain what you know, not just what you do not know.
-

12.0 GUIDELINES FOR MEETING WITH THE MEDIA

1. **Be Prepared**
 - Plan what you want to say
 - Anticipate reporters' questions
2. **Take/Keep Control**
 - You decide where to be interviewed
 - “Bridge” to your points or to turn negative questions into positive responses
 - Don't repeat negatives
 - Know when to exit the interview
3. **Make Your Point**
 - Bring your own agenda to the interview
 - Stress positive aspects of your operation
4. **Keep Your Composure/Watch Body Language**
 - Look and sound like you “want to be there”
 - Be cooperative; not combative
 - Avoid defensive appearance
5. **Don't Speculate**
 - If you do not have an answer, say so.
 - Do not answer hypothetical questions.
 - Do not feel all questions must be answered immediately.
6. **Never Say “No Comment”**
 - Give sound reasons why you cannot answer a question (proprietary information, lack of authority, etc.).
7. **Never Go “Off the Record”**
 - Anything you say may be reported.
 - Do not be tricked into answering a question when a reporter says he has turned off a microphone or camera.