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Risk & Crisis Communication

Risk and crisis communication refers to the orderly and effective transmission of information during periods of high stress to an organization. The ability to craft these messages and either deliver them directly or work with others in an organization tasked with the delivery is rapidly becoming an essential skill of an SH&E professional. This article focuses on many important concepts, including common theoretical foundations and definitions, evaluation of the risk to the organization in a variety of situations, goals for the process, development of a written risk/crisis communication plan and common problems and pitfalls.

The term risk communication was first thought to be attributed to William Ruckelshaus, EPA's first administrator, who marshaled the organization through its first years, establishing a role in protecting the environment and assisting other community organizations in their role (Covello, et al, 1997). In the 1980s, the Superfund program incorporated the concept in its public participation process, and it also appeared in the Emergency Planning and Community Right to Know Provisions of Title III of the Superfund Amendments and Reauthorization Act of 1986. Most of the roots of the theories and process of risk communication come from the environmental arena and working with the public and other stakeholders, but in recent years, the concepts have been successfully used to address any type of hazardous situation or disaster.

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Before getting into the theoretical concepts and applications, it is helpful to provide a foundation based on common definitions of terms used throughout the article.

Risk is the probability of undesired effects (or health outcomes) arising from exposure to a hazard. According to Manuele (2003), it is "the potential for realization of unwanted, negative consequences of an event."

Along the same lines, the National Academy of Sciences says risk communication ". . .is an interactive process of exchange of information and opinion among individuals, groups and institutions; often involves multiple messages abut the nature of risk or expressing concerns, opinions or reactions to risk messages or to legal and institutional arrangement for risk management" (http://www.nasonline.org/site/PageServer).

A difference exists between risk communication and crisis communication. The difference is subtle, but according to CDC, crisis communication ". . . is the attempt by science or public health professionals to provide information that allows an individual, stakeholders or an entire community to make the best possible decisions during a crisis emergency about their well being" (http://www.cdc.gov).

Theoretical Foundations

The ability of a messenger to deliver effective risk and crisis messages comes in large part from understanding how the general public perceives risk so that the messages can be tailored for the circumstances as well as the understanding of the audience. Many models of risk perception have been theorized and provide the SH&E professional with a framework for understanding how risk and crisis messages are perceived.

Covello, Peters, Wojtecki, etal. (2001) at the Center for Risk Communication offer four theoretical models that help practitioners understand how information is processed, how perceptions are formed and how risk decisions are made. By understanding these models and how they apply in various situations, SH&E professionals can better prepare their messages and coordinate their communication in high-risk situations.

The Risk Perception Model theorizes that the public's perception of risk comes from the strength of 15 different factors, each of which has the capacity to alter perceptions in varying degrees of magnitude. They determine the public's level of concern and elevate or decrease worries, anger, fear hostility and outrage. Understanding the strength or weakness of these levels impacts the SH&E professional's ability to alter perception, change behavior and modify attitudes and factors based on the messages delivered. Factors include:

•Volunteerism: Risks that are perceived to be voluntary are more readily accepted.

•Controllability: Risks under the control of the individual are more readily accepted.

•Familiarity: Risks perceived to be familiar are more readily acceptable.

•Certainty: Risks that are known to science are more readily acceptable.

•Personal stake: Risks perceived to have limited direct or personal threat are more readily acceptable.

The Mental Noise Model provides a means for understanding how the public processes information in periods of high stress and anxiety. As the perceived threat to individuals rises, their ability to process information decreases because of the creation of mental noise that effectively blocks their ability to hear the message and be willing or even able to process it. An individual's ability to engage in rational discourse has substantive implications for those SH&E professionals attempting to deliver a message dedicated to changing attitudes and behaviors.

The Negative Dominance Model addresses how the public processes negative and positive information in high-concern situations. The model suggests that the relationship between the two messages is asymmetrical; the negative messages receive substantially more weight than the positive. In other words, the public places more value on their losses than their gains. This knowledge provides implications to the SH&E professional, not only in how the message is delivered but also in terms of the importance of balancing positive messages with negative ones to counteract the intensity given to the negative messages. Covello states, "More specifically, risk communications are most effective when they focus on what is being done, rather than what is not being done."

The Trust Determination Model identifies the importance of establishing trust in all forms of risk and crisis communications. Trust comes first in all messages, regardless of purpose or content and without it, limited success can be achieved. Further, the trust required to fully engage the public in the message is a long-term process and requires thoughtful processes and methods in addition to sound communication skills.

So if trust and credibility are vital, what factors can aid a communicator in determining whether trust can be built and credibility can be achieved? How can communicators use this information to craft risk and crisis communications? The empathy factor is crucial in this respect, and in studies conducted at the Center for Risk Communication, three factors were determined to be key:

1) Perceptions of knowledge and expertise.

2) Perceptions of openness and honesty.

3) Perceptions of concern and care (Covello, Peters & McCallum, 1997).

Therefore, a communicator must be able to craft a message that helps the audience develop or enhance the perception needed to have the message both heard and acted upon.

Sandman (2003) also provides a substantial body of work in the understanding of risk and crisis communications. His Risk = Hazard + Outrage theory is much quoted among risk and crisis communications professionals. In Sandman's theory, hazard is the actual event that the communication covers and can be anywhere along the continuum from negligible to catastrophic. Outrage refers to the emotions and behaviors of the message receivers in light of their perceptions of the level of hazard presented to them. Like hazards, the level of outrage exists on a continuum from high to low.

Combining the concepts of hazard and outrage, Sandman poses a framework of the four kinds of risk communications.

1) High hazard/low outrage. This situation features a serious hazard but an apathetic audience. The good news in these types of situations is that the audience will not often object to the message. The bad news is that even with a skilled communicator and message, moving the audience to a desired action may be more difficult. The task for the risk/crisis communicator is to find the means to convey the message that will predispose the audience toward the communicator's goals.

2) Medium hazard/medium outrage. This situation features an audience that is interested but not so emotional that internalizing the message is difficult. It allows the message sender to discuss the situation rationally and openly and is likely to generate audience questions and rational concerns. This is the easiest communication environment and the task is to provide an open and honest dialogue that explains the situation and allows sufficient opportunity for audience response and questioning. It is likely that the audience will respond to the request for action.

3) Low hazard/high outrage. This is the most difficult scenario for a risk communicator as the audience is often not trusting of any message. The tasks for the communicator in this scenario is to reduce the outrage by sincere listening, acknowledging and even apologizing, if that will move the audience to a more realistic view of the seriousness of the hazard. The advantage is that the messenger has the audience's attention and with skillful messages, movement in a desired direction is possible.

4) High hazard/high outrage. The audience is not angry but fearful and scared; because the hazard is serious, their position may be valid. Without skillful management by the communicator, the outrage can easily slip into terror or depression, which are of limited use in getting the message receiver to take the desired action. The advantage is that the outrage is not typically directed at the communicator, at least until after the crisis has passed.

Crafting Risk & Crisis Messages

These models aid in the development of both risk and crisis communication messages. Central to all of them is an understanding of the audience and its stake in the process or situation at hand. EPA has created a list of "seven cardinal rules," a few of which are listed here. Although these rules were originally designed for environmental communications, they apply to a wide variety of hazard situations.

Accept and Involve the Public as a Legitimate Partner

If the goal is to produce an informed public that will respond in a specific way to a hazard, all communications must begin with this foundation. The public's knowledge base may be minimal at the time the communication process begins, but the level can brought up high enough for the process to become a dialogue rather than a speech.

Be Honest, Frank & Open

Developing and maintaining trust and credibility with the audience is a predominant factor that determines the success of the message in terms of how it is understood

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and whether it prompts the audience to act in certain ways. In addition, when a risk communicator loses that trust because the message is not honest and open, the ability to regain it is substantially hampered and, in some cases, may be permanently lost.

Speak Clearly & With Compassion

The act of speaking clearly is not one that comes naturally to everyone, particularly in high-stress situations in front of an angry or terrorized public. Therefore, the risk communicator must spend time in advance of the communication situation practicing the text of the message and rehearsing the various scenarios that might occur to prepare for how to address them comfortably. While a risk communicator need not possess the skills of a presidential spokesperson or prepare as if as presidential debate were about to happen, s/he must be able to speak with clarity and often off the cuff.

Finally, the act of compassion and the ability to portray it is essential to any situation but becomes more important as the level of outrage increases. In addition, in situations where death and destruction may be imminent or have already occurred, the audience must know that the organization represented by the risk communicator cares about it. The adage about faceless bureaucrats must be proven wrong in these types of situations.

Common Pitfalls in Message Delivery

In addition to EPA's rules, a risk communicator must be aware of common pitfalls before crafting messages. The U.S. Department of Health and Human Services provides guidance in identifying the most common pitfalls in advance (http://www.riskcommunication.samhsa.gov/RiskComm.pdf). Common pitfalls include:

•**Using abstractions.** A risk communicator should not assume a common understanding. Jargon, acronyms and highly technical language should be avoided.

•**Attacking the audience.** Respond to issues, not people and be careful to end debates by responding with clarity and factual information.

•**Blaming anyone.** It is never helpful to assign blame to another party in the process; it confuses the audience and forces them to take sides. Along the same lines, if an organization has some responsibility for the situation, accepting it matter of factually and honestly can help build trust and credibility.

•**Using negative words and phrases.** As has been noted above in the Negative Dominance Model, negative messages override an audiences' ability to respond and move away from high levels of emotionality. It is best to avoid them if at all possible.

•**Forgetting to define the message goals in advance.** Nothing is worse than being unprepared in front of a large group of people who may already be distrustful. It is a surefire path to disaster.

•**Forgetting the role of the public.** This is a partnership. It is crucial to build trust and credibility by engaging in a dialogue.

Measuring the Risk to Your Organization

To be effective, understand the type of risk messages that may need to be crafted. An SH&E professional must evaluate the organization's risk and subsequent need for a risk/crisis communications plan.

Measuring risk is best done in a formal process that quantifies when possible, while recognizing that some aspects of the process are subjective. Many tools can be used to accomplish this. Depending on the organization's needs and potential risk situations, seeking external consultation may be necessary, but in general, a simple risk matrix may be all that is needed. Some common tools are presented here, but the reader is encouraged to peruse additional information to best determine which tools are most applicable.

Risk matrices. At its simplest, a risk matrix uses two variables to establish probabilities of an occurrence and helps define those situations, which require advance action and planning. To complete a risk matrix, an organization must list all of the various risk situations that may occur and determine under which category they belong.

A risk matrix can be further expanded as necessary to flush out the varying levels, but in the end, its value is in helping to identify the critical and high-risk situations, which have needs that should be addressed first.

Preliminary hazard analysis. In this method, scenarios are developed to describe what is analyzed and evaluated. The scenario's details are provided that encompass tasks, operations, systems and products, as applicable. Exposures are analyzed and quantified in terms of people, facility, product, equipment loss, down time or environmental damage.

Once the analysis is completed, a plan is developed to reduce or eliminate the hazard through preparation, processes and systems changes.

What-If analyses. In this method, a group uses brainstorming sessions to identify hazards and develop hazard scenarios, incident development and probable consequences. All questions and concepts are then recorded for further investigation, clarification and quantification.

Upon reconvening, the group then uses the gathered data to develop controls to remove or sufficiently reduce the potential occurrence of the hazard situation.

Failure modes and effects analysis. This method is most often used at the time of design or redesign of equipment or processes. The most commonly used steps of the process include:

1) Identify the item or function to be analyzed.
2) Define the failure modes.
3) Record the failure causes.
4) Determine the failure effects.
5) Enter a severity code and a probability code for each effect.
6) Enter a risk code.
7) Record the actions required to reduce the risk to an acceptable level.

Developing a Risk Communications Plan

As with any planning process, the key point in developing a risk/communications plan is to anticipate risks and crises and to prevent them when possible; in other words, never having to implement the plan is always the best. Beyond that concept, the plan is designed to use risk communications to develop the trust and credibility with the targeted audience in advance of any crisis eruption. Further, the plan dictates the processes that will be followed when crisis communications are required. Most of the information in this section comes from a planning tool developed by the Texas Department of State Health Services (http://www.dshs.state.tx.us/riskcomm/tools.shtm).

As with all organizational planning processes, all levels of management and operations must be involved in the process and must participate on the working group. Sufficient authority must be provided to the planning and implementations processes and include resources, such as money and time. The planning process will ideally be team-focused and may also include external resources and groups.

Once the plan is developed, the implementation team must be selected and trained. Most of the formal training will take place internally, but several members of the team may need external training, such as those who will address the media. Drills are essential and can be minimal, such as tabletops to test the basics of the plan, or extensive, such as full-scale exercises to test the significant details in the plan.

Key elements of the plan include:

•endorsement from top levels of management;
•designated responsibilities for all levels of the organization;
•identification of a spokesperson who is authorized to speak for the organization;
•procedures for information clearance;
•regional and local media contact list;
•procedures for coordinating response teams;
•after-hours contact list and contact information;
•signed mutual aid agreements;
•procedures to secure resources, such as space, equipment and finances; and
•methods of disseminating information to stakeholders.

Conclusion

An SH&E professional uses risk and crisis communications to communicate hazards and risks to the varying stakeholders associated with an organization before and during crises. Understanding how to use these tools requires an identification of the definitions and theoretical frameworks. This understanding helps the SH&E professional determine how to craft the various the types of messages relying on an understanding of the potential audience to determine the goals of the message and the best format in which to provide it.

The plan is designed to use risk communications to develop the trust and credibility with the targeted audience in advance of any crisis eruption.

An SH&E professional must provide more and more technical advice and assistance to an organization and is expected to have comprehensive knowledge of the processes involved in emergency planning. One of these processes involves risk and crisis communications and should be a skill that the SH&E professional has readily available. ✪

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