



Psychology of a Crisis

2019 Update



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

CERC: Psychology of a Crisis

Explanations of figures for accessibility found in the [Appendix: Accessible Explanation of Figures on page 16](#).

This chapter will introduce:

[Four Ways People Process Information During a Crisis](#)

[Mental States in a Crisis](#)

[Behaviors in a Crisis](#)

[Negative Vicarious Rehearsal](#)

[Addressing Psychology in the CERC Rhythm](#)



Crises, emergencies, and disasters happen. Disasters are different from personal and family emergencies, and not just because they are larger in scale. Disasters that take a toll on human life are characterized by change, high levels of uncertainty, and complexity.¹

In a crisis, affected people take in information, process information, and act on information differently than they would during non-crisis times.^{2,3} People or groups may exaggerate their communication responses. They may revert to more basic or instinctive fight-or-flight reasoning.

Effective communication during a crisis is not an attempt at mass mental therapy, nor is it a magic

potion that fixes all problems. Nonetheless, to reduce the psychological impact of a crisis, the public should feel empowered to take actions that will reduce their risk of harm.

This chapter will briefly describe how people process information differently during a crisis, the mental states and behaviors that tend to emerge in crises, how psychological effects are different in each phase of a crisis, and how to communicate to best reach people during these changing states of mind.

Four Ways People Process Information during a Crisis



By understanding how people take in information during a crisis state, we can better plan to communicate with them. During a crisis:

We simplify messages.⁴

Under intense stress and possible information overload, we tend to miss the nuances of health and safety messages by doing the following:

- Not fully hearing information because of our inability to juggle multiple facts during a crisis.
- Not remembering as much of the information as we normally could.

- Misinterpreting confusing action messages.

To cope, many of us may not attempt a logical and reasoned approach to decision making. Instead, we may rely on habits and long-held practices. We might follow bad examples set by others.

Use simple messages.

We hold on to current beliefs.^{5,6}

Crisis communication sometimes requires asking people to do something that seems counterintuitive, such as evacuating even when the weather looks calm.

Changing our beliefs during a crisis or emergency may be difficult. Beliefs are often held very strongly and not easily altered. We tend not to seek evidence that contradicts beliefs we already hold.

We also tend to exploit any conflicting or unclear messages about a subject by interpreting it as consistent with existing beliefs. For example, we might tell ourselves, "I believe that my house is a safe place." Before an impending hurricane, however, experts may recommend that we evacuate from an insecure location and take shelter in a building that is stronger and safer. Although the action

advised is actually for us to evacuate our house to seek a safer shelter, we can easily misinterpret the recommendation to match our current beliefs. We might say, "My home is strong and safe. I've always been secure in my home. When we left last time, the hurricane went north of us anyway. I'll just stay here." Faced with new risks in an emergency, we may have to rely on experts with whom we have little or no experience. Often, reputable experts disagree regarding the level of threat, risks, and appropriate advice. The tendency of experts to offer opposing views leaves many of us with increased uncertainty and fear. We may be more likely to take advice from a trusted source with which we are familiar, even if this source does not have emergency-related expertise and provides inaccurate information.

Messages should come from a credible source.

We look for additional information and opinions.⁷⁸

We remember what we see and tend to believe what we've experienced. During crises, we want messages confirmed before taking action. You may find that you or other individuals are likely to do the following:

- Change television channels to see if the same warning is being repeated elsewhere.
- Try to call friends and family to see if others have heard the same messages.

- Turn to a known and credible local leader for advice.
- Check multiple social media channels to see what our contacts are saying.

In cases where evacuation is recommended, we tend to watch to see if our neighbors are evacuating before we make our decision. This confirmation first—before we take action—is very common in a crisis.

Use consistent messages.

We believe the first message.⁹

During a crisis, the speed of a response can be an important factor in reducing harm. In the absence of information, we may begin to speculate and fill in the blanks. This often results in rumors. The first message to reach us may be the accepted message, even though more accurate information may follow. When new, perhaps more complete information becomes available, we compare it to the first messages we heard.

Because of the ways we process information while under stress, when communicating with someone

facing a crisis or disaster, messages should be **simple, credible, and consistent**. Speed is also very important when communicating in an emergency. An effective message must do the following:

- Be repeated.
- Come from multiple credible sources.
- Be specific to the emergency being experienced.
- Offer a positive course of action that can be executed.

Release accurate messages as soon as possible.





Mental States in a Crisis

During a disaster, people may experience a wide range of emotions. Psychological barriers can interfere with cooperation and response from the public. Crisis communicators should expect certain patterns, as described below, and understand that these patterns affect communication.

There are a number of psychological barriers that could interfere with cooperation and response from the public. A communicator can mitigate many of the following reactions by acknowledging these feelings in words, expressing empathy, and being honest.

Uncertainty

Unfortunately, there are more questions than answers during a crisis, especially in the beginning. At that time, the full magnitude of the crisis, the cause of the disaster, and the actions that people can take to protect themselves may be unclear. This uncertainty will challenge even the greatest communicator.

To reduce their anxiety, people seek out information to determine their options and confirm or disconfirm their beliefs. They may choose a familiar source of information over a less familiar source, regardless of the accuracy of the provided information.⁷ They may discount information that is distressing or overwhelming.

Many communicators and leaders have been taught to sound confident even when they are uncertain. While this may inspire trust, there is a potential for overconfidence, which can backfire. It is important to remember that an over-reassured public isn't the goal. You want people to be concerned, remain vigilant, and take all the right precautions.

Acknowledge uncertainty. Acknowledge and express empathy for your audience's uncertainty and share with them the process you are using to get more information about the evolving situation. This will help people to manage their anxiety. Use statements such as, "I can't tell you today what's

causing people in our town to die so suddenly, but I can tell you what we're doing to find out. Here's the first step..."

Tell them

- What you know.
- What you don't know.
- What process you are using to get answers.

Although we can hope for certain outcomes, we often cannot promise that they will occur. Instead of offering a promise outside of your absolute control, such as "we're going to catch the evil people who did this," promise something you can be sure that response officials will do, such as "we're going to throw everything we have at catching the bad guys, or stopping the spread of disease, or preventing further flood damage."

Former New York City Mayor Rudolph Giuliani cautioned, "Promise only when you're positive. This rule sounds so obvious that I wouldn't mention it unless I saw leaders break it on a regular basis."¹⁰ A danger early in a crisis, especially if you're responsible for fixing the problem, is to promise an outcome outside your control. Never make a promise, no matter how heartfelt, unless it's in your absolute power to deliver.

Fear, Anxiety, and Dread

In a crisis, people in your community may feel fear, anxiety, confusion, and intense dread. As communicators, our job is not to make these feelings go away. Instead, you could acknowledge them in a statement of empathy. You can use a statement like, “we’ve never faced anything like this before in our community and it can be frightening.”

Fear is an important psychological consideration in the response to a threat. Bear in mind the following aspects of fear:

- In some cases, a perceived threat can motivate and help people take desired actions.
- In other cases, fear of the unknown or fear of uncertainty may be the most debilitating of the psychological responses to disasters and prevent people from taking action.



- When people are afraid, and do not have adequate information, they may react in inappropriate ways to avoid the threat.

Communicators can help by portraying an accurate assessment of the level of danger and providing action messages so that affected people do not feel helpless.

Hopelessness and Helplessness

Avoiding hopelessness and helplessness is a vital communication objective during a crisis.

Hopelessness is the feeling that nothing can be done by anyone to make the situation better. People may accept that a threat is real, but that threat may loom so large that they feel the situation is hopeless.

Helplessness is the feeling that people have that they, themselves, have no power to improve their situation or protect themselves. If a person feels helpless to protect him- or herself, he or she may withdraw mentally or physically.

According to psychological research, if community members let their feelings of fear, anxiety, confusion, and dread grow unchecked during a crisis, they will most likely begin to feel hopeless or helpless.¹¹ If this happens, community

members will be less motivated and less able to take actions that could help themselves.

Instead of trying to eliminate a community’s emotional responses to the crisis, help community members manage their negative feelings by setting them on a course of action. Taking an action during a crisis can help to restore a sense of control and overcome feelings of hopelessness and helplessness.¹¹ Helping the public feel empowered and in control of at least some parts of their lives may also reduce fear.

As much as possible, advise people to take actions that are constructive and directly relate to the crisis they’re facing. These actions may be symbolic, such as putting up a flag or preparatory, such as donating blood or creating a family check-in plan.



Denial

Denial refers to the act of refusing to acknowledge either imminent harm or harm that has already occurred. Denial occurs for a variety of reasons:

- People may not have received enough information to recognize the threat.
- They may assume the situation is not as bad as it really is because they have not heard the most recent warnings, didn't understand what they were told, or only heard part of a message.
- They may have received messages about a threat but not received action messages on how people should respond to the threat.
- They may receive and understand the message, but behave as if the danger is not as great as they are being told. For example, people may get tired of evacuating for threats that prove harmless, which can cause people to deny the seriousness of future threats.

When people doubt a threat is real, they may seek further confirmation. With some communities, this confirmation may involve additional factors, such as the following:

- A need to consult community leaders or experts for specific opinions.
- The desire to first know how others are responding.
- The possibility that the warning message of the threat is so far outside the person's experience that he or she simply can't make sense of it—or just chooses to ignore it.

Denial can, at least in part, be prevented or addressed with clear, consistent communication from a trusted source. If your audience receives and understands a consistent message from multiple trusted sources, they will be more likely to believe that message and act on it.

What about Panic?

Contrary to what you may see in the movies, people seldom act completely irrationally during a crisis.¹² During an emergency, people absorb and act on information differently from nonemergency situations. This is due, in part, to the fight-or-flight mechanism.

The natural drive to take some action in response to a threat is sometime described as the fight-or-flight response. Emergencies create threats to our health and safety that can create severe anxiety, stress, and the need to do something. Adrenaline, a primary stress hormone, is activated in threatening situations. This hormone produces several responses, including increased heart rate, narrowed blood vessels, and expanded air passages. In general, these responses enhance people's physical capacity to respond to a threatening situation. One response is to flee the threat. If fleeing is not an option or is exhausted as a strategy, a fight response is activated.¹³ You cannot predict whether someone will choose fight-or-flight in a given situation.

These rational reactions to a crisis, particularly when at the extreme ends of fight-or-flight, are often described erroneously as "panic" by the media. Response officials may be concerned that people will collectively "panic" by disregarding official instructions and creating chaos, particularly in public places. This is also unlikely to occur.



If response officials describe survival behaviors as "panic," they will alienate their audience. Almost no one believes he or she is panicking because people understand the rational thought process behind their actions, even if that rationality is hidden to spectators. Instead, officials should acknowledge people's desire to take protective steps, redirect them to actions they can take, and explain why the unwanted behavior is potentially harmful to them or the community. Officials can appeal to people's sense of community to help them resist unwanted actions focused on individual protection.

In addition, a lack of information or conflicting information from authorities is likely to create heightened anxiety and emotional distress. If you start hedging or hiding the bad news, you increase the risk of a confused, angry, and uncooperative public.

Media Coverage of Crisis and Potential Psychological Effects

As we will see later in this chapter, most of us tend to have stronger psychological and emotional reactions to a crisis if it's manmade or imposed.¹⁴ These types of crises also tend to have increased media exposure. The media will often show repeated negative images, such as the following:

- People who are dying or in distress.
- People who lack food and water.
- Animals that have been abandoned, hurt, or covered in oil.
- Landscapes, such as collapsed buildings, flooded homes, or oil floating on top of water.

Those who are indirectly affected by the crisis through media exposure may personalize the event or see themselves as potential victims. For example, on September 11, 2001, adults watched an average of 8.1 hours of television coverage, and children

watched an average of 3.0 hours.¹⁴ Several studies show that the amount of time spent watching TV coverage and the graphic content of the attacks on September 11 was associated with increased post-traumatic stress disorder (PTSD) and clinical depression symptoms.^{15,16,17} This was even true for those far away from disaster sites. In addition, those who were directly affected by the attacks and watched more television coverage had higher rates of PTSD symptoms and depression than those who did not.

As you are planning your communication strategy, remember that even those people not directly affected by an emergency may have substantial psychological effects. Communication targeted at them will also need to use sound crisis and emergency risk communication principles.

Behaviors in a Crisis

Proper crisis communication can address a variety of potentially harmful behaviors during a crisis. Although it may be difficult to measure the impact, using good communication to persuade people to avoid negative

behaviors during a crisis will save lives, prevent injuries, and lessen the misery people experience. Some of these negative behaviors are listed here, with advice on communication strategies to address them.



Seeking Special Treatment

Some people will attempt to bypass official channels to get special treatment or access to what they want during a crisis. For instance, in Richard Preston's book *Demon in the Freezer*, an account of the eradication

of smallpox, neighbors and friends approached the wife of a prominent government smallpox researcher asking for help to obtain smallpox vaccine in case of a bioterrorist attack with smallpox.¹⁸ The vaccine

was not available for these people through official channels, so they reached out to someone with influence, who they thought could assist them.

This behavior may result from the following:

- A person's sense of privilege.
- A belief that officials cannot guarantee the person's well-being.
- An inflated need to be in control.
- A lack of awareness of available resources.

Whatever the cause, seeking special treatment can be damaging to the harmony and recovery of the community. If there is a perception that favored people get special help, it invites anger among community members and chaos when resources are made available.

Some supplies or treatments may first be given to priority groups who are either especially vulnerable to the disaster, such as children and elderly people, or whose safety is critical to an effective response, such as healthcare workers. The term "priority groups" may confuse some people, who may be unclear about what criteria are used to define priority and may assume they are important enough to be in a priority group. To avoid this,

communicators can discuss those groups who have the greatest need for treatment without referring to them as "priority groups."

Good communication can reduce some of these reactions. The more honest and open government officials are about resources, the better odds officials have of reducing the urge among people in the community to seek special treatment. The following communication strategies can help communicators persuade the public to avoid seeking special treatment:

- Explain what resources are available.
- Explain why some resources are not available.
- Explain that limited supplies are being used for people with the greatest need.
- Explain who the people are with the greatest need.
- Describe reasonable actions that people can take, so that they do not focus on things they cannot have.
- Keep open records of who receives what and when.

Remember, both people directly affected by the crisis and those who anticipate being affected by the crisis need enough information to help them manage anxiety and avoid behaviors that may divide the community.

Negative Vicarious Rehearsal

In an emergency, many communication and response activities are focused on audiences who were directly affected, such as survivors, people who were exposed, and people who had the potential to be exposed. However, these targeted messages will also reach people who do not need to take immediate action. Some of these unaffected observers may mentally rehearse the crisis as if they are experiencing it and practice the courses of action presented to them.

In many cases, this mental rehearsal can help to prepare people for the actions they should take in an emergency. This may reduce anxiety and uncertainty. As a communicator, you may encourage this type of mental rehearsal by asking an audience not yet affected by an emergency to create an emergency plan of action according to your recommendations.

Other times, spectators farther away from the emergency may be much more critical about the value of your recommendations because they have more time to decide their chosen course of action. In some cases, they may reject the proposed course

of action and choose another. If a person rejects an action, it may be harder for that person to take that action in the future. For example, if people hear a story about a search and rescue effort for someone lost in the wilderness they may mentally rehearse how they would act in a similar situation. If they plan out creating an elaborate shelter, starting a fire and finding food, instead of finding a simple shelter and water and waiting for rescue, then those are the actions they might choose to take in the event that they do find themselves lost in the wilderness. This would decrease their survival chances because they would waste their energy and resources on less important actions.

People practicing negative vicarious rehearsal might decide that they are at the same risk as those directly affected by the emergency and need the recommended remedy, such as a visit to an emergency room or a vaccination. These people, sometimes referred to as the "worried well," may heavily tax response resources by requesting medical treatment they do not need. For example, during

the 2011 earthquake, tsunami, and radiation disaster in Japan, people who lived on the west coast of the United States and Canada began to worry about radiation exposure coming across the ocean. Because people very close to the danger in Japan had been advised to take potassium iodide (KI) to mitigate effects of radiation, some people in North America thought they should take KI too. In fact, when unneeded, KI has dangerous side effects and should not be used.

Communicators can help to address the effects of negative vicarious rehearsal by creating simple action steps that can be taken by the people not directly affected by an emergency. Simple actions in an emergency will give people a better sense of control and will help to motivate them to stay tuned to your messages. During the Japan emergency, communicators related to people on the West Coast

what they could do to help people in Japan; what they could do to learn more about actual levels of radiation reaching the United States; and directed them to fact sheets about when KI was and was not necessary. “Let your friends know KI can be dangerous when not needed” became a new action people could take.

When communicators create messages, they are likely to segment their target audience into groups who need to take different types of action. The challenge is to convince people unaffected by the emergency to delay taking the same action recommended to people directly affected unless their circumstances change. Create alternative action messages for those people who are vicariously experiencing the threat, but who should not take the action currently being recommended to those directly affected.

Stigmatization



Stigmatization can affect a product, an animal, a place, and an identifiable group of people. It occurs when the risk is not present in the stigmatized minority group but people associate the risk with that group. Stigmatization is especially common in disease pandemics.

If a population becomes stigmatized, members of this group may experience emotional pain from the stress and anxiety of social avoidance and rejection. Stigmatized people may be denied access to health care, education, housing, and employment. They may even be victims of physical violence.

Crisis communicators must be aware of the possibility that, although unintentional and unwarranted, segments of their community could be shunned because some perceive them as being identified with the problem. This could have both economic and psychological impact on the well-being of members of the community and should

be challenged immediately. This stigmatization can occur without any scientific basis. It can come not only from individuals, but entire nations. During the first avian influenza outbreak in Hong Kong during 1997–98 and during the first West Nile virus outbreak in New York City in 1999, the policies of some other nations banned the movement of people or animals, despite the absence of clear science calling for those measures.

Communication professionals must help to counter potential stigmatization during a disaster. You should be cautious about images you share repeatedly and understand that constant portrayal of a segment of the population in images may contribute to stigmatization. For instance, if the images accompanying a news story about a disaster consistently show members of a particular ethnic group, this may reinforce the idea that the disaster is associated with members of that ethnic group. If stigmatizing statements or behaviors appear, public health officials must offset this with accurate risk information that people can understand, and speak out against the negative behavior.

It is important to remember that even if stigmatization decreases through the beginning of the crisis lifecycle, the stigma may return in the resolution phase. As misery and anger turns to fault-finding and blame, the group of people perceived to be responsible for the disaster could be stigmatized once again. Keep this in mind when creating your communication strategy.

Harmful Actions Brought About by Crisis-Related Psychological Issues

Without communication from a source that is trusted by the audience to lessen the psychological impact, negative emotions may lead to harmful individual or group behaviors. These behaviors may affect the public's safety by slowing the speed, quality, and appropriateness of a crisis response and recovery. Crisis-related psychological issues may lead to further loss of life, health, safety, and property. Harmful actions may include the following:

- Misallocating treatments based on demand rather than medical need.
- Accusations of providing preferential treatment and bias in providing aid.
- Creating and spreading damaging rumors and hoaxes directed at people or products.
- Offering unfounded predictions of greater devastation.

- Encouraging an unfair distrust of response organizations.
- Attempting bribery for scarce or rationed treatments and resources.
- Depending on special relationships to ensure considerations based on desire, not need.

People in a crisis tend to have more unexplained physical symptoms. Stress caused by a crisis situation will give some people physical symptoms, such as headaches, muscle aches, stomach upsets, and low-grade fevers.¹⁹ In emergencies involving disease outbreaks, these symptoms could confound the effort to identify those people who need immediate care versus those who need only limited treatment or limited access to medication.

Positive Responses following a Crisis



Crises do not only create negative emotions and behaviors. Positive responses might include coping, altruism, relief, and elation at surviving the disaster. Feelings of excitement, greater self-worth, strength, and growth may come from the experience. Often a crisis results in changes in the way the future is viewed, including a new understanding of risks and new ways to manage them.

How quickly the crisis is resolved and the degree to which resources are made available will make a difference. Many of these positive feelings associated

with a successful crisis outcome depend on effective management and communication. Positive responses may include the following:

- Relief and elation.
- Sense of strength and empowerment.
- New understanding of risk and risk management.
- New resources and skills for risk management.
- Renewed sense of community.
- Opportunities for growth and renewal.

Risk Perception^{20,21}

Not all risks are perceived equally by an audience. Risk perception can be thought of as a combination of **hazard**, the technical or scientific measure of a risk, and **outrage**, the emotions that the risk evokes. Risk perception is not about numbers alone.

Don't dismiss outrage. The mistake some officials make is to measure the magnitude of the crisis only based on how many people are physically hurt or how much property is destroyed. Remember that we must also measure the catastrophe in another way: the level of emotional trauma associated with it.

As a communicator, expect greater public outrage and more demands for information if what causes the risk is manmade and, especially, if it's intentional and targeted. Unfairly distributed, unfamiliar, catastrophic, and immoral events create long-lasting mental health effects that lead to anger, frustration, helplessness, fear, and a desire for revenge. A wide body of research exists on issues surrounding risk communication, but the following explains how some risks are more accepted than others:



- **Natural origin versus manmade:** Risks generated by nature are better tolerated than risks generated by man or institution. *Example: a natural disaster v. an oil spill.*
- **Reversible versus permanent:** Reversible risk is better tolerated than risk perceived to be irreversible. *Example: having a broken leg v. having an amputated leg.*
- **Endemic versus epidemic:** Illnesses, injuries, and deaths spread over time at a predictable rate are better tolerated than illnesses, injuries, and deaths grouped by time and location. *Example: seasonal influenza v. pertussis (whooping cough) outbreak.*
- **Fairly distributed versus unfairly distributed:** Risks that do not appear to single out a group, population, or individual are better tolerated than risks that are perceived to be targeted. *Example: water pollution that is citywide v. water pollution in a minority neighborhood.*
- **Generated by trusted institution versus mistrusted institution:** Risks generated by a trusted institution are better tolerated than risks that are generated by a mistrusted institution. *Example: air pollution by coal plant that is a longtime area employer v. air pollution by new and unknown company.*
- **Adults versus children:** Risks that affect adults are better tolerated than risks that affect children. *Example: lead paint in an office building v. lead paint in a school.*
- **Understood benefit versus questionable benefit:** Risks with well-understood potential benefit and the reduction of well-understood harm are better tolerated than risks with little or no perceived benefit or reduction of harm. *Example: chemotherapy for cancer is a risk with a well-understood benefit.*
- **Statistical versus anecdotal:** Statistical risks for populations are better tolerated than risks represented by individuals. *Example: an anecdote shared with a person or community, even if it is explained to be a "one in a million" event, can be more damaging than a statistical risk of one in 10,000 presented as a number.*
- **Voluntary versus involuntary:** Voluntary risks are more readily accepted than imposed risks. *Example: elective knee surgery v. emergency appendectomy.*
- **Personally controlled versus controlled by others:** Risks controlled by the individual or community are more readily accepted than risks outside the individual's or community's control. *Example: choosing to house a nuclear reactor in the community v. having a nuclear reactor built in your community against your wishes.*
- **Familiar versus exotic:** Familiar risks are more readily accepted than unfamiliar risks. *Example: seasonal influenza v. a new respiratory illness.*

Addressing Psychology in the CERC Rhythm

The CERC Rhythm

Engage Community • Empower Decision-Making • Evaluate

Preparation

- Draft and test messages
- Develop partnerships
- Create plans
- Determine approval process

Initial

- Express empathy
- Explain risks
- Promote action
- Describe response efforts

Maintenance

- Explain ongoing risks
- Segment audiences
- Provide background information
- Address rumors

Resolution

- Motivate vigilance
- Discuss lessons learned
- Revise plan

The CERC Rhythm graphic shows the four phases of a crisis. [Accessible explanation of figure in Appendix, page 16.](#)

In addition to the principles of risk communication described, such as expressing empathy and being respectful, it's important to consider how the situation changes during each phase of a crisis and how risk

communication can be applied during each phase.

Although these phases were discussed in our [introduction](#), it's helpful to have a more in-depth picture of each category.

Preparation

Important information and assumptions are set during the pre-crisis stage even before a crisis occurs. Develop plans and establish open communication during this phase.

Provide an open and honest flow of information to the public: Generally, more harm is

done by officials trying to avoid panic by withholding information or over-reassuring the public, than is done by the public acting irrationally in a crisis. Pre-crisis planning should assume that you will establish an open and honest flow of information.

Initial

During this stage of acute danger, the priority for all is basic safety and survival. Most people respond appropriately to protect their lives and the lives of others.²² To reduce the threat, they create spontaneous efforts to cooperate with others. However, some may behave in disorganized ways and may not respond as expected. The more stress felt in a crisis, the greater the impact on the individual. Important causes of stress include the following:

- Threat to life and encounters with death.
- Feelings of powerlessness and helplessness.
- Personal loss and dislocation, such as being separated from loved ones or home.

- Feelings of being responsible, such as telling oneself "I should be doing more."
- Feelings of facing an inescapable threat.
- Feelings of facing malevolence from others, such as deliberate efforts that cause harm.

During the initial phase, the following CERC concepts are important. These concepts are explained further in [spokesperson](#).

- Don't over-reassure.
- Acknowledge uncertainty.
- Emphasize that a process is in place to learn more.
- Be consistent in providing messages.

Put the good news in secondary clauses

For example, “it’s too soon to say we’re out of the woods, even though we haven’t seen a new anthrax case in X days.” The main clause indicates that you are taking the situation seriously and that you are responding aggressively. The secondary clause includes the reassuring information without over-reassuring.

Maintenance

During this phase, the crisis magnitude, the concept of personal risk, and the initial steps toward recovery and resolution are in motion. Emotional reactions vary and will depend on perceptions about the risk and the stresses people experienced or anticipated. At first people may appear to be elated, despite surrounding destruction or death, because they are relieved they survived. However, as the maintenance phase evolves, people may experience varied emotional states, including numbness, denial, flashbacks, grief, anger, despair, guilt, and hopelessness.

The longer the maintenance phase lasts, the greater these reactions. Once basic survival needs are met, other needs for emotional balance and self-control emerge. People often become frustrated and

let down if they are unable to return to more normal conditions. Early selfless responses to the emergency may fall away and be replaced by negative emotions and blame.

The following CERC principles apply to the maintenance phase and are further explained in the chapter on spokesperson:

- Acknowledge fears.
- Express wishes.
- Give people things to do.
- Acknowledge shared misery.
- Give anticipatory guidance (foreshadow).

Resolution

When the emergency is no longer on the front page, those who have been most severely affected will continue to have significant emotional needs. Emotional symptoms may present as physical health symptoms such as sleep disturbance, indigestion, or fatigue. They may cause difficulties with interpersonal relationships at home and work. At this point,

organized external support often starts to erode and the realities of loss, bureaucratic controls, and permanent life changes come crashing down.

To maintain trust and credibility during the resolution phase, keep the expressed commitments from the initial phase. Failures or mistakes should be acknowledged and carefully explained.

References

1. Seeger MW, Sellnow TL, Ulmer RR. Communication and organizational crisis. Westport (CT): Praeger; 2003.
2. Covello VT, Peters RG, Wojtecki JG, Hyde RC. Risk communication, the West Nile virus epidemic, and bioterrorism: responding to the communication challenges posed by the intentional or unintentional release of a pathogen in an urban setting. *J Urban Health* 2001;78(2):382–391.
3. Glik DC. Risk communication for public health emergencies. *Annu Rev Public Health* 2007;28: 33–54.
4. Hill D. Why they buy. *Across the Board* 2003;40(6):27–33.
5. Andreasen AR. Marketing social change: changing behavior to promote health, social development, and the environment. San Francisco: Jossey-Bass Publishers;1995.
6. Brehm SS, Kassin S, Fein S. Social psychology. 6th ed. Boston: Houghton Mifflin Co.;2005.
7. Brashers DE. Communication and uncertainty management. *J Commun* 2001;51(3):477–497.
8. Sellnow TL, Ulmer RR, Seeger MW, Littlefield RS. Effective risk communication: A message-centered approach. New York: Springer Science+Business Media, LLC;2009.
9. Solso RL. Cognitive psychology. 6th ed. Boston: Allyn and Bacon;2001.
10. Giuliani, R. Leadership. New York: Miramax; 2005. p. 164–165.
11. Benight CC, Bandura A. Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour research and therapy*, 42(10), 1129–1148;2004.
12. Clarke, L. The problem of panic in disaster response. [online]. 2003. [cited 2019 Feb]. Available from URL: http://www.centerforhealthsecurity.org/our-work/events/2003_public-as-asset/Transcripts/index.html#clarke.
13. Sellnow TL, Seeger MW. Theorizing crisis communication. Malden (MA): Wiley-Blackwell; 2013. p. 7.
14. Novac A. Traumatic stress and human behavior. *Psychiatric Times* [online] 2001 Apr [cited 2019 Feb]; 18(4). Available from URL: <http://www.psychiatrictimes.com/dissociative-identity-disorder/traumatic-stress-and-human-behavior>.
15. Ahern J, Galea S, Resnick H, Kilpatrick D, et al. (2002). Television images and psychological symptoms after the September 11 terrorist attacks. *Psychiatry*, 65(12), 289–300;2002.
16. Schuster MA, Stein BD, Jaycox LH, Collins RL, Marshall GN, Elliott MN, Berry SH. A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New Engl J Med*, 345(20), 1507–1512;2001.
17. Schlenger WE, Caddell JM, Ebert L, Jordan BK, Rourke KM, Wilson D, Kulka RA. Psychological reactions to terrorist attacks: findings from the national study of americans' reactions to September 11. *J Am Med*, 288(5), 581–588;2002.
18. Preston R. The demon in the freezer. New York: Random House; 2003.
19. Stuart JA, Ursano RJ, Fullerton CS, Norwood AE, Murray K. Belief in exposure to terrorist agents: reported exposure to nerve or mustard gas by Gulf War veterans. *Journal of nervous and mental disease*, 191(7), 431–436; 2003.
20. Cohn V. Reporting on risk: getting it right in an age of risk. Washington (DC): The Media Institute; 1990.
21. Covello V. Communicating Radiation Risks. Crisis communications for emergency responders. EPA Document 402-F-07-008 [online]. 2007. [cited 2019 Feb]. Available from URL: <http://tinyurl.com/6lva2sk>
22. U.S. Department of Veterans Affairs. National Center for PTSD. Phases of traumatic stress reactions in a disaster. Impact phase [online]. 2018 Jan. [cited 2019 Feb]. Available from URL: <https://www.ptsd.va.gov/professional/treat/type/index.asp>.

Resources

- American Psychological Association. The effects of trauma do not have to last a lifetime [online]. 2004 Jan 16. [cited 2019 Feb]. Available from URL: <http://www.apa.org/research/action/ptsd.aspx>.
- DeWolfe, DJ. Mental health response to mass violence and terrorism: a field guide. DHHS Pub. SMA 4025. Rockville (MD): Substance Abuse and Mental Health Services Administration [online]. 2005. [cited 2019 Feb]. Available from URL: <https://store.samhsa.gov/product/Mental-Health-Response-to-Mass-Violence-and-Terrorism-A-Field-Guide/SMA05-4025>
- DiGiovanni C Jr. Domestic terrorism with chemical or biological agents: psychiatric aspects. *Am J Psychiatry* 1999 Oct;156(10):1500–5.
- Everly GS Jr, Mitchell JT. America under attack: the “10 commandments” of responding to mass terrorist attacks. *Int J Emerg Ment Health* 2001 Summer;3(3):133–5.
- Krug EG, Kresnow M, Peddicord JP, Dahlberg LL, Powell KE, Crosby AE, et al. Suicide after natural disasters. *N Engl J Med* 1998 Feb 5;338(6), 373–378.
- Reynolds BJ. When the facts are just not enough: credibly communicating about risk is riskier when emotions run high and time is short. *Toxicol Appl Pharmacol* 2011 Jul 15;254(2):206–14.
- Schuster MA, Stein BD, Jaycox LH, Collins RL, Marshall GN, Elliott MN, et al. A national survey of stress reactions after the September 11, 2001 terrorist attacks. *N Engl J Med* 2001;345(20), 1507–1512.
- Sandman, Peter M. The risk communication website. Risk = hazard + outrage [online]. 2004 [cited 2019 Feb]. Available from URL: <http://www.psandman.com/index.htm>.
- Tinker, Tim L, and Elaine Vaughan. Risk and crisis communications: best practices for government agencies and non-profit organizations. McLean, Va: Booz, Allen, Hamilton, 2010. Print.
- U. S. Department of Veterans Affairs. National Center for PTSD. Psychological first aid: field operations guide [online]. 2006. [cited 2019 Feb]. Available from URL: https://www.ptsd.va.gov/professional/treat/type/psych_firstaid_manual.asp.
- U.S. National Library of Medicine. Current bibliographies in medicine 2000–2007. Health risk communication [online]. 2000 Oct. [cited 2019 Feb]. Available from URL: https://www.nlm.nih.gov/archive/20061214/pubs/cbm/health_risk_communication.html

Appendix: Accessible Explanation of Figures

The CERC Rhythm (page 13): Crisis communication needs and activities evolve through four phases in every emergency. The first phase is preparation. During preparation communicators should draft and test messages, develop partnerships, create communication plans, and determine the approval process for sending out information in an emergency. The second phase is the initial phase. During the initial phase of a crisis communicators should express empathy, explain risks, promote action, and describe response efforts. During the third phase, maintenance, communicators need

to explain ongoing risks and will have more time to segment audiences, providing background information, and addressing rumors. The final phase, resolution, requires communicators to motivate the public to stay vigilant and communicators should discuss lessons learned and revise communication plans for future emergencies. Throughout all phases, CERC encourages communicators to engage communities, empower community members to make decisions that impact their health, and evaluate communication efforts.