



Introduction



2018 Update



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

CERC: Introduction

This chapter will introduce:

- [Crisis and Emergency Risk Communications \(CERC\)](#)
- [The Six Principles of CERC](#)
- [Terms Associated with CERC](#)
- [The Phases of a Crisis and the Communication Rhythm](#)
- [The Role of CERC](#)

What is Crisis and Emergency Risk Communications (CERC)?

The Centers for Disease Control's (CDC) **Crisis and Emergency Risk Communication (CERC)** manual provides an evidence-based framework and best practices for anyone who communicates on behalf of an organization responding to a public health emergency.¹ CERC is built around psychological and communication sciences, studies in the field of issues management, and lessons learned from emergency responses.

Emergencies can assault communities in an instant. Hurricanes, chemical releases, bombs,

pandemic illness, and earthquakes are just some of the emergencies that we know could threaten any community at any time. Often, communicating information is the first and only resource available for responders to give affected communities at the onset of an emergency. Through effective communication, we can impact how our community responds to and recovers from these potentially devastating emergencies.

For the purpose of this manual, the term **“emergency”** describes any public health event or incident presenting risk to life, health, and infrastructure including natural, weather-related, and manmade destruction, infectious disease outbreaks, and exposure to harmful biological, radiological, and chemical agents. The term “emergency” encompasses “crises” and “disasters.”

Why is CERC important?

“The right message at the right time from the right person can save lives.”
—Barbara Reynolds, PhD
CDC Senior Crisis and Risk Communication Advisor

When a crisis occurs, even if anticipated, initiating a full response can take time. The situation must be assessed and monitored for emerging or secondary threats, resources must be allocated, and personnel and materials must overcome any logistical or safety barriers to getting into the affected area. But the affected people and those at immediate risk are

ready to act right away and need information on the situation and how to stay safe immediately.

The CERC framework and its principles can help you provide the public with information to make the best decisions and to accept the imperfect nature of choice, under incredibly challenging time constraints. You can help your organization and your community prepare for, respond to, and recover from an emergency by using CERC's six main principles:² be first, be right, be credible, express empathy, promote action, and show respect. We can have a real and measurable effect on the wellbeing of our communities by what we say, when we say it, and how we say it.

The **Six Principles** *of CERC*

Throughout these chapters, six principles of effective emergency and risk communications are emphasized:

1



Be First:

Crises are time-sensitive. Communicating information quickly is crucial. For members of the public, the first source of information often becomes the preferred source.

2



Be Right:

Accuracy establishes credibility. Information can include what is known, what is not known, and what is being done to fill in the gaps.

3



Be Credible:

Honesty and truthfulness should not be compromised during crises.

4



Express Empathy:

Crises create harm, and the suffering should be acknowledged in words. Addressing what people are feeling, and the challenges they face, builds trust and rapport.

5



Promote Action:

Giving people meaningful things to do calms anxiety, helps restore order, and promotes some sense of control.³

6



Show Respect:

Respectful communication is particularly important when people feel vulnerable. Respectful communication promotes cooperation and rapport.

Fully integrating CERC helps ensure that limited resources are managed well and can do the most good at every phase of an emergency response.

Terms Associated with CERC

Crisis Communication

The term “crisis communication” describes the process of providing facts to the public about an unexpected emergency, beyond an organization’s control, that involves the organization and requires an immediate response. The crisis may cause harm to an organization’s reputation or viability.

Confronted with the uncertainty of this type of situation, crisis communicators must find a way to inform and alert the public about an emergency. The content, form, and timing of crisis communication can either help reduce and contain harm or make the situation worse.

Communicator: Member of the organization impacted by the crisis

Time pressure: Urgent and unexpected

Message purpose: Explain and persuade

Issues Management Communication

Issues management communication is similar to crisis communication except the organization has foreknowledge of the impending crisis and the opportunity to choose when they will announce the issue and reveal the organization’s plan to resolve the issue.⁴

Communicator: Member of the organization impacted by the crisis

Time pressure: Anticipated; timing is somewhat controlled by the communicator

Message purpose: Explain and persuade

Risk Communication

Risk communication provides the community with information about the specific type (good or bad) and magnitude (strong or weak) of an outcome from an exposure or behavior. Typically, risk communication is a discussion of a negative outcome and the probability that the outcomes will occur. Risk communication can be employed to help an individual make a choice about a behavior such as smoking, getting vaccinated, or undergoing a medical treatment.

Communicator: Expert who is not directly impacted by outcomes

Time pressure: Anticipated with little or no time pressure

Message purpose: Empower decision-making⁵

Risk Communication: Addressing Hazard and Outrage

In CERC, “hazard” can be explained as the amount of physical, structural, and economic damage caused by an event. “Outrage” is the level of emotion, concern, and even fear, anxiety, and anger brought on by an event or threat. Good risk communication aims to keep outrage in proportion to hazard so people will have the appropriate level of concern to motivate them to act according to the actual danger they face. More information about hazard, outrage, and risk is found in [Psychology of a Crisis](#).

Crisis and Emergency Risk Communication (CERC)

CERC encompasses the urgency of crisis communication, empowers decision-making, and is communicated by an expert that may be a participant.

During an emergency, decisions about risks and behaviors must be made within a narrow timeframe. The decision may be irreversible; the outcome of the decision may be uncertain. The decision may need to be made with imperfect or incomplete information.

Emergency risk communication can be used to help an individual make a decision in response to many questions, including the following:

1. Should I seek medical treatment?
2. Do I need to treat my drinking water?
3. Should I evacuate my home?
4. Should I keep my child home from school?

CERC combines the need to communicate about risks and benefits to your community under urgent time constraints. You can use CERC to provide information to guide individuals or entire communities to make the best possible decisions about their well-being during an emergency.

Communicator: Expert who is impacted by outcomes

Time pressure: Urgent and unexpected

Message purpose: Explain, persuade, and empower decision-making

Communication Type	Crisis Communication	Issues Management Communication	Risk Communication	Crisis and Emergency Risk Communication
Communicator	Member of the organization impacted by the crisis	Member of the organization impacted by the crisis	Expert who is not directly impacted by outcomes	Expert who is impacted by outcomes
Timing	Urgent and unexpected	Anticipated; timing is somewhat controlled by the communicator	Anticipated with little or no time pressure	Urgent and unexpected
Message Purpose	Explain and persuade	Explain and persuade	Empower decision-making	Explain, persuade, and empower decision-making.



The Phases of a Crisis and the Communication Rhythm

Every emergency, disaster, or crisis evolves in phases. Communication efforts and priorities align with these phases, and communicators need to adapt and respond according to each phase. By dividing the crisis into these phases—preparation, initial, maintenance, and recovery—communicators can anticipate the information needs of the media, government organizations, private and public organizations, and the people in an affected area. For each of these phases, specific types of information need to be created.

Although some communication tactics change through the phases of the crisis communication rhythm, communicators need to maintain three objectives throughout all phases: community engagement, encouraging decision-making, and evaluation.

Community engagement: Include members of your community and local leaders (i.e., religious leaders, trade union officials, representatives from community based-organizations, etc.) in planning for

and responding to an emergency. Consider them in decisions, gather feedback, and respond to their needs. Provide two-way communication and engage in active listening. (See more on [Community Engagement](#)).

Empower decision-making: Public health leaders and communicators can guide community members to make their own decisions by providing information about the situation, risks, resources available, and actions they can take. Give options for communities to decide on their own, what is in their best interest. (See more on [Community Engagement](#)).

Evaluation: Evaluating a response does not just occur in a formal after-action review; throughout a response, gather feedback and test audience understanding of your messages. An important component of the maintenance phase is to tailor messages for specific audiences. Evaluating the reach of your messages and assessing who is taking action and where there are information gaps can help save more lives during a response. It's too late after.

Figure 1-1. Crisis and Emergency Risk Communication (CERC) Rhythm

Accessible information for figures is located in [Appendix, page 11](#).

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

Preparation

Develop partnerships and build relationships with organizations and community stakeholders that you expect to work with in a response.

Identify organizations that represent different segments in your community, and connect with them before an emergency. Establish shared concerns for your target populations so you can connect and empathize with their communities. Identify roles and processes for you and your partners to distribute information during an emergency.

Draft and test messages with different populations to make sure that the information is understandable and actionable in a crisis.

Bring draft messages and communication products like infographics, social media messages, and flyers out to community groups or community representatives for feedback on content and delivery. Ensure messages are easily understood and will motivate the intended actions. Test out the accuracy of any materials that are being translated in other languages.

Prepare for the types of disasters you are especially likely to face.

For example, if your organization serves a coastal community, prepare specifically for flooding disasters in addition to all hazards prep.

Create crisis communication plans.

Using all of the components above and the additional information described in [Communication Plans](#), create a crisis communication plan.

Select and train spokespersons.

Refer to [Spokesperson](#) for more information on selecting and preparing spokespeople. Potential speakers should be respected leaders in your organization with knowledge or expertise on the situation. Everything the spokesperson says should be consistent with all other messaging released by your organization. Spokespersons should be well-versed in the CERC principles and trained prior to an event. Repeated practice is the best way to prepare for tough questions in an emergency.

Determine the approval process for releasing information.

When a crisis occurs, accurate and concise information needs to be released right away and repeated to keep people safe. Determine ahead of time who needs to approve of information and the order in which information will be reviewed, then when a crisis occurs, remind everyone who needs to be aware of your organization's statements and everyone who contributes to ensuring its accuracy so they can follow this process quickly.

Engage communities in preparedness planning.

Get to know and be known by the people you will be helping in an emergency. Include representatives or leaders for established organizations in your preparedness planning activities and exercises. Whenever it is relevant, share planning resources with the public and establish ways to exchange feedback. Maintain social media activity at all times so that you will have an active following during an emergency.

Initial

Express empathy.

Express empathy right away. Put yourself in their shoes. Read social media quickly if you need to know what people are thinking. Addressing what people are feeling, and the challenges they face, builds trust and rapport.

Example empathy statements:

"In addition, we recognize that there will be concerns in the U.S. Ebola poses little risk to the U.S. general population. It's important to understand how it spreads."

—Dr. Thomas Frieden,
CDC Director, July 31, 2014

"I know many of you are concerned about this flu season and have seen the heart breaking stories of those who have lost loved ones."

—Dr. Anne Schuchat,
CDC Acting Director, February 2, 2018

Provide simple explanations of risk.

Inform affected communities right away about who is at risk and what the risk is. Keeping in mind that people can only take in so much information at once during an emergency, be simple, concise, and direct.

Promote action.

Give people things they can do to reduce the risk you are describing and actions to stay safe.

Establish your organization's credibility.

Explain what your organization is doing to respond to the emergency and how you continue to provide updates.

Maintenance

Ensure community understands ongoing risks and actions they can take to reduce risk or harm.

It's important that the community remains vigilant on how to care for themselves and others and how to help in recovery efforts. When there are gaps in information, people may start to speculate, so remind the community that your organization is still working for them. Help people understand the risk and keep the level of outrage in proportion to the level of hazard (see [Psychology of a Crisis](#)). Stay on top of updates, and reference trusted others.

Provide more background information.

During the maintenance phase, work to

answer questions like, "Has this happened before? How can we keep this from happening again? How long will it take to recover?" Help your community understand your long-term response and recovery plans.

Segment audiences - explain the different risks that exist for different people.

Some emergencies are more likely to affect certain groups of people than others or may have greater consequences for some people. For instance, elderly people and small children may be more susceptible to the flu and get sicker when they are infected. People living within a disaster zone need different information and action steps than people outside of or close to the disaster zone.

Encourage public support and cooperation with response and recovery efforts.

Another way to engage the community and create a lasting recovery is to include community groups to participate in the response efforts. The CERC principle to promote action goes beyond individual behaviors. During emergencies, encouraging people to check on their neighbors or connect with elderly can save lives. Many people want to help when a disaster strikes; organized and productive community efforts can help prevent people from unintentionally getting in the way of the emergency responders' efforts or putting themselves in danger.

Address misunderstandings, rumors, and unclear facts.

Track social and news media, public comments or statements at meetings to identify rumors and resolve misunderstandings. Alter or add clarification messages to keep information accurate.

Resolution

Motivate people to take action or remain vigilant.

Express empathy for those who may still be suffering or who have suffered an unrecoverable loss. Although the emergency may no longer be featured in the news, your organization should still be consistently reaching out and reminding people of protective actions.

Promote community preparedness for possible future crises.

Build off of the current moment while people are still thinking about emergencies and are engaged in response efforts.

Discuss, document, and share lessons learned from the response.

After action reports or debriefs should document gaps, successes, and lessons from the communication aspects of the response. Try to make reports constructive, and based on facts, not feelings.

Evaluate plans.

Evaluate the performance of the communication plan internally and externally by asking the community and partners, and then use this information to revise communication plans for the next emergency.

Five pitfalls to avoid

1. Mixed messages from multiple experts
2. Information released late
3. Paternalistic attitudes
4. Not countering rumors and myths in real-time
5. Public power struggles and confusion



Conclusion: The Role of CERC

The right message from the right person at the right time can save lives. CERC aims to provide people with the information they need to make lifesaving decisions in critical situations. CERC is designed around the psychological processes of people affected by, responding to, or observing a crisis.

CERC principles are vital to helping people cope and begin to rebuild. The right communication

helps to bring a sense of order and understanding to otherwise chaotic situations.

Good communication enables organizations to fulfill their mission, maintain public trust, manage limited resources, and most of all, prevent and reduce illnesses and injuries. Throughout every step of an effective response, **be first, be right, be credible, express empathy, promote action, and show respect.**

References

1. Veil S, Reynolds B, Sellnow TL, Seeger MW. CERC as a theoretical framework for research and practice. *Health Promotion Practice* (2008) 9, 4, 265-345.
2. Reynolds BJ. Principles to enable leaders to navigate the harsh realities of crisis and risk communication. *J Bus Contin Emer Plan* (2010) Jul;4(3):262-73.
3. Benight CC, Bandura A. Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour research and therapy* (2004) 42(10), 1129-1148.
4. Heath RL, Palenchar MJ (Sep 23, 2008) *Strategic Issues Management: Organizations and Public Policy Challenges*.
5. Tucker WT, Ferson S. Strategies for Risk Communication. *Annals of the New York Academy of Sciences* (2008) 1128: ix-xii. doi:10.1196/annals.1399.000

Table 1-1. Specific Hazards Under CDC Emergency Preparedness and Response

Type of Hazard	Definition	Examples
Bioterrorism	Deliberate release of viruses, bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants.	<ul style="list-style-type: none"> ■ Anthrax ■ Botulism ■ Brucellosis ■ Plague ■ Smallpox ■ Tularemia
Chemical Emergencies	An emergency involving the intentional or unintentional release of a chemical that could harm people’s health.	<ul style="list-style-type: none"> ■ Carbon monoxide ■ Chlorine ■ Mercury ■ Nerve agents ■ Oil Spill ■ Ricin
Infectious Disease Outbreaks	An emergency involving unintentional release of viruses, bacteria, or other microorganisms that causes illness or death in people, animals, or plants.	<ul style="list-style-type: none"> ■ Cholera ■ E. coli infection ■ Pandemic flu ■ MRSA infection ■ Whooping cough ■ Salmonella infection ■ Ebola virus ■ Zika virus
Natural Disasters and Severe Weather	A disaster in which the proximate cause is a natural hazard. Due to their scope and scale, a natural disaster can be a mass causality event. It can be accompanied by severe economic impact. Natural disasters are particularly severe in infrastructure poor regions and nations, and linked (potentially?) to other disasters (e.g. earthquake, tsunami, Fukushima).	<ul style="list-style-type: none"> ■ Earthquakes ■ Floods ■ Hurricanes ■ Landslides/mudslides ■ Tornadoes ■ Wildfires ■ Winter weather
Radiation Emergencies	An emergency involving the release of radiation that could harm people’s health.	<ul style="list-style-type: none"> ■ Nuclear accident ■ Nuclear blast ■ Radiation dispersal device (dirty bomb) ■ Transportation accident
Explosions	Explosion or blast producing numerous casualties with complex, technically challenging injuries—not commonly seen after natural disasters.	<ul style="list-style-type: none"> ■ Industrial explosions ■ Terrorist bombings ■ Military strikes

Table 1-2. National Response Framework Incident Categorization

Type of Incident	Definition	Examples
Biological Incident	Naturally occurring biological diseases (communicable and non-communicable) in humans—as well as those used in a terrorist event.	<ul style="list-style-type: none"> ■ Anthrax ■ Botulism ■ H1N1 flu ■ Ricin ■ Smallpox
Cyber Incident	Any incident of national significance with cyber-related issues.	<ul style="list-style-type: none"> ■ Cyber attacks against Internet ■ Cyber attacks against critical infrastructure information systems ■ Technological emergencies
Food and Agricultural Incident	This is a threat to public health, animal health, food production, aquaculture, livestock production, wildlife, soils, rangelands, and agricultural water supplies.	<ul style="list-style-type: none"> ■ <i>E. coli</i> infection ■ Mad Cow Disease ■ Melamine contamination ■ <i>Salmonella</i> infection
Natural Disaster	<p>A disaster caused by natural events. Due to their scope and scale, a natural disaster can be a mass casualty event.</p> <p>Natural events are almost always accompanied by a severe economic effect. They are particularly harsh in poor regions and nations, where bridges, buildings, and structures do not remain intact.</p>	<ul style="list-style-type: none"> ■ Earthquakes ■ Floods ■ Hurricanes ■ Landslides/ mudslides ■ Severe weather ■ Severe winter weather or ice storms ■ Tornadoes ■ Wildfires
Nuclear or Radiological Incident	Release of radioactive material that poses an actual or perceived hazard to public health, safety, national security, or the environment.	<ul style="list-style-type: none"> ■ Nuclear accident ■ Nuclear blast ■ Radiation Dispersal Device ■ Transportation accident
Oil and Hazardous Materials Incident	A threat to public health, welfare, or the environment caused by an event from oil or other hazardous materials.	<ul style="list-style-type: none"> ■ Chemical spill ■ Ground water contamination ■ Oil spill ■ Waste transportation accident
Terrorism Incident	A threatened or actual terrorist incident within the United States.	<ul style="list-style-type: none"> ■ Biological threats ■ Chemical threats ■ Explosions ■ Nuclear blast ■ Radiological dispersion device

Appendix: Accessible Explanation of Figure

Figure 1-1. Crisis and Emergency Risk Communication (CERC) Rhythm: 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.