❱ **DIRECT FROM CDC** ENVIRONMENTAL HEALTH SERVICES

Risk Communication for Environmental Health Practitioners

Vivi Siegel, MPH
*National Center for Environmental Health,
Centers for Disease Control
and Prevention*

> **Editor's Note:** NEHA strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, we feature this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the *Journal*.
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> In these columns, authors from CDC's Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.
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> Vivi Siegel is the crisis and emergency risk communication lead for CDC's Division of Environmental Health Science and Practice in the National Center for Environmental Health.

Is This Water Safe to Drink? Is This Food Safe to Eat?

Environmental health practitioners have many occasions to speak with the public about concerns regarding clean water, safe food, and a healthy environment. These occasions could happen during an unexpected event or disaster—a chemical spill in the local water supply, a foodborne illness outbreak, or a hurricane with power outages. Or, it could happen in the course of a normal workday, like during a routine inspection.

Our ability to explain a situation and the risk someone is facing clearly, succinctly, and with empathy can make the difference of whether or not they are able to make the best choices for themselves and their family. The Centers for Disease Control and Prevention (CDC) has communications resources and trainings (Figure 1) that can help environ-

mental health practitioners with these sometimes tricky conversations:

- **CDC's Drinking Water Advisory Communication Toolbox** provides tools and templates to help plan for, develop, implement, and evaluate communication activities with the public during drinking water notifications and advisories.
- **CDC's Crisis and Emergency Risk Communication (CERC) Training** gives suggested strategies for reaching people experiencing an emergency and provides the context for why these strategies work.

Understanding How Someone Receives a Message Is Just as Important as the Content of the Message

CDC's risk communications body of knowledge draws in part from communication les-

sons learned in the field of environmental health by the Agency for Toxic Substances and Disease Registry and U.S. Environmental Protection Agency during the 1980s and 1990s. Risk communication experts such as Vince Covello, Frederick W. Allen, Peter Sandman, Baruch Fischhoff (see quote on page 31), and others looked at environmental risks and the way authorities talked with people about them. They found that good communication included

- accepting the public as an equal partner and
- giving people an opportunity to ask questions and share feelings.

Covello and Sandman defined risk as "hazard + outrage" and examined the factors that make risks feel less acceptable and more dangerous to people. They defined hazard as the amount of harm a risk is likely to do and outrage as how upset it is likely to make people. The level of outrage people feel about a risk rises with the following factors, among others:
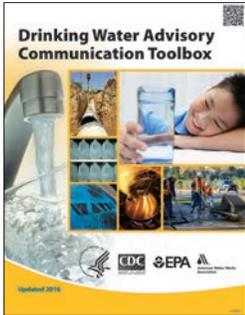
- They are invisible or hard to observe (e.g., germs in food).
- They affect some groups more than others (e.g., children and older adults).
- They are out of our personal control (e.g., a chemical spill).

Consequently, environmental health risks might be seen with more fear and less understanding than other types of health risks: they are invisible, affect some populations disproportionally, and are often out of our control.

With that in mind, there are things we can do to address the anxiety people can feel and help them listen to, understand, accept, and follow health protection messages. CDC's CERC principles (see sidebar) are designed to do that. While all principles are important,

QUICK LINKS

- Centers for Disease Control and Prevention's (CDC) Crisis and Emergency Risk Communication Training: https://emergency.cdc.gov/cerc/training/index.asp

- CDC's Drinking Water Advisory Communication Toolbox: www.cdc.gov/healthywater/emergency/dwa-comm-toolbox/index.html

Centers for Disease Control and Prevention's Crisis and Emergency Risk Communication Principles

- **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.

- **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.

- **Be credible:** Honesty and truthfulness should not be compromised during crises.

- **Show 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.

- **Promote action:** Giving people meaningful things to do calms anxiety, helps restore order, and promotes some sense of control.

- **Show respect:** Respectful communication is particularly important when people feel vulnerable. Respectful communication promotes cooperation and rapport.

there are two that can be particularly critical for environmental health issues:

1. **Show empathy**: For the person who has experienced an unwanted and unexpected environmental exposure, even a small dose is unacceptable and disruptive. Accept and understand that people might be feeling justifiable anger and fear. Acknowledge those feelings in words.

2. **Promote action**: The first question asked by people in an emergency is, "What do I need to do to protect myself and my family?" CDC's educational materials, emergency communications, and social media include action messages wherever possible. Actions you recommend will depend on where someone is geographically in relation to the exposure threat and how much time has passed as actions will change over time. For example, actions for people closest to the exposure (e.g., "Don't drink tap water until further notice.") can be different from actions for people who are out of the geographically affected area (e.g., "Call and check on your friends," or "Learn more by reading our online fact sheet.").

Make a Plan Before the Emergency

Finally, plan and evaluate for good communications (see sidebar). Communications plans can be as in-depth as you need, with precleared messages laid out in advance, or as simple as identifying in advance who will be a spokesperson for a given scenario, knowing how you will quickly clear information, and which channels you will use to reach all

> *"If we have not gotten our message across then we ought to assume that the fault is not with our receivers."*
> — Baruch Fischhoff

of your audiences. Communications plans should be part of any exercise scenario and should be exercised along with other plans.

Communicating with the people affected by an emergency is an important step in any public health emergency response situation and an imperfect plan is better than no plan at all. Furthermore, each opportunity to communicate is an opportunity to learn from our mistakes. It is also an opportunity to connect and build trust in the role of environmental health in an emergency situation. CDC's risk communication resources can help you prepare for your next emergency.

Corresponding Author: Vivi Siegel, Crisis and Emergency Risk Communication Lead, Division of Environmental Health Science and Practice, National Center for Environmental Health, Centers for Disease Control and Prevention, 4770 Buford Highway NE, Atlanta, GA 30341. E-mail: evj0@cdc.gov.

Additional Risk Communication Resources

- Prepare a plan to communicate before, during, and after an emergency: https://emergency.cdc.gov/cerc/resources/templates-tools.asp

- Develop products for diverse audiences with these preparedness key messages: www.cdc.gov/cpr/readiness/hurricane_messages.htm

- Share health and safety information in the event of a natural disaster: www.cdc.gov/disasters

- Use these tools for cross-cultural communication: www.cdc.gov/healthliteracy/culture.html

- Reach at-risk populations in an emergency: https://emergency.cdc.gov/workbook/index.asp