Preparing Your Healthcare Practice for Environmental Emergencies

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Environmental emergencies can occur at any time and any place, and they can have widespread consequences for individuals, businesses, and communities. Natural disasters, severe weather, industrial accidents, chemical and oil spills, and unintentional radiation exposure are all examples of potential environmental emergencies.

History has shown society’s vulnerability to a myriad of disasters — but it also has shown how preparedness efforts can have a significant impact on disaster outcomes. Despite an element of unpredictability that is inherent in many natural and manmade environmental emergencies, planning and preparation are powerful and effective tools for managing these situations.

For healthcare practices, planning and preparation for environmental crises are paramount to safeguarding patients, family members, visitors, providers, staff, and office infrastructure; minimizing adverse effects; preventing losses; and facilitating recovery efforts.

This article will examine important aspects of the preparedness effort, such as performing a risk assessment, developing an emergency response plan, evaluating resources, and training staff. Additionally, this article will provide resources to assist with emergency preparedness evaluation and planning.
Risk Assessment

Natural disasters and other environmental crises can occur with or without warning and may necessitate a rapid emergency response. In the United States, the Federal Emergency Management Agency (FEMA) declared 137 disasters in 2017.¹

A survey about trends in healthcare emergency management, which polled hospital and healthcare system executives, showed that 87 percent of the respondents’ organizations had one or more events in the previous 5 years that necessitated implementing their emergency preparedness plans. The top events cited were winter storms, power outages and other system failures, tornadoes, floods, and hurricanes.²

With the knowledge that environmental emergencies are possible and probable in some cases, a crucial first step in emergency preparedness is identifying and assessing the types of hazards that could affect your healthcare practice.

You should consider a number of factors as part of your risk assessment, including:

- **Geography.** Is your practice in an area prone to earthquakes, tornadoes, hurricanes, flooding, etc.?

- **Local weather patterns.** Is severe weather more likely during a particular season? Do certain environmental circumstances increase the risk of emergencies? (For example, drought may increase the risk of wildfires.)

- **Local history of environmental emergencies.** Have natural or manmade environmental disasters previously affected your area?

- **Proximity to possible hazards.** Is your practice located in a floodplain, near the coast, close to a fault line, near a power plant, close to railroad tracks, near a dam, etc.? Is your practice close to a company that produces, uses, or stores toxic or hazardous materials?
• **Office structure.** Is your practice in a standalone facility or part of a larger, multi-use facility? Is the entire practice on one floor or multiple floors? Does the facility have appropriate places to take shelter? Are critical systems and equipment located in safe and secure areas?³

These questions represent a sample of factors to consider when identifying and assessing potential risks. For more detailed guidance, visit Ready.gov’s [planning resources](#). Once risks have been identified, the next step is prioritizing them based on probability and potential impact. For example, think about:

• **The frequency and duration of the event.** Does the emergency typically occur yearly, every 5 years, etc.? How long does it last?

• **The speed of onset and the potential area affected.** Will the crisis likely occur quickly or develop over time? Will warnings precede it? Will the crisis affect a widespread or localized area?

• **Potential severity and outcomes.** Will the disaster likely result in physical damage, potential losses, technology and utility interruptions, etc.?

• **Safety.** How might the emergency affect the safety of patients, family members, visitors, providers, and staff? Could it cause injuries or deaths?

• **Continuity of care.** How will the crisis potentially affect your ability to provide patient care?

As part of identifying and assessing risks for your healthcare practice, you might want to contact local, state, or federal authorities to obtain emergency preparedness information and resources.

Examples of these authorities include local emergency management agencies, local fire officials and emergency responders, the Small Business Association, the National Weather Service, FEMA, the Centers for Disease Control and Prevention (CDC), and the Red Cross.
Emergency Response Plan

Following a risk assessment, the next step in emergency preparedness is developing or evaluating your practice’s emergency response plan. Having a comprehensive response plan is a critical element of emergency preparation because it provides the basis for prompt and appropriate action. Further, the Occupational Safety and Health Administration (OSHA) requires a written emergency response plan for employers who have 11 or more employees.4

No two healthcare practices are exactly alike; thus, emergency response plans should reflect the specific needs and circumstances of each practice. Also, different types of environmental emergencies will likely require different responses, so your practice’s plan should individually address the most probable emergency scenarios (as identified by your risk assessment).

Additionally, your practice’s plan should cover staff emergency roles and responsibilities, contingency plans, resources, and training. Visit FEMA’s website for a sample emergency response plan template.

Staff Emergency Roles and Responsibilities

Your practice’s response plan for environmental emergencies should specify staff roles and responsibilities by position and include all team members as active participants in emergency response.

As your plan takes shape, consider the various actions and responses that each emergency might trigger, and determine which staff position is best suited to handle the responsibility. For example, who will:

- Serve as the safety coordinator, providing oversight of all emergency functions and making critical decisions about safety protocols and procedures?
• Serve as the emergency response leader, implementing the practice’s response plan and coordinating staff activities?

• Oversee technology and equipment, including moving, maintaining, or shutting down systems as necessary?

• Monitor local disaster warning systems and media and communicate essential information to staff members?

• Communicate with external organizations and resources, such as emergency service providers; local, state, and/or federal authorities; local hospitals; and other healthcare organizations?

• Contact vendors, business associates, utility providers, building management, etc.?

• Maintain keys to the office and provide onsite assistance if necessary (e.g., turning off utilities)?

When developing staff responsibilities, make an effort to include all team members in the planning process. Collaboration and staff insight can reinforce the team approach to disaster management, help team members understand their individual roles, and foster an overall awareness of the practice’s emergency response plan.

**Contingency Plans**

An environmental emergency can have short- or long-term consequences, ranging from minor issues or disturbances to severe outcomes or damage. For example, “roads may be blocked or jammed, telephones may be overloaded or nonfunctional, emergency responders and the public health system may be overwhelmed, electricity may be out, and major facilities may be damaged.”

A significant element of preparedness is considering how your practice will react and respond if an environmental disaster compromises your staff, infrastructure, or technology. Because
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different types of emergencies may result in different outcomes, contingency planning often requires thinking about a range of potential scenarios and critical functions. For example:

- How will you notify providers, staff, and patients if an environmental emergency affects your office?
- How will you implement safeguards if an environmental emergency occurs while providers, staff, and patients are in the office?
- Will you be able to provide continuity of care in the event of utility failures, technological interruptions, or loss of vital services?
- What is the maximum amount of time that you can close your practice or experience system downtime without significant consequences?
- How will you identify and procure necessary resources?
- How will you recover from physical damage or losses?6

Major areas of consideration in contingency planning include communication, utilities, technology, emergency equipment/supplies, sheltering/evacuation, and relocation. MedPro’s checklist titled Environmental Emergency Preparedness for Healthcare Practices includes basic questions in each of these categories and may serve as a helpful tool in developing, evaluating, or updating your practice’s emergency response plan.

Additionally, you can find detailed guidance about how to develop contingency plans for certain types of environmental disasters at Ready.gov’s Be Informed webpage and CDC’s Information on Specific Types of Emergencies webpage.

Although contingency planning requires a commitment of time and effort, well-developed plans can help minimize the impact of an environmental crisis; establish appropriate safeguards for providers, staff, and patients; and facilitate recovery efforts.
**Emergency Resources**

In addition to assigning staff roles and responsibilities and developing contingency plans, another crucial component of emergency planning is identifying important contacts, vendors, and suppliers whose assistance might be required during or in the aftermath of an emergency. Examples include:

- Local emergency contacts, such as the local hospital, emergency management agency, fire department, emergency medical services, public health department, and the police department
- State and federal authorities, such as the Environmental Protection Agency, the CDC, FEMA, and the Department of Homeland Security
- Insurance carriers
- Building and construction contractors or the building landlord
- Utility companies and utility repair workers, such as electricians and plumbers
- Health information technology vendors
- Medical equipment and supply contractors

Maintain an up-to-date list of contact information for these resources, and post it in a location in your practice that is accessible and conspicuous (as well as in an offsite location). The list should include the type of service, the main point-of-contact and a secondary contact, the standard business phone number, and an emergency phone number.

Remember that in the aftermath of an environmental emergency, some resources might be diverted or overwhelmed due to high demand. To address this issue, healthcare practices should consider vendor/supplier location, emergency response clauses in vendor contracts, and possible alternate or backup resources.

**Training**

Training for environmental emergencies, as with any type of emergency, can have a significant impact on response delivery and potential outcomes. Without training, providers
and staff members might be unprepared to recognize potential hazards, manage emerging situations, and mitigate potential risks.

Training for environmental emergencies should address major components of the practice’s disaster response plan, such as staff roles and responsibilities, contingency plans, and recovery efforts. You might want to employ a variety of training techniques — such as tabletop exercises, mock drills or simulations, review of actual disaster response efforts, and equipment training — to help providers and staff develop proficiency with emergency processes. For some types of training, it might be beneficial to involve local emergency responders or authorities.9

OSHA notes that training should occur during new hire orientation, and retraining should occur at least annually. Further, providers and staff should receive follow-up training when your plan changes due to “a change in the layout or design of the facility, new equipment, hazardous materials, or processes are introduced that affect evacuation routes, or new types of hazards are introduced that require special actions.”10

**Take-Away Message**

Preparing for environmental emergencies might not seem like a priority until an emergency actually occurs; however, an “out-of-sight, out-of-mind” approach could have serious implications for human safety, critical systems and infrastructure, recovery, and long-term business viability.

A prudent approach to environmental emergency preparedness involves identifying risks, developing a framework for emergency response and action, and educating and training providers and staff. Although you can’t predict with absolute certainty how an environmental emergency might affect your healthcare practice, awareness, knowledge, and vigilance provide the first line of defense.
### Emergency Preparedness Online Resources

- Association for Professionals in Infection Control and Epidemiology: Infection Prevention for Ambulatory Care Centers During Disasters
- Centers for Disease Control and Prevention: Emergency Preparedness and Response
- ECRI Institute: Disaster Preparedness and Recovery Resource Center
- Federal Emergency Management Agency
- Institute of Medicine: Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response
- Occupational Safety & Health Administration: Emergency Preparedness and Response
- Ready.gov
- U.S. Department of Health and Human Services: Primary Protection: Enhancing Health Care Resilience for a Changing Climate
- U.S. Department of Health and Human Services: Public Health Emergency

### Endnotes


4 Occupational Safety and Health Administration, Occupational Safety and Health Standards, 29 C.F.R. § 1910.38.


8 Insurance Institute for Business and Home Safety, *Stay open for business toolkit*.


10 Ibid.