



Planning for Water Supply Interruptions: A Guide for Hospitals & Healthcare Facilities

It's 6:00 a.m. You look out your office window and notice water is gushing from the street adjacent to your hospital. Emergency responders are on the scene. Meanwhile, your emergency department is currently operating at capacity, and you just learned the water pressure in the facility has started to decrease. What do you do?

In December 2008, a 66-inch water main along River Road in Bethesda, Maryland ruptured causing water outages at several schools and area hospitals who all shared the same water main. Water pressure dropped at the National Naval Medical Center, which forced emergency planners to quickly identify how operations would be fully restored at this critical institution providing healthcare services to key American leaders and military service men and women. This real-life scenario demonstrated how an interruption of water supply during natural disasters or other emergencies can severely compromise the operation of a healthcare facility. Water is necessary not only for drinking and sanitation, but also heating and cooling, patient care, and emergency response efforts.

This information sheet highlights some of the impacts of a water interruption and poses questions to ask to help you prepare for an interruption. Additionally, it provides some information on existing resources that can help you develop and implement your preparedness strategy, including information related to the Joint Commission Emergency Management Standards for hospitals to have a plan to respond to a 96-hour denial of service for all utilities, including water and wastewater services.

Water Supply Systems Can and Do Fail: What does that mean for you?

- Loss of HVAC systems that rely on water for heating, cooling, and ventilation.
- Loss of access to water for use in disinfection, sterilization, and water-based patient treatments.
- Loss of fire suppression capabilities (e.g. no water for sprinkler systems and hydrants).
- Loss of drinking water and sanitation services.
- Potential loss of access to other hospitals and healthcare facilities on the same affected water system.
- Inability to provide an effective hazmatdecontamination response.
- Potential lack of water for field medical triage centers during an emergency response.

How Prepared Are You: Questions to Ask Yourself & Team

- Do you know the name of your water utility contact?
- Do you have partnerships in place with other local healthcare facilities in case of a water outage?
- Do you know what partner hospitals may be on the same water system as you?
- Have you determined your water usage under normal operating conditions?
- Have you identified your essential functions and minimum water needs?
- Do you have emergency water conservation measures in place that can be quickly implemented?
- Do you have access to well water from your site?
- Have you identified emergency water supply options?
- Have you developed an emergency water restriction plan?
- Have you exercised your water outage emergency plan?
- If your water supply is disrupted, do you know how long you can shelter in place before you need to evacuate?

Helpful Tools and Resources

Emergency Water Supply Planning Guide for Hospitals and Health Care Facilities

Provides information on how to prepare for, respond to, and recover from a water supply interruption; developed jointly by the Centers for Disease Control and Prevention (CDC) and American Water Works Association (AWWA) More information: http://www.cdc.gov/healthywater/emergency/drinking water advisory/index.html

Planning for an Emergency Drinking Water Supply

Reviews the roles and responsibilities among various levels of government and essential planning steps; developed jointly by EPA and AWWA

<u>More information</u>: <u>http://www.awwa.org/portals/0/files/resources/water knowledge/rc emergency prep/emergencywater.pdf</u>

The Joint Commission Emergency Management Standards (Standard EM.02.02.09)

Provides detailed standards, rationale, and performance elements hospitals must follow to maintain accreditation More information: http://www.jointcommission.org/

Hospital & Water Sector Interdependency Summit-Keeping Patients Safe

Addresses drinking water and waste water safety, security, and preparedness; collaborative project between the Metropolitan Chicago Healthcare Council & U.S. Environmental Protection Agency (EPA) Region 5 More information:

http://water.epa.gov/infrastructure/watersecurity/upload/hospitalandwaterinterdependencysummit.pdf

Evanston Water Emergency Roundtable Summary Report

Demonstrates the importance of increased awareness of resilient water systems as a result of a water emergency in Evanston, Illinois

More information:

http://water.epa.gov/infrastructure/watersecurity/upload/evanstonwateremergencyroundtablesep2009.pdf

If you do not know who to contact, then how effective is your emergency plan? Establish relationships with these key individuals:

<u>water</u>	Utility:	
Name		
Phone		

State Emergency Operations Center: Name Phone

State 1	Health Department:
Name	
Phone	

Local	Health Department:
Name	
Phone	