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 a column from the Environmental Health Services Branch (EHSB) of the Centers for Disease Control and Prevention (CDC) in every issue of the Journal.

In this column, EHSB and guest authors from across CDC will highlight a variety of concerns, opportunities, challenges, and successes that we all share in environmental public health. EHSB's objective is to strengthen the role of state, local, and national environmental health programs and professionals to anticipate, identify, and respond to adverse environmental exposures and the consequences of these exposures for human health. The services being developed through EHSB include access to topical, relevant, and scientific information; consultation; and assistance to environmental health specialists, sanitarians, and environmental health professionals and practitioners.

This month’s column features an excerpt from the Emergency Water Supply Planning Guide for Hospitals and Health Care Facilities. This planning guide was recently published as a collaborative effort between CDC and the American Water Works Association.

In order to maintain daily operations and patient care services, health care facilities need to develop an emergency water supply plan (EWSP) to prepare for, respond to, and recover from a total or partial interruption of the facilities’ normal water supply. Water supply interruption can be caused by several types of events such as natural disaster, a failure of the community water system, construction damage, or even an act of terrorism. The following are a few actual examples of water supply interruptions at some health care facilities:

- A hospital in Mississippi lost service for 18 hours as a result of Hurricane Katrina.
- A hospital in Texas lost water service for 48 hours due to an ice storm that caused a citywide power outage that included the water treatment plant.
- A nursing home in Florida lost its water service for more than 48 hours as a result of Hurricane Ivan.

Because water supplies can and do fail, it is imperative to understand and address how patient safety, quality of care, and the operations of a facility will be impacted. Below are a few examples of critical water usage in a health care facility that could be impacted by a water outage.

Water may not be available for:
- Hand washing and hygiene;
- Drinking at faucets and fountains;
- Food preparation;
- Flushing toilets and bathing patients;
- Laundry and other services provided by central services (e.g., cleaning and sterilization of surgical instruments);
- Reprocessing of medical equipment, including that typically performed by special services (e.g., bronchoscopy, gastroenterology);
- Patient care (e.g., hemodialysis, hemofiltration, extracorporeal membrane oxygenation, hydrotherapy);
- Radiology;
- Fire suppression sprinkler systems;
- Water-cooled medical gas and suction compressors (a safety issue for patients on ventilation);
- Heating, ventilation, and air conditioning; and
- Decontamination/hazmat response.

A health care facility must be able to respond to and recover from a water supply...
interruption. Standards of the Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations) require hospitals to address the provision of water as part of the facility's Emergency Operations Plan (EOP). The Center for Medicare and Medicaid Services (CMS) Conditions for Participation/Conditions for Coverage (42 CFR 482.41) also requires that health care facilities make provisions in their preparedness plans for situations in which utility outages (e.g., gas, electric, water) may occur. A robust EWSP can provide a road map for response and recovery by providing the guidance to assess water usage, response capabilities, and water alternatives.

The objective of this planning guide is to help health care facilities develop a robust EWSP as part of its overall facility EOP and to meet the published standards set forth by the Joint Commission and the CMS. The guide is intended for use by any health care facility regardless of its size or patient capacity. The guide provides a four-step process for the development of an EWSP:

1. Assemble the appropriate EWSP Team and the necessary background documents for your facility.
2. Understand your water usage by performing a water use audit.
3. Analyze your emergency water supply alternatives.
4. Develop and exercise your EWSP.

The EWSP will vary from facility to facility based on site-specific conditions, but will likely include a variety of emergency water supply alternatives evaluated in step #3 above. How the EWSP is developed for a health care facility will depend on the size of the facility. For a small facility, one individual may perform multiple functions, and the process may be relatively simple with a single individual preparing an EWSP of only a few pages. For a large regional hospital, however, multiple parties will need to work together to develop an EWSP. In this case the process and the plan would be more complex.

Regardless of size, however, a health care facility must have a robust EWSP to be prepared to ensure patient safety and quality of care while responding to and recovering from a water emergency.

For more information and to download the guide and other resources, visit www.cdc.gov/healthywater/emergency/drinking_water_advisory/index.html.

In the New Year, NEHA will bring you an even easier way to update your contact information, access your transactional history, and manage your preferences for how NEHA communicates with you. Stay tuned to neha.org for more information!