TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

Utility Failures
Topic Collection
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ASPR

ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE

Topic Collection: Utility Failures

Losing power or potable water after a critical incident can have a serious and significant effects on both healthcare facilities and patients. The resources in this Topic Collection include lessons learned from recent disasters, case studies, and toolkits designed to help healthcare planners prepare to respond and recover from post-disaster utility failures.

This ASPR TRACIE Topic Collection is in development and will be comprehensively reviewed in the fall of 2015. If you have resources to recommend for inclusion in this Topic Collection, specifically illustrative examples, plans, tools or templates, please email your recommendations to askasprtracie@hhs.gov.

Centers for Disease Control and Prevention and American Water Works Association. (2012). Emergency Water Supply Planning Guide for Hospitals and Health Care Facilities.

This document provides a four step process for the development of a hospital emergency water supply plan and includes tips for assembling the right planning team, performing a water use audit, analyzing alternatives, and developing and exercising the plan.

Greater New York Hospital Association. (2006). Power Disruptions.

The Greater New York Hospital Association shares links to documents that can help healthcare facilities plan for disruptions to electrical and other power systems.

Klein, K., Rosenthal, M., and Klausner, H. (2005). Blackout 2003: Preparedness and Lessons Learned from the Perspectives of Four Hospitals. Prehospital and Disaster Med. 20(5):343-49.

The authors reviewed after-action reports from four hospitals that experienced loss of power (and in two cities, water supply). They found that many issues landing or keeping patients in the hospital were social/resource rather than medical, which is consistent with more recent disasters (e.g., Hurricane Sandy).

Markham, P., Gianato, J., and Hoyer, J. (2015). After Action Review: Emergency Response to January 9, 2014 Freedom Industries Chemical Leak.

Several local health departments participated in a review of the response to the 2014 methanol spill. Interagency communications and public risk communications were listed as challenges, and participants shared that, for example, flushing recommendations were not practical for hospitals (they suggested that in future incidents, hospitals be treated as separate from the business community.

Present, D.; Clair, J.; Belyaev, S.; et al. (2005). Effects of the August 2003 Blackout on the New York City Healthcare Delivery System: A Lesson for Disaster Preparedness. (Abstract only.) Critical Care Medicine, 33 (1): S96-S101.

The authors reviewed citywide emergency medical calls for service, emergency department visits, and hospital admissions after the 2003 power failure in New York City. They found unexpected increases in calls for service from respiratory device failures in community-based patients and note the need for better disaster preparedness planning for facilities and homebound patients.

Stoto, M., Piltch-Loeb, R., and Savoia, E. (2015). The Public Health System Response to the 2014 West Virginia Water Crisis.

The authors analyzed the public health system's response to the spill of close to 10,000 gallons of methanol into West Virginia's Elk River, a public water supply to nine counties in the state. They focused specifically on internal and external (risk) communication with the public.