

ASPR TRACIE Technical Assistance Request

Request Response Date: 6 December 2017

Request:

Provide resources related to wildfires and hospital evacuations.

Response:

ASPR TRACIE is providing resources below for wildfire smoke and air quality and healthcare facility assessments/ evaluations.

ASPR TRACIE Topic Collections that may also provide useful resources include:

- [Emergency Public Information and Warning/Risk Communications](#)
- [Healthcare Facility Evacuation / Sheltering](#)
- [Natural Disasters](#)

A full list of ASPR TRACIE Topic Collections can be found [here](#).

Wildfire Smoke and Air Quality Resources

Primary Resource

U.S. Environmental Protection Agency. (2016). [Wildfire Smoke: A Guide for Public Health Officials](#).

This guide, developed in 2006 and revised in 2016 by the U.S. Environmental Protection Agency, the U.S. Forest Service, the U.S. Centers for Disease Control and Prevention, and the California Air Resources Board is the primary public health resource published by these organizations to guide preparation, risk communication, and interventions. The appendices provide several Fact Sheets for use in risk communication efforts.

Lessons Learned: Fire/Wildfire

Centers for Disease Control and Prevention. (2015). [Protect Yourself from Wildfire Smoke](#).

The information on this webpage can help first responders and community members understand the risk and protect themselves from the effects of wildfire smoke.

Finlay, S.E., Moffat, A., Gazzard, R., et al. (2012). [Health Impacts of Wildfires](#). PLOS Currents Disasters. Nov 2;4:e4f959951cce2c.

The authors conducted a comprehensive literature review of international research on wildfire-related health effects and led several focus groups with study authors. Results

indicated that certain populations are especially vulnerable; wood smoke has high toxicity levels; respiratory morbidity is the leading health effect, wildfire exposure is also associated with burns (and related effects) and cardiovascular, ophthalmic, and psychiatric problems.

Kenward, A., Adams-Smith, D., and Raja, U. (2013). [Wildfires and Air Pollution: The Hidden Health Hazards of Climate Change](#). Climate Central.

This analysis document reviews air pollution from some of the largest wildfires in the West over the past 12 years. It addresses the impact of wildfires on air quality, and the health impacts of wildfires.

National Resources Defense Council. (2013). [Where There's Fire, There's Smoke: Wildfire Smoke Affects Communities Distant from Deadly Flames](#).

Readers can learn about how smoke from wildfires—both near and far—can have an effect on health. Maps that show how smoke from wildfires in 2011 affected many areas of the U.S. are included.

Plans, Tools, and Templates: Fires and Wildfires

Centers for Disease Control and Prevention, Emergency Preparedness and Response. (2013). [Wildfires](#).

This webpage can help users prepare for a wildfire, take proper actions during a wildfire, and prevent injury and address physical and emotional health after a wildfire.

Commonwealth of Kentucky. (2016). [Wildfire Smoke Can Impact Your Health](#). Kentucky.gov.

In this news post, the Kentucky Division for Air Quality and the Kentucky Department for Public Health (KDPH), within the Cabinet for Health and Family Services, issued information on how smoke from the fires may affect the community's health.

Jagnarine, S., Van Alphen, D., Gibbs, T., et al. (2014). [Hospitals Don't Burn!: Hospital Fire Prevention and Evacuation Guide](#). World Health Organization, and Pan American Health Organization.

This guidance document was developed to address the vulnerability of hospitals to fires. It is intended that all possible steps should be taken to minimize the hazard of fires in hospitals and the need for evacuation. The guide is applicable to existing hospitals that can be retrofitted to improve safety against fires, and proposed new-build facilities. It is formatted into four sections: Prevention, Suppression, Evacuation, and Training Drills.

National Wildfire Coordinating Group. (2015). [InciWeb](#).

This webpage provides up-to-date information on wildfires across the country. Users can search by state or incident name. Photographs, announcements, and news articles are also included.

Oregon Health Authority, Public Health Division Health Security, Preparedness, and Response Program. (n.d.). [Wildfires and Smoke](#). (Accessed 11/18/2016.) Oregon Health Authority, Public Health Division Health Security, Preparedness, and Response Program.

This webpage includes information and links to factsheets and other resources that can help users learn about current wildfires, smoke conditions, and how to reduce the health effects of wildfire smoke.

Oregon Health Authority, Public Health Division Health Security, Preparedness, and Response Program. (2015). [Crisis and Emergency Risk Communication Toolkit for Wildfire Smoke](#).

This toolkit can help local health authorities develop public messaging during a severe wildfire smoke event. It includes key messages, talking points, sample press releases, sample social media messages for Twitter and Facebook, and links to related information.

U.S. Department of Health and Human Services, Disaster Information Management Research Center. (2015). [Fires and Wildfires](#).

This webpage provides links to fire and health-related information and other relevant resources. Information is geared towards health professionals and the general public.

Healthcare Facility Assessments/ Evaluations

American College of Emergency Physicians. (n.d.). [Hospital Disaster Preparedness Self-Assessment Tool](#).

This tool includes information on categories that should be considered in a post-disaster assessment (particularly sections 3-7). This assessment was developed to assist hospitals in revising and updating existing disaster plans or in the development of new plans.

California Emergency Medical Services Authority. (n.d.). [Hospital Incident Command System 251- Facility Systems Status Report](#).

This HICS form is to be used to determine the status (functional, partially functional, nonfunctional) of a healthcare facility after an emergency event.

Centers for Disease Control and Prevention. (n.d.). [Checklist for Infection Control Concerns when Reopening Healthcare Facilities Closed Due to Extensive Water and Wind Damage](#).

This checklist provides guidance for completing building and life safety inspections prior to restoration work, and guidance for infection control review of facilities to be done

before the hospital can reopen. Attachment A includes a site specific checklist for selected areas of the facility (e.g., laboratory, pharmacy, etc.).

Harvard School of Public Health, Emergency Preparedness and Response Exercise Program. (2014). [Essential Functions and Considerations for Hospital Recovery Version 2](#). Federal Emergency Management Agency.

This document helps hospitals prepare to manage recovery from all types of events. Recovery planning benchmarks are included starting on page 34 to help hospitals independently assess their recovery capabilities. The benchmarks are drawn from a variety of sources including the ASPR Healthcare Preparedness and Response Capabilities, Joint Commission Hospital Accreditation Standards, the NDRF, and lessons learned from both recovery-focused exercises and real-world disasters. The document also includes questions to consider during recovery planning starting on page 38.

Pan American Health Organization, World Health Organization. (n.d.). [Hospital Administrator, Post Disaster Functional Checklist](#).

This checklist is meant to be used by a CEO or Hospital Administrator within 24 hours after the impact of a natural or man-made disaster. Its objective is to determine the immediate level of safety and functionality of the hospital. The facility is assessed in three segments: structural, non-structural, and functional capacity.

Raske, K. (2006). [Greater New York Hospital Association Recovery Checklist for Hospitals After A Disaster](#). Greater New York Hospital Association.

Hospital staff can utilize this facility recovery checklist to check for potential issues in the facility after a disaster.

South Carolina Department of Health and Environmental Control. (2016). [Post-Disaster Hospital Reopening Procedures](#).

This document provides a step-by-step guide for hospitals to follow prior to reopening. It includes five primary steps with action items under each.

Zane R, Biddinger P, Gerteis J, Hassol A. (2010). [Hospital assessment and recovery guide](#). AHRQ Publication No. 10-0081.

This guide is designed to help organize the initial assessment of a hospital after an evacuation/closure due to an emergency event. The guide is divided into 11 sections, each with its own team and assessment assignment: Administration, Facilities, Security and Fire Safety, Information Technology and Communications, Biomedical Engineering, Medical, Ancillary Services, Materials Management, Building and Grounds Maintenance/ Environmental Services, and Support Services.