ASPR TRACIE Technical Assistance (TA) Request

Request Receipt Date (by ASPR TRACIE): 30 July 2019
Response Date: 9 August 2019
Type of TA Request: Standard

Request:

The requestor asked if ASPR TRACIE had After Action Reports (AARs), preferably from real-life events, and from the perspective of hospitals and health systems. However, it was noted that AARs based on scenarios and outside of this scope could be included as well.

Response:

The ASPR TRACIE Team conducted a search for AARs and lessons learned from real-life events on the ASPR TRACIE website, as well as within previous TA requests. We also searched online for relevant materials.

The ASRP TRACIE Team identified several AARs and lessons learned resources from real-life events and exercises, and from the hospital/health system perspective. NOTE: We gathered materials that primarily contained lessons learned from real-life events as we believe those will add the most value to this request.

The following sections in this document include AARs and lessons learned covering these topics:
- Section I – mass casualty events
- Section II – mass gathering/ special events
- Section III – special hazards

I. Mass Casualty-Related After Action Reports/ Lessons Learned

Real-Life Events


This report summarizes the findings from a research project conducted to evaluate how the healthcare system was negatively affected in preparation for, during, and after Hurricane Sandy. Lessons learned from the hospital, EMS, and ancillary services (i.e., pharmacies, methadone clinics, dialysis/kidney centers, and medical supply companies) sectors are noted to assist healthcare professionals, medical facilities, and public health better prepare for future disasters.

Speakers from Louisiana share how they managed their recovery, organized, designed, and implemented federally-compliant recovery programs, and delivered the best possible services to their communities. NOTE: The title page of the presentation includes a link to the recording. You will need to enter your name and email address prior to accessing the recording.


In this ASPR TRACIE webinar, healthcare providers who responded to the mass shooting incident in Las Vegas share their experiences and recommendations that can help others prepare for similar incidents.


Following a number of related technical assistance requests and in anticipation of future information needs from healthcare systems impacted by current and future disasters, ASPR TRACIE developed this white paper to answer the question: “How long does it take the healthcare system to recover from a major hurricane?”


This ASPR TRACIE document provides numerous hurricane-related resources applicable to a variety of stakeholders and audiences. It also includes multiple sections on lessons learned from various natural disasters.

ASPR TRACIE. (2019). Lessons Learned from the Pulse Nightclub Shooting: An Interview with Staff from Orlando Regional Medical Center.

ASPR TRACIE interviewed staff from Orlando Regional Medical Center three months after a gunman opened fire at the Pulse nightclub, killing 49 people and wounding at least 66. Trauma surgeons and the director of the hospital’s emergency preparedness program shared a comprehensive overview of the attack, including challenges encountered during the response and lessons learned.


This ASPR TRACIE resource was developed to provide a short overview of the potential significant public health and medical response and recovery needs facing hurricane- and severe storm-affected areas, based on past experience and lessons learned from Hurricanes Katrina, Sandy, Harvey, and others.
ASPR TRACIE. (2018). **Natural Disasters Topic Collection.**

The resources in this Topic Collection highlight lessons learned from recent events, communication tools and information, and checklists, plans, tools, and templates that can be modified to suit specific threats and needs. **NOTE:** Refer to the multiple Lessons Learned sections for a comprehensive and updated list of lessons learned specific to various natural disasters.


This issue covers the challenges associated with providing care during no-notice incidents (e.g., mass shootings).


This AAR identifies the strengths and areas for improvement related to the all-hazards preparedness and response efforts by the Centers for Disease Control and Prevention specific to Hurricane Katrina in 2005.


The authors share how lessons learned in patient movement and other planning and response capabilities have been incorporated since Hurricane Katrina struck the Gulf Coast. The authors highlight the development of Mississippi MED-COM, a statewide medical communications center, to serve as a “hub for patient coordination and movement during emergency incidents.”


The Federal Emergency Management Agency conducted an after-action review of the agency’s preparedness, response, and recovery operations following Hurricanes Harvey, Irma, and Maria in 2017.

Gray, B. (2006). **After Katrina: Hospitals in Hurricane Katrina; Challenges Facing Custodial Institutions in a Disaster.** The Urban Institute.

This document discusses the challenges facing hospitals before, during, and after Hurricane Katrina.

The authors describe the hospital system response after the Interstate 35W bridge collapsed into the Mississippi River on August 1, 2007 in Minneapolis, MN. The incident resulted in 13 deaths and 127 injuries.


This report was written to help hospital, healthcare coalition, and emergency management planners learn more about the actions taken, lessons learned, observations and hospital experiences that occurred after the Las Vegas mass shooting. Information was collected through interviews, facilitated discussions, field trips and the state's InfoXChange program. The author also highlights planning, exercises, and updated assumptions "based on the changing world and social environment in which we now live."


This AAR describes the events related to response to the Boston Marathon Bombings and associated incidents. The report attempts to constructively evaluate and assess public safety, public health, and medical response actions with the goal of providing agencies and organizations involved in the incident with practical recommendations to address them. Unified command, multi-agency coordination, and use of the incident command system are recurring themes in the document.


This AAR highlights strengths and lessons learned specific to response efforts conducted under the Emergency Management Assistance Compact during the 2005 hurricane season (including Hurricanes Katrina and Rita).


This AAR provides strengths and lessons learned specific to response efforts conducted under the Emergency Management Assistance Compact during the 2017 hurricane season.


This website provides a brief video of interviews with various hospital staff members from Orlando Health who share their experiences following the June 12, 2016 Pulse
Nightclub shooting. It also includes lessons learned from administrators, physicians, nursing, and other support staff.


This report describes response and recovery operations by several hospitals during the 2011 natural disasters in Missouri, with many implications for COOP planning. It summarizes lessons learned, with a focus on the Joplin tornado.


This article discusses lessons learned from the evacuation of two NYC area hospitals in response to Hurricane Sandy in 2012.


The speaker focused on four main areas: the impact of an unexpected natural disaster on healthcare services; how the nation responded to help the Joplin community; how to incorporate lessons learned into planning; and how to design enhancements that can protect against future incidents.


This report explains the response to the I-35W bridge collapse in Minneapolis (e.g., firefighting and rescue operations, perimeter control and security maintenance, fatality management, and handling hazardous materials). The authors also discuss how support was provided to families of the dead and how emergency management staff worked at the emergency operations center. The report includes best practices.


This AAR was requested by the City of Orlando and the Orlando Fire Department (OFD). It describes OFD's level of preparedness for an incident such as this and details the response and recovery from the incident. The report also offers guidance and recommendations for fire and EMS providers to take into consideration. **NOTE:** This AAR is specific to the fire department; however, may provide useful information.

This AAR provides a review of state-level public health and medical preparedness and response activities in Texas specific to Hurricane Harvey in 2017.


The Texas Hospital Association met with hospital representatives and agency partners from areas affected by Hurricane Harvey to discuss experiences prior to, during, and after the storm. This document highlights identified areas for collaborative improvement for future disasters and outlines how to incorporate next steps.


This AAR describes the activities of Arlington County, VA and the supporting jurisdictions, government agencies, and other organizations in response to the September 11, 2001, terrorist attack on the Pentagon. It includes an entire section on hospitals and clinics.


New York University’s Langone Medical Center had to be evacuated during Hurricane Sandy in 2012. The authors interviewed nurses to determine strengths and challenges associated with the evacuation and found that coworker support, leadership, and “personal resourcefulness” helped nurses respond. Challenges included limited prior disaster experience, training, and education, and the authors emphasize the need for more disaster-related education in schools of nursing.

Exercises


This AAR provides a summary of the Central West Medical Coordination Center regional mass casualty exercise. Organizers developed two objectives for this exercise: evaluate the ability to evacuate residents from a long-term care facility and evaluate medical surge into an acute care hospital. This document can also serve as a template for other community exercises.
II. Mass Gathering/ Special Events After Action Reports/ Lessons Learned

Real-Life Events


This report summarizes the events that occurred during the 2012 Democratic National Convention in Charlotte, NC. It identifies the strengths and areas for improvement that were demonstrated during the event. Section 2.8 specifically addresses the aspects of Fire and Public Health agencies.


This report summarizes the events that occurred during the 2012 Republican National Convention in Tampa, FL. It identifies the strengths and areas for improvement that were demonstrated during the event. Section 2.8 specifically addresses the roles of Fire/Hazardous Materials (HAZMAT), Emergency Medical Services (EMS), Hospitals, and Public Health agencies.


This report describes the lessons learned after the 2017 Charlottesville, VA protests and provides recommendations related to preparedness, response, and other activities. NOTE: Appendix I includes the Virginia’s Response to the Unite the Right Rally After-Action Review developed by the International Association of Chiefs of Police.


The authors describe the health and medical planning for and impact of the Republican National Convention on the City of St. Paul and the Minneapolis-St. Paul metropolitan area.


This report describes the actions that took place by various agencies during the 2017 Charlottesville, VA protest events. NOTE: Page 105 provides lessons learned from the
University of Virginia (UVA) Medical Center and experiences noted from an interview with the Director of Emergency Management at UVA Health Systems.


This AAR summarizes the events that occurred during the January 20, 2009 Presidential inauguration of Barack Obama. It identifies the strengths (including several coalition activities and the use of the Health Emergency Coordination Center) and areas for improvement that were demonstrated during the event.


This presentation is an EMS after action briefing on the Democratic National Convention held in Boston, MA in July 2004. It provides an overview of EMS roles and responsibilities during the convention, and identifies lessons learned.

III. Specific Hazards-Related After Action Reports/ Lessons Learned

Real-Life Events


The authors discuss findings from a review of medical records and autopsy reports to describe the clinical presentation, hospital course, and pathology observed in persons hospitalized or deceased as a result of chlorine gas exposure after a train derailment in 2005.

Exercises


This website provides an overview of the Homeland Security Exercise and Evaluation Program (HSEEP), guidance on how to write exercise objectives, a checklist on completing exercise design, guidance on how to develop an exercise scenario and Master Scenario Events List, and examples/ templates of After Action Reports and Improvement Plans. NOTE: An example AAR is located under Lesson 7 and is related to a chemical decontamination exercise.