



TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY

Exercise Program
Topic Collection
9/13/2016

Topic Collection: Exercise Program

Discussion- and operations-based exercises are critical for healthcare providers, public health agencies, and other community stakeholders to use to evaluate the efficiency and efficacy of policies, plans, and procedures in meeting response goals. They can also be used to determine whether equipment, training, and facilities are adequate to support their mission. The proper evaluation of any exercise provides the necessary data to revise/reinforce existing policies, plans, procedures, training, facilities, and/or equipment. The following resources highlight select templates, courses, and competencies that can help planners develop comprehensive exercises to test the healthcare and public health response to any type of disaster.

Each resource in this Topic Collection is placed into one or more of the following categories (click on the category name to be taken directly to that set of resources). Resources marked with an asterisk (*) appear in more than one category.

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[After Action Reports](#)

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[Plans, Tools and Templates](#)

[Plans, Tools and Templates: Tabletop Exercises](#)

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Must Reads

Braun, J., Peterson-Kroeber, C., Scullard, M., et al. (2012). [Moving Beyond HSEEP \(Homeland Security Exercise and Evaluation Program\): Creating Well-Functioning Teams for Preparedness Response](#). (Site requires free registration.)

This train-the-trainer program is intended for public health department staff with emergency response roles and provides participants with step-by-step functional exercise guidelines.

California Hospital Association. (2011). [Drills and Exercises](#).

This website features links to checklists, reference guides, and other materials needed for a hospital active shooter interactive tabletop exercise.

Centers for Disease Control and Prevention. (2011). [Public Health Preparedness Capabilities at a Glance](#).

This document summarizes the Public Health Preparedness Capabilities developed by the Centers for Disease Control and Prevention. While exercises are not specifically addressed, the functions under each capability may be used as exercise objectives.

Cheung, M., Vu, A., Varlese, D., et al. (2010). [Hospital Preparedness Exercises: Guidebook](#).

This guidebook shares exercise requirements necessary for federal programs and hospital accreditation as well as detailed information about the types of exercises, the importance of the after-action process, and a list of resources. Emergency medical professionals can use the information in planning, carrying out, and evaluating exercises, while noting that the language may not confirm with most recent guidance.

Federal Emergency Management Agency. (n.d.). [HSEEP Policy and Guidance](#). (Accessed 9/15/2016.)

This website contains links to templates emergency planners can tailor for exercise program management, design and development, conduct, evaluation, and improvement planning. A link to exercise evaluation guides is also provided.

Federal Emergency Management Agency (FEMA). (2011). [Emergency Planning Exercises for Your Organization](#).

This website provides links to examples of tabletop exercises that organizations can utilize and adapt in preparation for emergencies.

Federal Emergency Management Agency. (2008). [IS-120.A: An Introduction to Exercises](#).

This five-hour, interactive, web-based training course introduces the basics of emergency management exercises and identifies the five phases of the exercise process.

Fruhworth, K., Chambers, G., Shields, S., et al. (2012). [Conducting Drills and Exercises: A Guide for Hospitals](#).

This guidebook describes how disaster exercises are one of the best ways to evaluate a hospital's emergency management plan, equipment, and systems. Information on exercise design, creation and evaluation is also included.

Harvard T.H. Chan School of Public Health. (2016). [Emergency Preparedness Research, Evaluation & Practice \(EPREP\)](#).

Public, private, and non-governmental organizations can use the resources on this page to prepare for and respond to emergencies of all types. Resources, including an exercise evaluation toolkit, are focused on design and facilitation, evaluation, exercise resources, and hospital-specific exercises.

Iowa Department of Public Health. (2015). [Capability-Based Training and Education Resources for Coalitions.](#)

This toolkit provides training resources for healthcare coalitions that align to the 15 Public Health Emergency Preparedness Capabilities.

Johns Hopkins University. (2016). [Public Health Preparedness Exercise Program: From Design to Evaluation.](#) (Free registration required.)

The speaker highlights design, implementation, and evaluation of public health emergency preparedness exercises in this three-part 1.5 hour training.

Robert Wood Johnson Foundation, Network for Public Health Law. (2011). [Non-Profit Organization Liability Related to Volunteer Actors During Preparedness Training Exercises.](#)

This document—while specific to the State of Arizona—describes liability risks for individuals that volunteer to participate in preparedness training exercises with local hospitals and may be used by other states.

Savoia, E., Agboola, F., and Biddinger, P. (2012). [Use of After Action Reports \(AARs\) to Promote Organizational and Systems Learning in Emergency Preparedness.](#) International Journal of Environmental Research and Public Health. 9(8): 2949–2963.

The authors performed a structured review of After Action Reports to analyze how lessons learned from the response to real-incidents may be used to maximize knowledge management and quality improvement practices such as the design of public health emergency preparedness exercises. Key areas of common problems were identified from a search of the Lessons Learned Information System database that may help develop objectives for community testing.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. (2014). [Hospital Surge Evaluation Tool.](#)

This tool can be used by hospital emergency planners, administrators, and other personnel to both assess and enhance their facility's surge plans. It includes evaluation tools specific to emergency department triage and hospital incident command.

Uniformed Services University of the Health Sciences, National Center for Disaster Medicine and Public Health (NCDMPH). (2015). [Aligning Exercises in Your Community.](#)

This document was developed to help assist healthcare coalition leaders find new potential partners for disaster exercises.

University at Albany, State University of New York, School of Public Health and Health Professions, Center for Public Health Preparedness. (2008). [Bridging Community Partners through Drills and Exercises](#).

This training program highlights the importance of community cooperation in preparedness planning and exercises.

Weill Cornell Medical College. (2010). [Hospital Preparedness Exercises Pocket Guide](#). U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

The quick reference guide summarizes the Hospital Preparedness Exercises Guidebook and can assist with evacuation planning.

After-Action Reports

*Harvard T.H. Chan School of Public Health. (2012). [Review of Current Doctrine Regarding After Action Reporting](#). (Requires free registration.)

This 1 hour video course provides an overview of After Action Reports and information on related federal guidance (including the Homeland Security Exercise and Evaluation Program).

Health Care Association of New Jersey. (2012). [Project ESCAPE \(Evaluate Surge Capacity and Prioritized Evacuation\) Full Scale Exercise: After Action Report/Improvement Plan](#).

This After Action Report 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.

National Mass Care Council. (2015). [Critical Mass 2015: National Mass Care Exercise; Mass Care/Emergency Assistance After-Action Report](#).

This After Action report provides a summary of outcomes related to the conduct of the 2015 National Mass Exercise held in Austin, Texas. The report also provides a synthesis of comments provided by participants during the hot wash at the conclusion of the exercise.

Savoia, E., Agboola, F., and Biddinger, P. (2012). [Use of After Action Reports \(AARs\) to Promote Organizational and Systems Learning in Emergency Preparedness](#). International Journal of Environmental Research and Public Health. 9(8): 2949–2963.

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management and quality improvement practices such as the design of public health emergency preparedness exercises. Key areas of common problems were identified from a search of the Lessons Learned Information System database that may help develop objectives for community testing.

Capabilities and Core Competencies

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U.S. Department of Health and Human Services and U.S. Department of Homeland Security. (2011). [Appendix 7. Hospital Preparedness Program \(HPP\). Budget Period 3 Training and Exercise Requirements.](#)

Hospital Preparedness Program and Public Health Emergency Preparedness grant awardees were given these requirements to help them with Budget Period 3 training and exercise planning.

Education and Training

Anzalone, J., Bush, S., Head, B., et al. (2014). [National Mass Care Exercise: Helping Build State Mass Care Capability.](#)

This webinar features speakers who discuss the rationale for a national mass care exercise, the Florida exercise experience, lessons learned from the exercise, and applying lessons at the state and local levels. A link to the slides used in the webinar and additional resources are also provided.

Biddinger, P. (2012). [Using Exercises to Enhance and Measure Preparedness.](#) (Site requires free registration. Scroll down the page to find this course.)

This one-hour course describes how exercises can be used to enhance and measure healthcare preparedness. The course also describes the process of designing, conducting, and evaluating exercises.

Braun, J., Peterson-Kroeber, C., Scullard, M., et al. (2012). [Moving Beyond HSEEP \(Homeland Security Exercise and Evaluation Program\): Creating Well-Functioning Teams for Preparedness Response.](#) (Site requires free registration.)

This train-the-trainer program is intended for public health department staff with emergency response roles and provides participants with step-by-step functional exercise guidelines.

Decosimo, K. (2013). [Public Health Preparedness Exercises: Basics of Public Health Preparedness, Module 3](#). (Site requires free registration. Course requires Flash Player.)

This course provides an overview of public health exercise planning with a focus on the Homeland Security Exercise and Evaluation Program.

Federal Emergency Management Agency (FEMA). (2008). [IS-120.A: An Introduction to Exercises](#).

This five-hour, interactive, web-based training course introduces the basics of emergency management exercises and identifies the five phases of the exercise process.

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The speaker highlights design, implementation, and evaluation of public health emergency preparedness exercises in this three-part 1.5 hour training.

Primary Care Emergency Preparedness Network. (n.d.). [Community Health Center Coastal Surge Exercise](#). (Accessed 8/12/2016.)

This planning guide can help healthcare centers conduct Homeland Security Exercise and Evaluation Program-compliant coastal surge exercises.

Russell, M. (2015). The Healthcare Disaster Exercises Toolkit. (Available for purchase.) HC Pro, Inc: Marblehead, MA.

This resource provides exercise planning, implementation and evaluation guidance for internal organizational needs, and mechanisms to participate with community partners. Sample scenarios, victim profiles, and a variety of templates will support exercise development, tracking and corrective actions.

Sarpy, S. (2012). [Essentials of Designing and Evaluating Exercises and Drills to Enhance Public Health Emergency Preparedness](#). (Site requires free registration.)

This course, intended for public health workers, presents information related to developing, implementing, and evaluating exercises and drills for enhancing emergency preparedness and response.

University at Albany, State University of New York, School of Public Health and Health Professions, Center for Public Health Preparedness. (2008). [Bridging Community Partners through Drills and Exercises.](#)

This training program highlights the importance of community cooperation in preparedness planning and exercises.

Yamaki, K., Mitchell, J., Coniglio, R., et al. (2014). [Partnering with People with Disabilities in Emergency Preparedness Activities.](#)

This transcript is from a webinar designed to assist emergency preparedness professionals with including people with access and functional needs in emergency planning and exercises.

Evaluation

* Harvard T.H. Chan School of Public Health. (2013). [Public Health Emergency Preparedness Exercise Evaluation Toolkit.](#)

This toolkit can help exercise planners and evaluators prepare to conduct and evaluate emergency preparedness exercises. It includes sections on evaluation methodology and tools, exercise basics, and After Action Reports.

Johns Hopkins University Evidence-based Practice Center. (2008). [Tool for Evaluating Core Elements of Hospital Disaster Drills.](#)

The Center developed a set of evaluation modules and addendums for operationalized hospital disaster drills in 2004 and abridged it in 2008. The focus of this version is critical elements of drill evaluation that all hospitals should address as part of disaster preparedness.

Kaji, A. and Lewis, R. (2008). [Assessment of the Reliability of the Johns Hopkins/Agency for Healthcare Research and Quality Hospital Disaster Drill Evaluation Tool.](#) (Abstract only.) *Annals of Emergency Medicine.* 52(3):204 -210.

This article characterizes the internal and inter-rater reliability of a hospital disaster drill performance evaluation tool developed by the Johns Hopkins University Evidence-Based Practice Center.

Guidance

Cheung, M., Vu, A., Varlese, D., et al. (2010). [Hospital Preparedness Exercises: Guidebook.](#)

This guidebook shares exercise requirements necessary for federal programs and hospital accreditation as well as detailed information about the types of exercises, the importance of the after-action process, and a list of resources. Emergency medical

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Scullard, M., Radi, D., Maine, J. (2014). [Designing for Unconventional Learning Outcomes and Experiences in Exercises.](#)

This PowerPoint presentation highlights examples of public health-related exercises that foster unconventional learning outcomes as opposed to the usual testing of plans and meeting established metrics.

Supernaw, S. (2014). [Challenges and Opportunities for Hospital Training and Exercises.](#)

The webinar host identifies some of the regulatory and accreditation requirements for hospital emergency management and preparedness, and discusses some of the most common challenges to planning and executing emergency training and exercises in the hospital environment.

* Uniformed Services University of the Health Sciences, National Center for Disaster Medicine and Public Health (NCDMPH). (2015). [Aligning Exercises in Your Community.](#)

This document was developed to help assist healthcare coalition leaders find new potential partners for disaster exercises.

Plans, Tools, and Templates

* Association of Healthcare Emergency Preparedness Professionals. (2014). [Disaster Exercises](#).

This website provides links to operations- and exercise-based documents and other resources that can assist healthcare emergency planners with creating, conducting and evaluating exercises.

California Hospital Association. (2011). [Drills and Exercises](#).

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U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. (2016). [Coalition Surge Test: An Exercise for Assessing and Improving Health Care Coalition Readiness](#).

Healthcare coalitions can use this no-notice exercise to identify gaps in surge planning. The exercise tests a coalition's ability to locate appropriate destinations for patients in a simulated evacuation of three or fewer patient care facilities.

Weston, B., Simpson, N., Hart, D., et al. (2015). [Multiple Casualty Scenario from a Bomb/Blast Injury](#). MedEdPORTAL Publications. 2015;11:10065. (Abstract only.)

This article describes in detail the simulation plan for a blast-related mass casualty incident exercise.

Plans, Tools, and Templates: Tabletop Exercises (Note: Many of the following references are examples of completed situation manuals or exercise plans completed using the HSEEP template.)

Arizona Department of Health Services. (2014). [Code Silver/Active Shooter Tabletop Exercise for Community Health Centers: Situation Manual \(SitMan\)](#).

This Situation Manual (SitMan) is intended for participants of a tabletop exercise that focused on emergency response plans, policies, and procedures as they pertain to an active shooter event at a community health center.

* Association of Healthcare Emergency Preparedness Professionals. (2014). [Disaster Exercises](#).

This website provides links to operations- and exercise-based documents and other resources that can assist healthcare emergency planners with creating, conducting and evaluating exercises.

Centers for Disease Control and Prevention (CDC). (2014). [Pan Flu Scramble Exercise](#).

This website provides access to the Pan Flu Scramble Exercise, a discussion based tabletop exercise that enables healthcare entities to test their patient surge plans. The exercise also addressed Hospital Preparedness Program and Public Health Emergency Preparedness capabilities.

Central Ohio Trauma System. (2011). [Ohio Central Region Hospitals Evacuation/Shelter-in-Place Tabletop Exercise](#).

This situation manual for a tabletop exercise provides participants an opportunity to evaluate response plans and hospital readiness for a severe weather scenario requiring hospital evacuation. The discussion exercise is designed for a single hospital.

Colorado Community Health Network. (2010). [Peak Vista Community Health Centers Wildfire Tabletop \(TTX\) Disaster Exercise.](#)

This presentation addresses the purpose of the tabletop exercise, describes and the wildfire scenario that impacts the community health center, and provides discussion questions for participants.

District 1 [Michigan] Regional Medical Response Coalition. (2010). [Situation Manual: Shelter-In-Place/Evacuation Tabletop Exercise: Long Term Care Facility.](#)

This situation manual for a tabletop exercise provides participants with a forum for long term care facilities to discuss emergency response and evacuation.

Federal Emergency Management Agency. (2011). [Emergency Planning Exercises for Your Organization.](#)

This website provides links to examples of tabletop exercises that organizations can utilize and adapt in preparation for emergencies.

Georgia Hospital Association. (2014). [Tornado Tabletop Exercise.](#)

This Tornado Tabletop Exercise Template Situation Manual can be adapted to other healthcare facilities and provides exercise participants with information necessary to conduct a discussion about community/regional/facility issues after widespread severe weather.

Loyola University Medical Center, Illinois Emergency Medical Services for Children. (2013). [NICU \(Neonatal Intensive Care Unit\)/Nursery Evacuation Tabletop Exercise Toolkit.](#)

This toolkit can assist hospitals with conducting a tabletop exercise related to the evacuation of a neonatal intensive care unit (NICU) and nursery.

Primary Care Development Corporation, and the National Association of Community Health Centers. (n.d.). [Severe Weather Table Top Exercise.](#) (Accessed 9/15/2016.)

This presentation addresses the purpose of the tabletop exercise, describes the severe weather scenario that impacts the community health center, and provides discussion questions for participants.

U.S. Department of Homeland Security. (2013). [DHS Cyber Tabletop Exercise \(TTX\) for the Healthcare Industry.](#)

This package of materials can help healthcare industry organizations plan and organize a cyber tabletop exercise.

University of Washington, Northwest Center for Public Health Practice (NWCPH). (2015). [Communicating During Emergencies: A Pandemic Flu Tabletop Exercise](#). (Site requires free registration).

This tabletop exercise enables participants to identify strengths and gaps in policies and procedures as it relates to communication systems during a major multi-agency pandemic impacting a large county.

Research

Breslin, P.; McGowan, C.; Pecheux, B. and Sudol, R. (2007). [Serious Gaming: Advanced Computer Simulation Games Help to Transform Healthcare and Disaster Preparedness](#). Health Management Technology. 28(10):14, 16-17.

This article describes a game-based training environment that incorporates multiple, adjustable, variables such as numbers of participants and victims, skill level of first responders and relative effectiveness of the measures taken. The key innovation underlying the simulation is a capability called Game Analysis, which captures and analyzes all of the data generated during the play of a game.

Gillett, B., Silverberg, M., Roblin, P., et al. (2011). [Computer-Facilitated Assessment of Disaster Preparedness for Remote Hospitals in a Long-Distance, Virtual Tabletop Drill Model](#). (Abstract only.) Prehospital Disaster Medicine. 26(3):230-3.

The authors developed and tested an Internet-based software tool to assess disaster preparedness for remote hospitals using a long-distance, virtual, tabletop drill. Results were positive, and indicated that weekly reinforcement contributed to strong compliance with the study.

Pate, A., Bratberg, J., Robertson, C. et al. (2016). [Evaluation of a Tabletop Emergency Preparedness Exercise for Pharmacy Students](#). American Journal of Pharmaceutical Education.

The purpose of this research study was to demonstrate the application and observe the effects of an emergency preparedness laboratory activity (e.g. discussion based tabletop exercise) on second-year pharmacy students. The focus of the activity was for students to create and examine emergency response plans within small groups.

Agencies and Organizations

Note: The agencies and organizations listed in this section have a page, program, or specific research dedicated to this topic area.

Centers for Disease Control and Prevention. [Public Health Preparedness Capabilities: National Standards for State and Local Planning](#).

Federal Emergency Management Agency. [Center for Domestic Preparedness](#).

Federal Emergency Management Agency. [Core Capabilities](#).

Federal Emergency Management Agency. [Emergency Planning Exercises](#).

Harvard T.H. Chan School of Public Health. [Emergency Preparedness Research, Evaluation & Practice \(EPREP\)](#).

*This ASPR TRACIE Topic Collection was comprehensively reviewed in August and September 2016 by the following subject matter experts (listed in alphabetical order): **John Hick, MD**, HHS ASPR and Hennepin County Medical Center; **Mark P. Jarrett, MD, MBA, MS, SVP & Chief Quality Officer**, Associate Chief Medical Officer, Northwell Health, Professor of Medicine, Hofstra Northwell School of Medicine; **Jodi Keller, RN**, Associate Director of Healthcare System Emergency Preparedness, Central Ohio Trauma System; **Brad Learn**, Emergency Preparedness Coordinator, Kentucky Hospital Association; **Ann Potter, RN, CHEP**, Institute for Public Health Emergency Readiness, Medstar Washington Hospital Center; **Christopher Riccardi, CHSP, CHEP**, Emergency Preparedness Program Manager, Providence Health and Services; **Mary Russell, EdD MSN**, Emergency Services, Boca Raton Regional Hospital; and the **Yale New Haven Health System Center for Emergency Preparedness and Disaster Response**.*