

PREFACE

This Chemical Emergency Surge Annex Tabletop Exercise (TTX) Toolkit Template has been developed by the U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR) Technical Resources, Assistance Center, and Information Exchange (TRACIE). It can be used by healthcare coalitions (HCCs) to enhance operational awareness to effectively address the needs of patients impacted by a chemical incident as part of a whole community emergency response framework. It can also be utilized to satisfy [Funding Opportunity Announcement \(FOA\) requirements](#) for the Hospital Preparedness Program (HPP) Cooperative Agreement.

HCCs are not required to use this template and may conduct a chemical emergency surge annex exercise using a chemical incident of their choosing and any acceptable [Homeland Security Exercise and Evaluation Program \(HSEEP\)](#) compliant format.

While many exercise scenarios are based on organophosphate agents that require coordinated administration of medical countermeasures, this toolkit uses a chlorine release scenario to help jurisdictions anticipate the specific issues related to patient surge, chemical exposure decontamination, and patient care needs that may create competing resource and coordination demands. Chlorine spills are common and account for the highest rate of injury of any chemical in the United States. Planning for such scenarios is important and should be included in the coalition annex and exercise plans.

This toolkit template is intended to be edited and modified by the HCC Exercise Planning Team to satisfy the concepts and objectives each HCC intends to test. Blue text boxes and bracketed sections are included throughout the document and serve as notes to planners to enter your own text. *Please delete those boxes and bracketed areas once final planning decisions are made and text has been crafted.*

The complete toolkit template includes the following supporting materials for conducting a Chemical Emergency Surge Annex TTX:

1. Step-by-Step Guide to Implementing the Chemical Emergency Surge Annex Tabletop Exercise Template (this document) ([compliant PDF](#), [DOC](#))
2. Situation Manual ([compliant PDF](#), [DOC](#))
3. Chemical Emergency Surge Annex Tabletop Exercise Presentation ([compliant PDF](#), [PowerPoint](#))
4. Participant Feedback Form ([compliant PDF](#), [DOC](#))
5. Sign-in Form ([compliant PDF](#), [DOC](#))

For more information, access ASPR TRACIE's [CBRN Resources Page](#), which includes links to an [HCC Chemical Emergency Surge Annex Template](#) and [Chemical Hazards Topic Collection](#). Our [Healthcare Coalitions Resources Page](#) contains additional tools and templates. For more information, visit www.asprtracie.hhs.gov or contact our Assistance Center at 1-844-5-TRACIE or askasprtracie@hhs.gov.

STEPS TO PREPARING AND CONDUCTING A SUCCESSFUL EXERCISE

Step 1: Determine the need to exercise and receive approval from leadership to proceed, if needed

- Identify the Exercise Director.
- Review the HCC's Chemical Emergency Surge Annex to ensure it is current and ready to test.

Step 2: Exercise Director convenes an Exercise Planning Team (EPT)

- Planning team members should not participate as players in the exercise, but they can serve as facilitators, controllers, or evaluators on the day of the exercise.
- One planning team member should be included for each major entity playing in the exercise and include those that will be responsible for the preparedness and response for this type of emergency (e.g., hospitals, public health, HCC leadership, Emergency Medical Services [EMS], and emergency management).
- Planning team members must attend each planning meeting.

Step 3: Convene a combined Concept and Objectives/Initial Planning Meeting with the EPT

- Establish an exercise date, time, and location (the exercise could be convened in person, held virtually, or a combination of both).
- Establish an initial list of exercise objectives, considering any gaps or areas of difficulty identified during the development of the Chemical Emergency Surge Annex.
- Use the accompanying Situation Manual and PowerPoint presentation as a guide but modify and adjust the recommended objectives as appropriate for your coalition's needs.
- Identify exercise assumptions and artificialities (ensure the artificialities are reasonable enough so that they reduce the level of pushback from participants during the actual exercise). During the exercise, if you do get pushback regarding the boundaries you have set, remind participants to focus on the exercise objectives.
- Select the exercise scenario, number of modules, and discussion questions. Use the accompanying Situation Manual and PowerPoint presentation as a guide, but modify, adjust and add-to the scenario, scope of impact, questions, and modular format as appropriate.
- Develop a well-constructed Master Scenario Events List (MSEL) to Include a chronological listing of the events and injects that will drive the exercise actions. The scenario and injects will prompt participants to implement the policy or procedure being tested.
- Identify the exercise facilitator. This person should have clinical expertise or actual experience in disaster response, emergency management, or prior exercise facilitation knowledge. It is also helpful if the individual is well known and respected in the community.
- Establish a list of exercise participants, preferably by name, but at least by title and organization. Attendees should include, at a minimum, representatives from hospitals, including frontline

facilities, assessment hospitals, and specialized treatment centers that serve the HCC population; EMS or other first response authorities; special chemical incident subject matter experts (e.g., HAZMAT, toxicology, industry), local/regional public health agencies, public/private universities or other educational entities, and any others that may assist with response efforts (e.g., agent specific management, behavioral health, staff from the medical examiner's office).

- Note that the scenario focuses on the response and referral process within the healthcare system to drive examination of the Chemical Emergency Surge Annex components. Hospitals should identify both clinical and emergency management/administrative representatives to participate. EMS agencies should send a supervisor and/or medical director to attend.
- Ensure that the exercise is designed to measure performance around responder safety protocols.
- Confirm exercise controllers and evaluators and select evaluation criteria.
- Determine who will send invitations to potential exercise participants and manage RSVPs.
- Determine who will develop and finalize the required exercise materials.

Step 4: Confirm exercise logistics and send invitations

- Visit the facility to determine if it meets exercise needs and enables objectives. Confirm virtual connectivity, including whether participants need technical “practice sessions” to ensure the virtual platform works at their location and that they are familiar with the functionality.
- Determine what additional supplies are needed to conduct the exercise (e.g., pens/paper, name tags, table tents, computers, a projector, other audio visual [AV] equipment, markers, easels).
- Invite HCC members and confirm representation from all four core members (i.e., hospitals, emergency management, EMS, and public health).
- Invite any regularly engaged chemical emergency referral partners to participate (in-person or virtual) and confirm participation. Ideally include representatives from a state or regional chemical safety organization, public health or environmental agency, and any specialized treatment centers.

Step 5: Develop exercise materials

- Using the materials in this toolkit, and based on outcomes from the Initial Planning Meeting, review and modify the Situation Manual (SitMan), agenda, presentation materials, and exercise participant evaluation form, according to HCC needs.
- Send initial drafts of exercise materials to the EPT for input, comments, approval, and finalization.
- Send final draft materials to EPT members prior to the Final Planning Meeting.
- Determine whether participants need “Read Ahead” or “Prep” packets, and if so, develop the packets for review at the Final Planning Meeting.

Step 6. Conduct a final planning meeting with the EPT

- Approve all documents as “Final.”

- Confirm and finalize all logistics and attendees.
- Determine who will coordinate “day of” logistics such as on-site registration/sign in; distribution of table tents and printed materials; management of AV equipment and room setup.
- Send a final reminder email to all participants with last-minute updates or logistical information. The email should include read-ahead materials (specifically the HCC Chemical Emergency Surge Annex) and remind participants to review relevant agency or entity specific response plans if possible. Encourage participants to bring appropriate plans, policies, and procedures to assist them during the exercise.

Step 7. Conduct a pre-exercise controller/evaluator training

- This meeting, (multiple sessions may be needed if you have a large number of participants) can be conducted virtually or in-person and should be used to review exercise logistics, facilitation support needs, and evaluation expectations.

Step 8. Conduct the exercise

- Set-up the necessary equipment, distribute supplies, and provide food or drinks (if possible).
- Check participants in, or plan to complete a roll call, and have a check-out process in place.
- Provide the [Participant Feedback Form](#) at the beginning of the exercise for participants to record their answers throughout the exercise.
- Conduct the exercise as designed, watch the time, and move the exercise forward.
- Track all personnel hours and expenses to apply/expense the cost/submit reimbursements.
- Collect the feedback form before participants leave and provide an email, website, or other contact information for them to send in additional comments later.

Step 9. Conduct an exercise hotwash/debrief

- A hotwash should be conducted by the exercise facilitator immediately following the conclusion of the exercise at all locations. Hotwash slides are provided in the [Exercise PowerPoint Template](#).
- Debriefing occurs following the conclusion of the hotwash once all participants have departed. The debriefing includes the exercise facilitator, the EPT, and exercise evaluators, and focuses on their immediate thoughts and reactions to the exercise. Controllers and Evaluators should follow up with their written notes.

Step 10. Conduct the after-action process

- Gather comments from participants during the hotwash and using Participant Feedback Forms to collect additional comments.
- Develop the draft After-Action Report (AAR) and Improvement Plan (IP) to address gaps, deficiencies and opportunities for improvement. ASPR TRACIE’s [Exercise Program Topic Collection](#) includes guidance documents and sample AARs.
- Have the EPT and exercise evaluator review, comment on, and validate the draft AAR/IP.

- Prepare a follow-up list of actions and assignments, as well as a mechanism to update the disaster plan, Chemical Emergency Surge Annex, and related procedures/processes.
- Disseminate the final AAR and IP, along with a proposed plan/timeline for implementing the IP.
- Update and finalize the HCC Chemical Emergency Surge Annex to address lessons learned, mitigate gaps identified, and incorporate best practices that emerged during the TTX.
- Provide training on the updated plan and lessons learned from the exercise to HCC members and participants beyond those who participated in the exercise.

Notes:

HCCs vary dramatically in their preparedness and response roles and capabilities. In some cases, the coalition itself will have a direct role through an operations center or utilization of coalition personnel. In other areas, the coalition is more a sum of the response roles of its partners. In these cases, the coalition ensures that information is being shared among partners and that all response functions are accounted for with agency and coalition facility members serving in the leadership role. Coalitions take many forms, but they all must ensure that the *functions* of the response occur, regardless of who or where that may be. This scenario focuses on the healthcare aspects of the response as a driver for other agency supportive actions and is meant to test the HCC Chemical Emergency Surge Annex.

The objective of this effort is to discuss the provision of patient care to those exposed, or potentially exposed, to a hazardous chemical substance in a no-fault learning environment to understand what plans are in place, and what gaps continue to exist, for members of the coalition and at the coordination level. Coalitions should engage with their regional chemical exposure/treatment experts on general chemical incident planning needs and the development of the HCC Chemical Emergency Surge Annex.

Participants should answer questions according to their facility plans and may compare notes with other facilities during discussion. Seating options vary depending on the number of attendees but hospital personnel from the same facility should sit together and ideally be paired at tables with others from their health system (or other hospitals in the area). EMS personnel should also be seated together. If multiple public health personnel attend, they should sit together to facilitate interjurisdictional discussions. Emergency management and other partners may be assigned their own table or participate in other partner discussions.

The following ASPR TRACIE Subject Matter Experts contributed to the development of this resource:

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RESOURCES

The following resources may assist in developing and conducting a chemical emergency surge exercise. They may also be useful as references during the exercise or to be used as read-ahead materials:

- Agency for Toxic Substances Disease Registry [Information for Emergency Responders, Healthcare Professionals, Public Health Partners](#)
- ASPR TRACIE: [Chemical Hazards Topic Collection](#)
- ASPR TRACIE: [Exchange Issue 9 Preparing for and Responding to Chemical Incidents](#)
- BARDA: [Primary Response Incident Management \(PRISM\)](#)
- CDC: [Emergency Preparedness and Response Chemical Emergencies](#)
- DOT: [Emergency Response Guidebook](#)
- HHS: [Chemical Hazards Emergency Medical Management \(CHEMM\)](#)
- HHS: [Patient Decontamination in a Mass Chemical Exposure Incident: National Planning Guidance for Communities](#)
- FEMA: [Oil and Chemical Incident Annex](#)
- OSHA: [Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances](#)