

# Facility Chemical Surge Emergency Checklist

JULY 2023

This checklist could be utilized in conjunction with Emergency Medical Services (EMS) emergency operations plans and standard operations procedures (SOPs). This should also be used while actively participating with the regional Health Care Coalition (HCC).

Adapted from [HHS/ASPR: Chemical Emergency Considerations for Healthcare Facilities](#) and [Chemical Hazards Emergency Medical Management - CHEMM \(hhs.gov\)](#)

Check	Pre-Incident Checklist	Notes
<b>All exercises, procedures, and resources needed to be prepared for a chemical emergency.</b>		
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• Know the chemical risks and vulnerabilities specific to your community.</li> <li>• Understand impacts to hospital operations during a chemical release.</li> <li>• Understand options/plans if critical infrastructure become impacted (e.g., food, transportation, water, internet, utilities).</li> <li>• Detail regional resources and the roles and responsibilities of key agencies/ disciplines/partners in a regional chemical response plan.</li> <li>• Provide relevant training for leadership and staff that reflect their roles (particularly in awareness and operations) during a chemical emergency.</li> </ul> <p>Determine the types and amounts of space, supplies, and staff needed to provide ambulatory and non-ambulatory patient decontamination at your facility.</p>	
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• Understand the Chemical Triage Guidelines (<a href="#">Triage Guidelines - CHEMM (hhs.gov)</a>)</li> <li>• Establish chemical exposure guidance, possibly in collaboration with other facilities in the region for consistency.</li> <li>• Assure decontamination equipment and proper PPE is available and ready for the ED</li> </ul>	

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	<ul style="list-style-type: none"> <li>• Consider specific entrance to identify individuals requiring further decontamination.</li> <li>• Consider area for donning and doffing PPE for staff members</li> <li>• <a href="#">Hospital Activities - CHEMM (hhs.gov)</a></li> </ul>	
	<p><b>Patient Care</b></p> <ul style="list-style-type: none"> <li>• Plan for processing and registering exposed patients, belongings, and assessment post decontamination.</li> <li>• Identify who will manage patient movement activities.</li> <li>• Provide staff education and updates on toxidromes, chemical-specific treatment protocols, and consider just in time trainings for chemical events</li> </ul>	
<input type="checkbox"/>	<p><b>Revise your facility’s Emergency Operations Plan to include a Chemical Emergency Plan:</b></p> <ul style="list-style-type: none"> <li>• Development of the plan will drive subsequent actions below</li> <li>• Above experts should participate in plan development, along with the Emergency Preparedness committee and other stakeholders</li> <li>• Assure adequate Continuity of Operations (COOP) planning for utilities failure, other logistical and service interruptions</li> <li>• <a href="#">Health Care Facility Chemical Emergency Surge Plan Template (Word)</a></li> </ul>	
<input type="checkbox"/>	<p><b>Survey staff to identify in-house (and possibly community) burn or trauma expertise:</b></p> <ul style="list-style-type: none"> <li>• Hospitals and networks should survey staff and admitting physicians to develop a database of personnel with burn and chemical/HAZMAT experience, training, and willingness to participate in a disaster response</li> <li>• Identify key positions that staff will occupy in a disaster (see below)</li> </ul> <p>Include notification procedures for key staff and response team members in the plan</p>	
<input type="checkbox"/>	<p><b>Create chemical emergency leadership positions for key personnel and qualified staff:</b></p>	

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	<p><b>Chemical Emergency Preparedness Coordinator:</b></p> <ul style="list-style-type: none"> <li>• May be a nurse, physician, or emergency manager with burn/trauma experience</li> <li>• Has a planning role distinct from any response roles they may hold</li> <li>• Will likely be the critical ‘champion’ that leads preparedness/advocacy efforts at the institution</li> </ul> <p><b>Burn or Trauma Technical Specialist – usually a physician:</b></p> <ul style="list-style-type: none"> <li>• Serves as regular member of the Hospital Emergency Preparedness Committee</li> <li>• Specialist should take trainings on chemical injuries and/or burn injuries (resources can be found on the <a href="#">CHEMM Training Website</a>, or the <a href="#">MDH Burn Surge Website</a>)</li> <li>• During a response determines overall priorities for patients</li> <li>• Logistics Section:                             <ul style="list-style-type: none"> <li>○ Plans for decontamination/burn/trauma-specific supply needs in conjunction with other members of the planning team</li> </ul> </li> <li>• During a response, ensures that patients’ needs are addressed by Logistics, including transportation, materials, and nutrition</li> </ul>	
<input type="checkbox"/>	<p><b>Decontamination Considerations:</b></p> <ul style="list-style-type: none"> <li>• Establish plan for victim flow, decontamination / clothing control, control of hospital environment regarding contamination. (Note that priority is on life saving patient care first, then decontamination (consider the best type of decontamination for the patient).</li> <li>• Stockpile decontamination kits for patients or plan to accommodate large numbers of these patients                             <ul style="list-style-type: none"> <li>○ Work with social workers/American Red Cross to make sure there are various sizes for people.</li> </ul> </li> </ul>	
<input type="checkbox"/>	<p><b>Personal Protective Equipment (PPE)</b></p> <ul style="list-style-type: none"> <li>• Different types of chemicals (A, B, C, and D) require varying levels of PPE</li> <li>• Consider different types of protection, such as respiratory, eye/face, and skin</li> <li>• <a href="#">Personal Protective Equipment (PPE) - CHEMM (hhs.gov)</a></li> </ul>	

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<p><b>All exercises, procedures, and resources needed to be prepared for a chemical emergency.</b></p>		
<input type="checkbox"/>	<p><b>Incorporate chemical emergency exercises and drills into facility Training and Exercise Plan:</b></p> <ul style="list-style-type: none"> <li>• Determine (or review) medical and nursing staff training requirements to assure that appropriate basic and advanced emergency care and trauma life support can be offered (Including credentialing or pre-requisite requirements to working in the ED, etc.)</li> <li>• Arrange updates and re-certifications as needed</li> <li>• Develop and implement training on the chemical emergency surge plan at the facility</li> <li>• Arrange brief, scenario-driven trainings in clinical areas</li> <li>• Conduct drills and exercises and identify and correct deficiencies</li> <li>• <a href="https://www.hhs.gov/chemm">Training and Education - CHEMM (hhs.gov)</a></li> </ul>	
<input type="checkbox"/>	<p><b>Include an equipment plan in the facility's plan:</b></p> <ul style="list-style-type: none"> <li>• Establish disaster equipment needs (decontamination equipment) – obtain and maintain stocks</li> <li>• Consider creating and stocking disaster carts in designated areas, including a cart specifically for Pediatric Critical Care in the event a pediatric patient gets transported to a non-pediatric medical facility</li> </ul>	
<input type="checkbox"/>	<p><b>Include a pharmaceutical plan:</b></p> <ul style="list-style-type: none"> <li>• Establish procedures for dosing (resuscitation medications/kits/color-coded bags)</li> <li>• Maintain and update an inventory of essential disaster drugs, including medication to counteract the effects of a chemical emergency (consider 96-hour supply of key medications)</li> <li>• Define plans for receipt and distribution of supplies from Strategic National Stockpile. (Including basic medical supplies, chemical antidotes, etc.)</li> </ul>	
<input type="checkbox"/>	<p><b>Include a nutrition plan in the facility's plan:</b></p> <ul style="list-style-type: none"> <li>• Be sure your plan is compliance with the Centers for Medicare and Medicaid Services (CMS) Emergency Preparedness Rule</li> <li>• A standard emergency preparedness measurement is to have supplies to maintain self-reliance for 72 hours.</li> <li>• Facilities have flexibility in identifying their individual subsistence needs that would be required during an emergency.</li> </ul>	

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<input type="checkbox"/>	<p><b>Patient Tracking/Reunification Procedures</b></p> <ul style="list-style-type: none"> <li>• Establish tools and/or methods for patient and victim tracking which integrate into community plan. Disaster plan to include how documentation may be simplified during mass casualty incident.</li> <li>• Establish plans for missing persons / patient hotline at facility</li> <li>• Have a process in place for family reunification; this may be separate from the healthcare facility depending on the contamination situation</li> <li>• Plan a space to hold uninjured, displaced or released children who are awaiting arrival of adult caregivers or whose caregivers are being treated                             <ul style="list-style-type: none"> <li>○ Develop a system to track both accompanied and unaccompanied children</li> </ul> </li> </ul>	
<input type="checkbox"/>	<p><b>Consider Transfer, Transport and Patient Load Balancing Issues:</b></p> <ul style="list-style-type: none"> <li>• Consider signed transfer agreements (See EMS-C templates: <a href="#">Emergency Medical Services Regulatory Board (EMSRB) / Emergency Medical Services Regulatory Board - Minnesota EMSRB (mn.gov)</a>)</li> <li>• Understand regional transport resources</li> <li>• In case transfer is delayed, plan to provide extended care during a disaster</li> <li>• Hospitals without trauma surgeons should develop a plan with referral hospitals to provide support for inpatient/ continued care if transfer cannot be accomplished (including telephone consultation and potentially telemedicine or other resource linkages)</li> <li>• Define plans for requesting resources from air and ground EMS services. Understand the physical limitations of facility helipad and anticipate excessive demands on external EMS services.</li> </ul>	
<input type="checkbox"/>	<p><b>Add special considerations to the facility Decontamination Plan for individuals with special needs: <a href="#">Specific Populations - CHEMM (hhs.gov)</a></b></p> <p><b>Pediatric:</b></p> <ul style="list-style-type: none"> <li>• Develop a system to keep children with their caregiver during decontamination process, unless medical issues take priority (or teen-aged children decline to shower with parents)</li> </ul>	

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	<ul style="list-style-type: none"> <li>• Assure specifics of supplies and training are addressed</li> <li>• Effects can be intensified in children</li> </ul> <p><b>Individuals with disabilities:</b></p> <ul style="list-style-type: none"> <li>• Develop a system for those who cannot shower on their own or need a caretaker to be in the same shower to help them.</li> <li>• Have a plan to wipe down medical equipment to decontaminate it</li> </ul> <p><b>Pregnant Women</b></p> <ul style="list-style-type: none"> <li>• Considerations for both pregnant woman and fetus are needed</li> <li>• Pregnant women can have different reactions because of pregnancy on the body (increased air breathed per minute, pre-existing pregnancy conditions, etc.)</li> </ul>	
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• Develop a strategy for crisis medical care including management of critical medical supplies. Consider what to potentially stockpile and contingencies for vendor delivery interruption</li> </ul>	
	<p><b>Fatality Management Considerations</b></p> <ul style="list-style-type: none"> <li>• Does your plan include a protocol for managing contaminated decedents, and regional planning for mass contaminated fatalities.</li> <li>• Engage and create a plan with local morticians, coroners, and medical examiners to advise on decontamination and handling of contaminated decedents</li> </ul> <p>Have a plan if the deceased are victims of crime. Bodies may not be able to be decontaminated, resulting in limited storage options.</p>	