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**FVHERC Wisconsin HERC Chemical HAZMAT Health Care Surge Annex**

December 19, 2022

# **Introduction**

## **Purpose**

The FVHERC Hospital Emergency Readiness Coalition provides these guidelines to the region for responding to a chemical medical surge incident. FVHERC has developed this annex to support regional capabilities of health care agencies and facilities and to increase the capabilities of the region and the state. Actions described here are intended to support, not replace, any existing facility or agency policy or plan.

## **Scope**

This annex provides support and guidance to supplement the FVHERC regional emergency response plans. Specifically, it is designed to address the process for which surge patients reach definitive care, as well as communication methods. This annex also works to address relevant capabilities listed in the Hospital Preparedness Program (HPP) and Public Health and Emergency Preparedness (PHEP) grants, of which are listed in the state Emergency Operations Plan (EOP).

## **Background**

A chemical emergency occurs when a hazardous material (HAZMAT) has been released, and the release has the potential for harming people’s health. HAZMATs include substances such as toxic chemicals, fuels, nuclear waste products, and biological, chemical, and radiological agents. HAZMATs may be released as liquids, solids, gases, or a combination or form of all three, including dust, fumes, gas, vapor, mist, and smoke.

## **Planning assumptions**

* Each facility or health care organization should understand expectations specific to them as part of the coalition, especially within the first minutes and hours of a large-scale chemical incident.
* Hospitals may need to shelter in place (or, less likely, evacuate) in response to a chemical release or plume.
* There should be an understanding of the general expectations for EMS and fire and rescue personnel during a chemical incident response that is appropriate to regional resources.
* Hospitals must have appropriate plans, PPE, and equipment to receive and decontaminate patients as self-referral is common.
* On-duty staff will need to quickly evaluate a large number of real versus possible exposures.
* Job aids will be needed to help initiate response, decontamination, and treatment guidance for these uncommon events.
* Specialty consultation (for example, poison control center, regional HAZMAT experts) will be needed quickly to provide specific care recommendations for agent type and magnitude of release.
* Depending on the scale of the chemical incident, establishment of alternate decontamination or screening locations may be required to assess low-risk patients and provide basic decontamination needs.
* There may not be an adequate local supply of specific countermeasures and antidotes for a large-scale chemical emergency.
* Health concerns, prolonged response requirements, fatigue, difficult work environments, and stress may contribute to behavioral health challenges among coalition members and the general public.
* Depending on the scale, severity, and type of chemical emergency, it may be necessary to contract private organizations to assist with large-scale containment and clean-up efforts.

# **Concept of Operations**

## **Management of the chemical surge incident by emergency medical services (EMS) and the local hospital**

A chemical HAZMAT event may occur from any of the incidents listed in the background section of this plan, however, not all chemical HAZMAT incidents may cause a medical surge. Prior to activation of surge activities, the following occurs:

* Patients may present to medical facilities by EMS services or as walk-in to a facility. Patients may seek out medical care for illness or exposure due to a chemical HAZMAT event, injury due to a chemical HAZMAT event, or illness or injury not related to a chemical HAZMAT event.

**Note:** EMS performs decontamination, triage, and stabilization care of patients following normal trauma guidelines and determines the transportation destination of patients based on the chief complaint and local hospital capabilities. EMS, or incident command on behalf of EMS, may contact the Chemical Emergencies and Natural Disasters On-Call Team, HERC, or local and Tribal health department (LTHD) if there are concerns of radiation exposure.

* The local hospital performs decontamination, triage, testing, and stabilization of walk-in and EMS transported patients and determine if there is concern for chemical HAZMAT contamination. Hospitals contact Chemical Emergencies and Natural Disasters On-Call Team, HERC, or the LTHD for situational awareness and subject matter expert support.
* Chemical Emergencies and Natural Disasters On-Call Team, HERC, or LTHD receives a report of a chemical HAZMAT event and conduct normal operations including sharing information with relevant partners. The Chemical Emergencies and Natural Disasters On-Call Team may provide subject matter expertise as needed.
* The local hospital determines if they are capable of handling patient needs without causing stress on their resources or if patients can be transferred to a higher level of care following normal transfer procedures. If neither of these scenarios can be met, a surge event is indicated.

**Note:** Requests for surge support can be made from hospitals, Chemical Emergencies and Natural Disasters On-Call Team, HERCs, or LTHDs. Surge plans may be activated at the local, regional, or state level.

## **Activation of the regional annex**

* **When** to activate: The regional HERC chemical annex may be activated prior to or in reaction to the activation of the state plan.
* **Who** determines activation: The activation of this annex is determined by the HERC coordinator, in consultation with HERC leadership and local and state officials, when reviewing the regional capabilities in either the response to a local incident or due to an activation in another region.

## **HERC roles and responsibilities**

The HERC coordinators may be notified by emergency response agencies, LTHDs, hospitals, or the Office of Preparedness and Emergency Health Care (OPEHC). When requested, the HERC regions support coordination with local public health, health care institutions, and first responder agencies (police, fire, and EMS) to have a uniform and unified response to an emergency. The HERCs support communities before, during, and after a chemical HAZMAT incident. Roles and responsibilities for the HERCs include, but are not limited to:

* Support training efforts of health care organizations.
* Establish and distribute regional plans.
* Communicate with health care systems to understand regional resources and the need for training and resource stockpiles.
* Support communication and coordination efforts of EMS and hospitals as needed.
* Support of the local community by understanding mental health resources for first responders.
* Support or conduct review efforts of the incident and update plans with lessons learned.
* Support the coordination of reimbursement needs.

Add regional-specific information to this section as necessary

Add additional roles and responsibilities as needed

## **Activation of the state plan**

This Medical Surge Annex to the Wisconsin Department of Health Services (DHS) Emergency Operations Plan (EOP) is activated when involved organizations have determined that resources and support are needed to respond to a health care surge. A health care surge is determined by current and forecasted capabilities (such as bed availability, staffing, and supplies) or a hospital to be able to safely conduct patient care. Local and regional resources must be utilized prior to the activation of state and federal resources. The HERCs may activate their regional surge plans as needed.

**Pediatric considerations**

Pediatric patients should be transferred to one of the following:

* American Family Children’s Hospital (level 1 trauma center) in Madison
* Children’s Hospital of Wisconsin (level 1 trauma center) in Milwaukee
* Marshfield Medical Center (level 2 trauma center) in Marshfield for severe traumatic and/or radiation injuries

**Note**: Pediatric patients may need additional follow-up care following a radiation incident as younger persons are more at risk for negative long-term effects of radiation exposure.

## **Communication mechanisms**

There are several communication methods used in the notification process of this plan:

* [**EMResource**](https://www.dhs.wisconsin.gov/preparedness/systems/emresource.htm): EMResource is a tool that health care facilities use to alert and communicate with each other and with their emergency response partners in both an emergency and on a day-to-day basis. The alert isusually initiated by the local facility to alert others of a mass casualty incident. EMResource also allows for polling of facilities to conduct bed capacity counts. Any member of EMResource can register an event, and alerts can be sent to specific facilities, partners in a region, or all state partners.
* [**WISCOM**](https://oec.wi.gov/wiscom/): The Wisconsin Interoperable System for Communications (WISCOM) radio system is a statewide wireless radio-frequency network primarily used for emergency communication between facilities.
* **Additional radio channels**: EMS may use a variety of radio channels to conduct transfer operations on a local or regional basis.
* **Phone**: Traditional phone use (text, email, or call) is used for communication between organizations involved in the response (such as pediatric trauma center, EMS agency, dispatch center, hospital, local and Tribal public health, and HERCs).
* **Secure fax**: Secure fax allows the sharing of medical records between medical facilities.
* **Secure communication platforms**: Communication platforms, such as Zoom or Microsoft Teams, allows for communication between any involved organization.
* [**EMTrack**](https://www.dhs.wisconsin.gov/preparedness/systems/emtrack.htm): EMTrack is a tool that facilitates patient tracking in a variety of patient movement situations. It can be initiated during a prehospital encounter or at a health care facility. It can be used for tracking daily EMS transports, mass casualty incident victims, and facility evacuations, and it supports situational awareness, resource allocation, and family reunification.
* [**eICS**](https://www.dhs.wisconsin.gov/publications/p03141.pdf): eICS is an electronic incident command system that allows organizations to plan for, respond to, and recover from an incident. The platform allows for streamlined incident management, standardized communication, and automated workflows.

## **Logistics**

*Space*

* This section should briefly document regional hospital decontamination capabilities including the number of decontamination stations and showers (fixed or temporary) and estimated throughput per hour.
* This section should also briefly outline community decontamination capabilities, including mobile assets (for example, fire and rescue), potential community sites for mass decontamination (including who controls and/or approves site use and activation), and may consider including additional information such as regional specialty resources for chemical burn care.

*Staff*

* This section should outline the expectations for initial and supplemental hospital decontamination teams and staffing. The usual staffing augmentation plans should apply as per the base plan, including use of supplemental staff.
* This section should also briefly outline fire and rescue assets that could support a hospital decontamination surge and include information on how they can be requested (if not occupied at the site).
* Consider including information on regional chemical information and response assets that may be needed (for example, HAZMAT safety officers, toxicologists, poison control, industry hygienists, or CST).
* Consider how regional Hazardous Materials Safety Assistance Teams (HMSAT), the Agency for Toxic Substances and Disease Registry (ATSDR) emergency response teams, or environmental health agency assets can be integrated and/or utilized (if available).

*Supplies*

This section should summarize the equipment and resource expectations of member health care facilities relevant to a chemical incident, and coalition-level strategies to ensure adequate supply levels and availability. This section should include coalition-level resource inventory management strategies for accessing, mobilizing, storing, and distributing specialized supplies as relevant (for example, CHEMPACK). This section should:

* Document baseline chemical PPE for EMS and hospitals in the coalition as appropriate per previously listed assumptions.
* Define baseline preparedness threshold levels of supplies for hospitals as appropriate (for example, PPE, countermeasures) and/or list the locations and contents of hospital-based caches.
* Define baseline EMS agency supply expectations for HAZMAT response and patient treatment.
* List current local or state countermeasure and stockpile data relevant to your area.
* Ensure stockpile and materials release, distribution, replenishment, and sharing policies are clear (for example, who gets what, when, and how).
* Include plans and protocol for accessing and distributing CHEMPACK resources. Ensure the coalition is familiar with how to engage the state to make additional requests.
* Document additional decontamination supplies (for example, dry decontamination kits, wet decontamination equipment, privacy shelters, containment materials).

## **Special considerations**

*Access and functional needs/mental and behavioral health*

* Patients with behavioral health and/or access and functional needs are supported by resources of EMS and hospitals as needed. EMS agencies and hospital facilities should train and prepare to care for these patient populations. These resources include considerations for providing culturally competent services and services through the lens of trauma-informed care.
* Call lines may be established to support mental health coordination needs during and following an incident. This resource may be used to support primary care systems which may experience a surge for mental health support following an incident.
* Efforts are taken and supported by Wisconsin state organizations—such as the Department of Children and Families, Office of Children’s Mental Health, and Resilient Wisconsin—to provide mental health support and family support services.
* Family reception and reunification centers provide local mental and behavioral health services.
* Crisis counseling is available from the [SAMHSA grant](https://www.samhsa.gov/dtac/ccp) following the declaration of a disaster as part of the Wisconsin Community Action Program (CAP). There are also trained permanent crisis counselors in CAP and other non-profit organizations that supplement social services and can be placed without the SAMHSA grant.
* There are ongoing efforts to improve health care worker resiliency by offering mental health trainings and debriefing sessions.

**Combined injuries**

Combined injuries can be any combination of traumatic, burn, radiological, and/or chemical injury in adults or pediatrics. Combined injuries significantly increase the mortality of patients and are better served at trauma and specialized centers depending on the severity.

Triage done by EMS on site of the incident is conducted by traditional trauma triage guidelines. *The lesser of the combined injuries are considered during a secondary triage conducted by a hospital.*

## **Training**

Hospitals, EMS, and other first responder agencies should have plans and conduct trainings for the management of mass casualty incidents.

It is recommended that leadership of hospitals, EMS, and first responder agencies review their organization’s need for chemical HAZMAT-specific training. The following courses are educational resources for radiation surge and disaster events:

* [Advanced HAZMAT Life Support (AHLS)](https://www.ahls.org/site/)
* [Hospital Emergency Response Training](https://cdp.dhs.gov/training/course/PER-902)

## **Tracking**

Tracking and reunification efforts are conducted by EMS, hospitals, and local officials. Mass casualty tracking and reunification efforts may not be needed for every incident. However, the use of tracking platforms, such as EMTrack, may still be used.

Wisconsin Admin. Code ch. DHS 110 requires EMS agencies to have a mass casualty plan that includes a mechanism for patient tracking. The EMTrack platform is recommended for use, however, agencies may use any alternative means of tracking that includes real time situational awareness in order to assist other partners who are involved in reunification efforts.

EMTrack may be used by EMS, hospitals, and local officials for patient tracking. Patient information is entered into the system by providers and allows for approved administrators to track where patients are located during planned or unplanned events.

Reunification can be conducted at a hospital or local reunification center. Hospitals and LTHDs follow their own procedures for properly sharing patient information with loved ones.

## **Deactivation**

The deactivation of this annex occurs when the incident de-escalates to a point when hospitals are no longer experiencing or forecasting chemical HAZMAT-related medical surge.

* **Responsible party**: The official deactivation of the regional annex is conducted by the HERC in consultation with hospitals, the LTHD, and OPEHC.
* **After action operations**: Upon deactivation, the incident may still continue at what is considered a normal operational level.
* **After action review**: Following deactivation, a review of the incident is conducted to inform future planning and training needs.

**Appendices**

## **Acronyms**

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| **Acronym** | **Term** |
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## **Additional resources**

[links as seen fit]

**Local response**

[flow chart of local response, if desired]