



# State Health Care Coalition Chemical Surge Annex

Louisiana ESF-8 Health & Medical Preparedness and Response  
Network Coalition

May 2024

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## Approval and Implementation

The following signatures hereby approve this plan. The ESF-8 Chemical Surge Annex is effective immediately and supersedes previous instruction and guidance.

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## Record of Distribution

Louisiana ESF-8 and HPP Team is responsible for the distribution, tracking, and revision of this plan.

Date	Recipient	Platform
MM/DD/YYYY	[Organization/Entity]	[Method of Distribution]

## Record of Changes

Louisiana ESF-8 maintains the HCC Radiologic Surge Annex as a living document intended to be annually reviewed and revised, with input from stakeholders.

Date	Description	Pages
MM/DD/YYYY	[Description of Change]	[Pages Effected]

## Training, Exercise, and Engagement Activity

Louisiana ESF-8 Network is committed to ongoing training, exercise, and engagement for the HCC Radiologic Surge Annex to validate public health and healthcare capabilities in the state of Louisiana.

Date	Activity Summary	Parties Involved	Entry Made by

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## Introduction

A chemical emergency may be defined as an event where a release of one or more hazardous chemicals occurs, which could harm human health and the environment. During such events, a surge of injured and uninjured patients with varying degrees of exposure uncertainty may present to hospitals and/or community reception sites. This Chemical Surge Annex provides the Emergency Support Function-8 (ESF-8) network of state and regional healthcare coalition (HCC) leads with a framework of response considerations along with an understanding of the actual risks and complexities that accompany a chemical emergency. This document will aid the ESF-8 network in guiding response efforts of hospitals and Emergency Medical Services (EMS) agencies during surge events for carrying out essential core functions of providing accurate information and assisting in resource coordination.

This plan is intended to outline the range of health impacts that may be experienced by patients from a chemical emergency. In some plausible scenarios where exposure has been validated, the clinical guidance and treatment for patients may be relatively simple or there may be no treatment and basic decontamination is all that is necessary. On the contrary, some chemical emergencies which occur in concurrence with other incidents or hazards will trigger a more in-depth clinical response – ex. explosions involving chemicals prompt prioritized treatment of traumatic injuries, or exposure to hazardous chemicals initiates more extensive decontamination and a need for increased healthcare worker protective measures. Lastly, large scale chemical emergencies with the potential to present multi-casualty incident (MCI) and long-lasting health impacts will involve a host of different federal and state response agencies and subject matter experts. Other state and federal plans may be activated during such incidents. Regardless of the event size or scale, the hospital(s) operations may be significantly interrupted or overwhelmed during a response. Thus, an effective and coordinated effort by the ESF-8 network of coalitions and partners is paramount.

## Purpose

This annex is a supplemental document to the *State ESF-8 Network Coalition Response Plan* and provides guidance to support a response to a chemical incident resulting in a surge of patients into the Louisiana acute healthcare systems. This plan identifies subject matter experts, existing response procedures, and specialized resources available to HCCs and the state to support response to a chemical incident which may impact a community and the overall healthcare system. The goal is to share quality information and guidance with medical experts treating patients exposed to dangerous amounts of hazardous chemicals as well as manage clear messaging to the public to prevent unnecessary fear and confusion. Individual healthcare facilities within HCCs are encouraged to develop more detailed policies and procedures that support individual operations and may reference this document to assist with their institutional planning for chemical emergencies.

## Scope

This plan applies to all participating ESF-8 healthcare coalitions, organizations and agencies contained within the geographical boundaries of Louisiana. Key stakeholders and response partners referenced span from each level of governmental agency and partner organizations – federal, state, regional, tribal and local jurisdictions, along with healthcare facilities. This plan outlines the most critical response procedures necessary for a coordinated response to a chemical incident including notification and information sharing for situational awareness, medical considerations for first responders and emergency departments, and response partner roles and responsibilities.

## Overview

### Louisiana ESF-8 Health & Medical Preparedness and Response Network

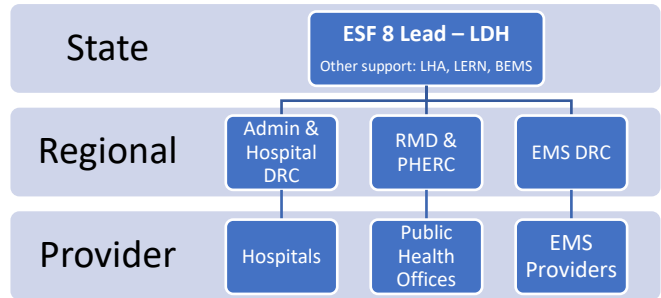
The Louisiana ESF-8 Health & Medical Preparedness and Response Network Coalitions prepare, plan, coordinate, and facilitate emergency support to public health and medical emergencies. This network is primarily anchored in emergency preparedness and response functions with the ability to incorporate other subject matter experts and industries as the event moves through different stages of response.

The Louisiana ESF-8 Network is organized into nine regions that span 64 parishes. Each region is comprised of a continuum of resources ranging from designated Trauma hospitals, Tier 1 and Tier 2 hospitals, Primary Care, Federally Qualified Health Centers (FQHCs), Public Health Units, outpatient clinics, psychiatric facilities, rehabilitation and long-term facilities, and EMS services. Louisiana's hospitals provide various levels of care to meet the immediate medical needs of citizens every day and during disasters. A classification system of hospitals was identified based on capabilities provided. Hospitals serve voluntarily as

one of three levels: Designated Regional Hospitals (DRH), Tier 1 Hospitals, and Tier 2 Hospitals. For more information about the ESF-8 structure, reference the [Louisiana ESF-8 Network Coalition Plan](#).

### Regional Healthcare Coalition

Each of the nine regions of Louisiana contains regional ESF-8, health and medical response partners who work in coordination and collaboration with one another. These healthcare coalitions are led by designated regional coordinators (DRCs) who assist with planning and response; ensuring objectives align with individual local providers as well as other health and medical industry partners.



### Chemical Risk Assessment

According to the [2020 Louisiana Rail Plan](#), Louisiana ranks second in the nation in the primary production of chemicals. South Louisiana, often referred to as the “chemical corridor”, is known for its chemical manufacturing and generous supply of natural gas and petroleum. The 200 miles from New Orleans to Lake Charles is home to hundreds of facilities and refineries that produce billions of dollars’ worth of product every year.

There are over 100 chemical plants located in the state producing a variety of “building block” chemicals, fertilizers, and plastics, plus the feedstocks (chemical precursors to industrial chemicals) for a wide array of other products. This makes chemicals the most exported commodity for the state, and there is a prediction of this growing at 2.8% by 2038.

While chemicals pose a huge risk to Louisiana, the state has a greater exposure to an oil spill than any other state. Louisiana Offshore Oil Port receives roughly fifteen percent of the oil that is imported into the United States. This does not include the massive number of pipelines, production platforms and inland barges that move oil through the state’s waterways. Louisiana is home to several of the world’s largest refineries that move oil on the highways and railroads. This causes a large amount of oil to be stored or transported in heavy tanker trucks and railcars.

Hazard Vulnerability Analysis (HVA) findings for Louisiana hospitals do not rank chemical or external hazardous materials (hazmat) exposure events high overall, particularly in comparison to internal hazmat events. Of the roughly 80% of Tier 1 hospitals surveyed in 2023 by the Louisiana Hospital Preparedness Program (HPP), approximately half reported that this type of incident is a high probability in their facility HVA. However, the States’ Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP) Threat and Hazard Identification and Risk Assessment (THIRA) outlines a hazmat release-chemical hazard as a finding such as a cyber-attack on utilities resulting in a secondary hazmat incident.

### Louisiana Sources & Prevalence

Within Louisiana, chemicals are made, transported, and stored across the state. According to the Louisiana Chemical Association’s [2018 Economic Impact Report](#), chemicals are Louisiana’s third largest export to the rest of the world, shipping \$9.7 billion (16% of total production in the state) in chemical products to other parts of the world in 2017. Petroleum and agricultural products are #1 and #2. Listed below is information about the ways that this state moves these chemicals.

### Railways

*(Information found in the 2020 Louisiana Rail Plan)*

- The rail system in Louisiana comprises 2,746 route miles which are owned by 19 freight railroads. Six of these railroads are categorized as Class I railroads (large railroads) and own a total 2,350 route miles or 86% of the total rail mileage in the state. Chemicals and Allied Products comprised 20% of the total carloads, followed closely by Hazardous Materials, Coal, and Food or Kindred Products.

Inbound Rail Freight Traffic (measured in carloads)	
Chemical and Allied Products	70,759 (13%)
Hazardous Materials	87,911 (16%)
Petroleum or Coal Products	9,840 (2%)

Outbound Rail Freight Traffic (measured in carloads)	
Chemical and Allied Products	162,805 (27%)
Hazardous Materials	134,004 (22%)
Petroleum or Coal Products	20,796 (3%)

## Waterways/Ports

*(Information found in the 2016 Marine Transportation System Booklet)*

Louisiana leads the nation in the amount of tonnage that travels the waterways throughout the state. This is because Louisiana has deeper channels that lead to the Gulf of Mexico which allows products to be brought to ports closer inland. Then the products can be transported on the inland waterways across the state and beyond.

- Waterways
  - Deep Draft
    - Lower Mississippi – 255.8 miles; this connects the Gulf of Mexico to Baton Rouge, LA and is the largest and longest deepwater terminal in America.
      - 11% of America’s petroleum refineries are located on this waterway.
      - The “Chemical Corridor” between Baton Rouge and New Orleans is along this waterway.
    - Calcasieu River Ship Channel – 35 miles; this connects the Gulf of Mexico to Lake Charles, LA.
      - 85% of the tonnage on the channel is energy cargo, i.e., natural gas.
  - Coastal
    - Gulf Intracoastal Waterway (GIWW) – 306 miles in Louisiana, 1300 miles total from Texas to Florida.
      - Serves as a supply route for oil, gas, offshore platforms, and chemical industries.
    - Houma Navigation Canal & Bayou Lafourche – combined 91 miles (36 & 55); connects the GIWW to the Gulf of Mexico.
      - Around 250 oil and gas related businesses located on this waterway.
      - The commodities commonly barged are the liquid bulk commodities such as oilfield fluids, heavy waters (CaCl<sub>2</sub>), cement, and fuel.
  - Inland
    - Atchafalaya River & Morgan City/Port Allen GIWW – combined 185.1 miles (121 & 64.1); The Atchafalaya is a distributary of the Mississippi and Red Rivers and flows to the Gulf of Mexico. The Morgan City/Port Allen GIWW Route connects the Mississippi River with the GIWW in Port Allen then flows into the Atchafalaya River just north of Morgan City, LA.
      - Serves as a short cut to relieve traffic on the Mississippi River from Baton Rouge, LA to New Orleans, LA. This allows products to move quickly to the GIWW.
    - Ouachita-Black Rivers – 332 miles from the Arkansas border; The Ouachita River flows out of SE Arkansas, turns into the Black River when it merges with the Tensas River, then joins the Red River east of Alexandria.
      - The commodities commonly transported are fertilizer, petroleum, and agriculture products.
    - Red River (J. Bennett Johnston Waterway) – 236 miles; Flows out of SW Arkansas down to the Atchafalaya River.
      - With NW Louisiana’s growing manufacturing industry, this waterway serves as a raw material route for auto/ship fabrication, specialty paper products, and consumer goods.
    - Shallow Draft Mississippi River (above Baton Rouge, LA) – 275 miles; this connects Baton Rouge, LA to the Ohio River.
      - This waterway is a vital part of world trading as it allows the deep-water ports to be connected to the “US Heartland.” One of the largest industries on this waterway is fertilizer.

- Ports

- Louisiana has 32 active ports within the state.

\*Note that by legislation Louisiana has 42 ports

- Lower Mississippi – 5 ports; 4 of the 5 are in the top 15 tonnage ports in the US.
  - Port of South Louisiana is the second largest tonnage port in the Western Hemisphere and has 9 major chemical plants within its borders.
- Calcasieu River Ship Channel – 1 port: this port is becoming one of the largest exporters of natural gas.
- Louisiana Offshore Oil Port (LOOP) – the only deep-water port in the US. 18 miles off the Louisiana coast, LOOP handles 13 percent of the nation's foreign oil, and connects by pipeline to 35 percent of the US refining capability.
- Gulf Intracoastal Waterway (GIWW) – 9 ports in Louisiana; the GIWW allows for Louisiana and Texas – the producers of 80% of American's chemicals and petrochemicals – to transportation materials affordably.
- Houma Navigation Canal & Bayou Lafourche – 2 ports; Port Fourchon is the largest supply base in the country for off-shore oil and gas industry. 95% of the tonnage of this port is oil and gas related.
- Inland Waterways – 14 ports; nearly 50% of all American markets are accessible by barge through the inland waterway ports.

### Plants/Pipelines

There are more than 300 facilities in Louisiana that produce various types of chemicals and/or forms of energy. Listed below are the noteworthy facilities or companies that are used for planning purposes.

- Chemical plants

- Dow Chemical, which has several campuses across Louisiana, produces more than 50 chemicals that range from household goods to pharmaceuticals.
- Shell Chemical in Geismar, LA, will soon be the largest single-site manufacturer of the chemicals called linear alpha olefins (found in polyethylene plastic for packaging and industrial oils and drilling fluids) in the world.
- BASF's largest manufacturing site in North America is in Geismar, LA. This site produces chemicals for electronics, insulation, pharmaceuticals, personal care products, and many more.
- Cornerstone Chemical Co. Plant in Jefferson Parish is a producer of hydrogen cyanide.
- Lake Providence, LA, is home to Myriant's first commercial facility to produce bio-derived succinic acid, which can be found in foods, clothing, and household products.
- Drax Biomass, located in Bastrop, LA, converts the wood waste from their forestry byproducts into pellets to be used as a cleaner alternative for coal-fired power generation around the world.
- NFR BioEnergy in White Castle, LA, is converting sugar cane waste into bagasse, a solid energy pellet, to be used in power generation as well.

- Oil refineries/natural gas

- ExxonMobil's site in Baton Rouge is the only site in the world where every chemical product in their portfolio is manufactured. It includes a refinery, a chemical plant, and a lubricants production facility.
- Southwest Louisiana is home to two of the fastest growing natural gas sites in the world, Salsol's Lake Charles Chemical Complex and Cheniere Energy.
- Venture Global is constructing liquid natural gas (LNG) facilities in both Cameron and Plaquemines parishes.

- Pipelines

- Louisiana has more pipelines than any other state in the Continental U.S. These pipelines transport crude oil, natural gas, hydrogen, and other refined products.
- Calumet Specialty Products largest refinery is in Shreveport and produces lubricating oils and waxes, gasoline, diesel, jet fuel and asphalt.

Chemical sources – outlined in *Appendix A*.

## Incident Types

The ESF-8 network, hospitals, EMS providers, regional coordinators, and state partners should plan, educate, train and exercise for an event based on the information presented in this section.

Chemicals of Concern outlined in the 2022 Lunch and Learn series offered by the Louisiana Poison Center and 62<sup>nd</sup> Weapons of Mass Destruction (WMD) – Civil Support Team (CST) to all of the ESF-8 Network:

- Ammonia
- Nitrogen Fertilizer
  - ANFO - Ammonium nitrite and fuel oil
- Phosgene
- Cyanide
- Hydrazine
- Fentanyl

Hazmat releases occur at either fixed facilities or may be transportation related. These incidents can be characterized as accidental or intentional (terrorism). More hazmat incidents, injuries, and fatalities occur in fixed facility incidents rather than transportation-related incidents; however, this plan accounts for response concepts for any plausible location and scenario.

- Fixed Facilities
  - Refineries
  - Manufacturing
  - Chemical Plants
  - Warehouses
  - Business
  - Homes
- Transportation-related
  - Railway
  - Highway
  - Shipping (waterways)
  - Pipelines
  - Air transportation
- Terrorist Attacks
  - Chemical terrorism is the use or threatened use by non-state actors of toxic chemicals with the intent to cause injury, death, economic destruction, or area denial, for political, religious, or ideological reasons. (Blackmail involving toxic chemicals is a form of chemical terrorism.)
  - Chemical weapons precursors are widely available due to the globalization of the chemical industry, which requires many of the same chemicals and industrial processes for peaceful applications as are used in chemical warfare.
- Newly emerging threats have been identified by industries and Critical Infrastructure Security Administration (CISA). These may be linked to terrorism or may simply be security threats.
  - Cyber incidents directed at chemical industries or critical utilities systems, such as water, communications, or power, which may affect operations at sites resulting in a chemical/hazmat incident.
  - Drones flying over sites considered to be a security threat.

## Assumptions

### Chemical Exposure Incident

- Inhalation is the most common hazmat exposure route due to airborne gases, vapors and/or aerosols.
- The most common fatal hazmat injuries are related to trauma followed by thermal burns and airway obstruction and/or respiratory failure.
- Hazmat incidents occur in the community and inside the hospital.
- Internal hazmat incidents are the 2<sup>nd</sup> most frequent reason for hospital evacuation (Sternberg L. et al, PDM 2004).

- Joint Commission accredited hospital are required to maintain an all-hazards emergency management plan that may be activated during response to a chemical incident.
- Federal, state, and local emergency resources will all be needed simultaneously for large scale events.
- The roles and responsibilities of organizations may change depending on the size and scope of an incident and the impacted jurisdictions.

#### Chemical Plant Release Incident

- Privately owned facilities have their own emergency operations plans.
- Response to chemical plant release may involve specified agencies, response partners and pre-identified hospitals and EMS agencies who are already familiar with plans and response roles.
- Communities surrounding these sites will expect clear direction and guidance from local and state authorities along with site officials.
- Evacuation and sheltering in place planning to prevent/limit exposure is the primary course of action for protecting the public.
- Response to a chemical incident may not be an emergency that would lead to a Presidential Declaration to activate the Stafford Act, resulting in a lack of FEMA emergency funding and reimbursement.
- Chemical plants have safety protocols in place for drone activity.
- Chemical plants are required to possess a public alert and warning system to advise the public of issues/ incidents / information.

## Concept of Operations

### Activation and Notification

This plan may be activated during any event in which a chemical exposure has occurred requiring the evaluation and treatment of patients in the field or a hospital. Suspected incidents of potential exposure to many citizens may also trigger the activation of this plan. Each ESF-8 HCC maintains a regional preparedness and response plan that outlines additional notification methods and triggers for activation of response plans.

Chemical plants and oil refineries work closely with their local communities to ensure that life and property are the top priority if an incident occurs. These facilities have their own emergency operations plans (EOP) which may include local and state agencies' roles and responsibilities that are not listed below. This includes any hospital and healthcare facility. If an incident occurs at a facility, the facility will follow their own EOP before reaching out to local and state governments for assistance.

- Exposure
  - For a chemical exposure, the public and healthcare providers can call the 24/7 Louisiana Poison Control Hotline. The hotline is staffed with specially trained nurses, pharmacists, and physicians to provide guidance and advice to chemical exposures.
  - Local, state, or federal law enforcement will provide notification of credible terroristic or malicious threats.
    - For credible terroristic or malicious threats, the Domestic Emergency Support Team (DEST) will provide guidance and support to the Federal Bureau of Investigation (FBI).
- HazMat incident
  - Responders – fire, EMS, hazardous materials (HazMat) teams, and hospital ED staff – are required to call the LSP HazMat hotline of suspected chemical emergencies.
  - Local notification of an incident is required to go to the Local Emergency Planning Committee (LEPC).
  - Louisiana State Police (LSP) is the lead entity for activation of state plans and notification of a chemical incident.
  - Local, state, or federal law enforcement will provide notification of credible terroristic or malicious threats.
  - LDEQ will be notified to provide environmental monitoring when a call has been made to the LSP HazMat hotline.
- Oil Spills
  - In an oil spill event, the law requires that the responsible party needs to call the LSP Hazmat hotline and the National Response Center hotline.

- Louisiana Oil Spill Coordinator’s Office (LOSCO) coordinates the state’s oil spill response efforts and, in accordance with National Contingency plan (40 CFR 300) works closely with the responsible party and the appropriate state and federal agencies during oil spill events.

For incidents prompting broad notification to health and medical partners in a specific jurisdiction or region, the state’s ESF-8 portal will be used to disseminate mass notification. During larger chemical incidents involving patients or a potential for patients, i.e. MCIs, the local 911 call centers notify LERN Communications Center. Through LERN Communications Center, the mass notifications to ESF-8 partners in the impacted region(s) will be continued throughout the duration of the event. LERN Communications Center may assist with obtaining and sharing safety data sheet (SDS) for chemicals involved to notify first responders and first receivers. They escalate notification beyond regions for events where response resources may be stretched so mutual aid may be requested and patients may be moved beyond the immediate impacted area. Supplemental notification and resources may be supplied through the ESF-8 Portal Messaging platform as well as through the DRC network. Reference *ESF-8 Network Coalition Response Plan* and the *ESF-8 Communications Annex*.

### Coordination and Situational Awareness

The entities and partners outlined in the *Roles and Responsibilities* section include notable agencies with a response role who will be an integral part of coordination. Some of the organizations outlined have a more forward-facing planning and response role, while others listed have a more secondary role in response, based on the event type. The ESF-8 Network will work with GOHSEP, state agencies, and experts to obtain credible information and guidance that should be shared with health and medical partners and used to inform HCC member response efforts. State ESF-8 Network Response Plan and HCC Response Plans outline specific methods that may be used to maintain situational awareness and coordination.

### Roles and Responsibilities

Partner		Planning & Response Roles
Individual HCC members	Hospitals	<p>Tier 1 Hospitals</p> <ul style="list-style-type: none"> <li>• Maintain all-hazards response plans which include the risk assessment of a chemical incident and an emergency operations plan which outlines key response strategies.</li> <li>• Emergency Department physicians may play a critical role in helping to respond and provide accurate information to patients and the public.</li> <li>• Track patients received from an incident and share pertinent information with local, state or federal officials as requested.</li> <li>• <i>Appendix D</i> outlines survey results from a Hospital Preparedness Program survey conducted of Louisiana Tier 1 Hospital Chemical Readiness and Capabilities in September 2023.</li> </ul> <p>Tier 2 Hospitals</p> <ul style="list-style-type: none"> <li>• Maintain all-hazards response plans which may include responding to internal spills/chemical or toxic substance exposures; however, their role in community response may be limited.</li> <li>• These facilities may be requested to support with off-loading patients from Tier 1 facilities for large scale events.</li> </ul>
	EMS	<ul style="list-style-type: none"> <li>• Utilize ICS and follow scene management and notification protocols.</li> <li>• EMS agencies coordinate with hospitals, local officials on scene and incident command to understand the situation, exposure risks of patients, triage protocols and protection methods.</li> <li>• Some EMS agencies may have access to detection equipment through their local Fire Department and Hazardous Materials (HazMat) teams.</li> </ul>
	Parish Offices of Homeland Security and Emergency Preparedness (OHSEP)	<ul style="list-style-type: none"> <li>• Supports and maintains awareness of multi-agency response.</li> <li>• Provides situational awareness and assists with logistical support to ESF-8/health and medical response function of local HCC members and providers.</li> <li>• Understands the chemical risks in their communities and participates in required, graded exercises when relevant to their jurisdiction.</li> <li>• Disseminates pertinent and timely information with the public by way of joint communication.</li> </ul>

Partner		Planning & Response Roles
Regional HCC Leads	ADRC/Hospital DRC	<ul style="list-style-type: none"> <li>Engage in regional and local exercises of plans.</li> <li>Initiate and/or support mass notification to HCC members.</li> <li>Communicate and coordinate with DRC network inside and outside of the region to monitor the situation and identify available resources to support surge strategies.</li> <li>Understand decontamination capabilities of various hospitals in the region.</li> <li>Advise hospitals on seeking subject matter expertise, guidance and detection and protection resources.</li> <li>Assist with coordinating patient placement and patient tracking from an incident with multiple hospitals involved.</li> </ul>
	EMS DRCs	<ul style="list-style-type: none"> <li>Ensure communication among jurisdiction response partners, first responders and healthcare facilities if patient movement is necessary.</li> <li>Assist with coordinating patient tracking from scene to hospital(s).</li> <li>Request support for surge at field treatment sites, including request for additional supplies, equipment, and PPE.</li> </ul>
	Public Health Emergency Response Coordinator (PHERC) & Regional Medical Director (RMD)	<p>Under guidance and direction of local and state officials, along with LSP among other SME's, carry out the following functions:</p> <ul style="list-style-type: none"> <li>Assist with carrying out local or regional sheltering operations if warranted, under guidance and recommendation of local/state officials, LSP or other industry partners.</li> <li>Support established procedures at community reception sites pertaining to detection, screening, monitoring and point of dispensing if warranted.</li> <li>Coordinate communication and information sharing by providing guidance to businesses, non-acute healthcare entities and the public about risks and protective actions.</li> </ul>
	GOHSEP Regional Coordinator(s)	<ul style="list-style-type: none"> <li>Coordinate resource requests with Parish OEPs as local capabilities are exceeded.</li> <li>Maintain situational awareness and share information with state EOC as needed.</li> <li>Assist with joint communication to local jurisdictions and parishes to aid in providing consistent information to the public.</li> </ul>
	Local Emergency Planning Committees (LEPC)	<ul style="list-style-type: none"> <li>Review emergency management plans once a year, or more frequently as circumstances change in the community, or as any facility may require.</li> <li>Ensure SDS are available, and Tier II Reporting is submitted to the LSP.</li> <li>Establish procedures for receiving and processing requests from the public for information.</li> <li>Receive from each subject facility the name of a facility representative who will participate in the emergency planning process.</li> <li>Be informed by the community emergency coordinator of hazardous chemical releases reported by owners or operators of Regulated Facilities.</li> <li>Be given follow up emergency information as soon as practical after a release that requires the owner/operator to submit a notice.</li> <li>Receive from each facility a chemical specific SDS, and upon request, make the SDS available.</li> <li>Respond to Tier II information requests no later than 45 days after receipt of the request.</li> </ul> <p>The LEPC may commence civil action against an owner or operator who fails to provide required information.</p>
State Response Partners	LDH/ESF-8	<p>ESF-8 Network</p> <ul style="list-style-type: none"> <li>Maintain situational awareness and support notification to external ESF-8 partners.</li> <li>Receive resource requests for surge supplies including but not limited to PPE, detection equipment, subject matter expertise, etc.</li> <li>Make formal requests for support or resources from other state agency partners, external state support (EMAC) or federal support when necessary.</li> <li>Office of Public Health may activate the LDH EOC.</li> <li>The OPH maintains the CHEMPACK, SNS, and POD plans.</li> <li>Bureau of Media and Communications (BMAC) may assist with dissemination of critical information.</li> </ul>

Partner	Planning & Response Roles
Louisiana Emergency Response Network (LERN)	<ul style="list-style-type: none"> <li>• Maintain the State's <i>Framework for Mitigating Crisis Environments, Crisis Standards of Care Guidance and Resources</i> which may be activated in response to large events.</li> <li>• Manages the 24-hour LERN Communications Center which may assist with sending ESF-8 portal messaging and broad notification of hazardous material related events to Hospitals and EMS partners across a region or the state.</li> <li>• Maintains event specific protocols including burn, trauma, and mass casualty incidents which may be activated prompting coordination with trauma centers and EMS agencies.</li> <li>• Uses the ESF-8 portal to maintain awareness of hospital capabilities and capacities and can assist with patient routing from scene of an incident to appropriate facility.</li> <li>• Manages the state Tactical Operations Center (TOC) during large scale events where surge ambulances may be activated for response.</li> </ul>
Louisiana OPH – Laboratory Response Network for Chemicals (LRN-C)	<ul style="list-style-type: none"> <li>• Louisiana OPH maintains a Laboratory Emergency Preparedness and Response program that oversees a 24/7 LRN-C level 3 capable lab (part of CDC network - see CDC section) for clinical specimens.</li> <li>• Responsible for training, outreach, clinical specimen collection guidance, and shipment.</li> <li>• Assist with development of coordinated response plans for state and regions.</li> <li>• Assist with specimen collection by advising hospitals in clinical specimen collection, storage, and shipment.</li> </ul>
Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)	<ul style="list-style-type: none"> <li>• Partner with LSP to conduct statewide planning with all chemical sites, parishes, and appropriate agency or Emergency Support Function (ESF) leads.</li> <li>• Activate the emergency operations center (EOC) and make formal state declaration and request federal declarations if necessary.</li> <li>• Establish joint information center with all relevant response partners and agencies.</li> <li>• Responsible for rail security which is identified in the Critical Infrastructure Protection Plan</li> </ul>
Louisiana National Guard (LANG)	<ul style="list-style-type: none"> <li>• Weapons of Mass Destruction (WMD) - Civil Support Team (CST) provides support to civil authorities at a domestic Chemical, Biological, Radiological and/or Nuclear incident site by identifying CBRN agents/substances, assessing current or projected consequences, advising on response measures, and assisting with appropriate requests for additional follow-on state and federal forces; provide hospital decontamination training for CBRN incidents.</li> <li>• LANG maintains a specialized trained Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Enhanced Response Force Package (CERFP) that can respond as requested to events where patient decontamination, emergency medical services, and field triage and treatment may be warranted.</li> <li>• The CERFP medical element may be requested through GOHSEP and The Adjutant General (TAG) to support response in the field or augment at a hospital</li> </ul>
Louisiana Department of Environmental Quality (LDEQ)	<ul style="list-style-type: none"> <li>• Responds to chemical and oil releases in Louisiana on a 24/7 basis.</li> <li>• Provides environmental monitoring through air monitoring, water sampling and soil sampling.</li> <li>• Provides community air monitoring for public health and public safety.</li> <li>• Plans and provides guidance during chemical spills and serves as technical support for other responding agencies.</li> <li>• Provides oversight of the disposal of all waste generated during an incident.</li> <li>• Establish roles and responsibilities for cleanup activities.</li> <li>• Participates in state exercises and facility drills throughout the state.</li> </ul>
Department of Natural Resources (DNR)	<p>Administers a regulatory program to prevent waste of oil and gas, to conserve the natural resources of the State, to prevent the drilling of unnecessary wells and to protect the correlative rights of mineral owners through the application of State laws, rules, regulations, and policies of the Office of Conservation.</p> <ul style="list-style-type: none"> <li>• Implements two major federal environmental programs which were statutorily charged to the Office of Conservation: the Underground Injection Control (UIC)</li> </ul>

Partner	Planning & Response Roles
	<p>program with federal oversight from the Environmental Protection Administration (EPA) and the Surface Mining Program with federal oversight from the U.S. Department of the Interior, Office of Surface Mining.</p> <ul style="list-style-type: none"> <li>Regulates the intrastate pipeline operators to ensure safety and compliance as authorized under the Federal certification process found in Chapter 601, Title 49 of the United States Code.</li> <li>Regulates the intrastate natural gas pipeline network under the Natural Resources and Energy Act of 1973, Act 16 of the 1973 Extraordinary Session of the Louisiana Legislature.</li> </ul>
Louisiana Poison Center (LPC)	<ul style="list-style-type: none"> <li>Manages the 1-800 poison hotline and provides the subject matter guidance on reported and suspected exposures to poisons, chemical and other hazardous materials.</li> <li>Oversees the Louisiana CHEMPACK distribution program.</li> <li>Provides training, such as Advanced HazMat Life Support (AHLS) to clinicians and health and medical response partners statewide.</li> </ul>
Louisiana State Police (LSP)/Louisiana Oil Spill Coordinator's Office (LOSCO)	<p>LSP</p> <ul style="list-style-type: none"> <li>Agency responsible for HazMat incident notification and coordination; includes managing the 24-hour HazMat hotline.</li> <li>Coordinates with local and federal law enforcement agencies.</li> <li>Coordinates response with all state, federal, and HazMat partners.</li> <li>The Louisiana State Police's Emergency Services Division of the Transportation and Environmental Safety Section (TESS) provides Level A response capabilities.</li> <li>Participate in state exercises and engages in state planning activities.</li> <li>Plans and provides guidance during response and lead coordinating entity for HazMat incidents that impact the State of Louisiana.</li> <li>Responsible for updating state HazMat plans and procedures related to response to HazMat incidents that impact Louisiana.</li> <li>Department secretary engages in Unified Command group with GOHSEP Director and Governor and provides protective action recommendations to the parishes.</li> </ul> <p>LOSCO</p> <ul style="list-style-type: none"> <li>Coordinates the state's oil spill response efforts and works closely with the appropriate federal agencies during oil spill events to ensure cleanups are properly completed.</li> <li>Works with state, federal, and industry partners to develop regional and area oil spill contingency planning tools, including alternative response technologies.</li> <li>Assists in planning, trains for, and participates in oil spill drills, some of which are conducted as tabletop exercises, and some of which require companies and federal, state, and local government agencies to send employees and equipment into the field.</li> <li>Maintains the Louisiana Oil Spill Management System (LOSMS), a public database with up-to-date information on oil spill response and NRDAs, LOSCO managed NRDA restoration funds, restoration project submittal, and outreach.</li> <li>Administers the Louisiana Regional Restoration Planning Program (RRP Program), which identifies the statewide Program structure, decision making process, and criteria used to assist the NRDA trustees in selecting restoration projects to be implemented to compensate the public for the natural resources and services injured by a given oil spill.</li> <li>Responds to oil releases in Louisiana on 24/7 basis.</li> <li>Participates in exercises and facility drills throughout the state.</li> </ul>
Louisiana Dept of Transportation and Development (LADOTD)	<ul style="list-style-type: none"> <li>Offer transportation resources when requested for people without vehicles during an evacuation.</li> <li>Partners with LSP to manage and monitor evacuation routes.</li> <li>Partners with other state agencies for railway safety and inspections.</li> <li>Works with the Federal Railroad Administration to collect data on all public highway-rail grade crossings in conjunction with the railroads.</li> </ul>

Partner	Planning & Response Roles
	<ul style="list-style-type: none"> <li>• Administers the Federal Highway Railroad Safety Program and evaluates state highways improvement projects that involve rail crossings to ensure appropriate warning devices and safety improvements.</li> <li>• Partners with Louisiana Operation Lifesaver (LOL) to promote rail law, education, enforcement, and safety.</li> <li>• Partners with the U.S. Army Corps of Engineers (USACE) to maintain the waterways, locks, and other ancillary structures.</li> <li>• Partners with the U.S. Coast Guard (USCG) to respond to incidents at the ports.</li> </ul>
Center for Disease Control and Prevention (CDC)	<ul style="list-style-type: none"> <li>• Provide public health planning information including public risk communication and shelter operations resources.</li> <li>• Manages the Strategic National Stockpile (SNS) in partnership with ASPR, which includes pharmaceuticals and antidotes, such as atropine and CyanoKits for chemical emergencies.</li> <li>• Oversees the Laboratory Response Network for Chemicals (LRN-C), a three-tiered system which allows for the rapid testing of clinical specimens collected from individuals possibly exposed to chemical warfare agents or toxic industrial compounds not routinely tested in the healthcare sector laboratories.</li> <li>• Can deploy Chemical Emergency Response Teams to establish and support the chain of custody and shipping of clinical specimens.</li> </ul>
Administration for Strategic Preparedness and Response (ASPR)/U.S. Department of Health and Human Services (HHS)	<ul style="list-style-type: none"> <li>• Coordinates and leads federal CBRN preparedness from a medical countermeasures perspective leading the Public Health Emergency Countermeasures Enterprise (PHEMCE).</li> <li>• Manages the Strategic National Stockpile (SNS) in partnership with CDC, which includes pharmaceuticals and antidotes, such as atropine and CyanoKits for chemical emergencies.</li> <li>• HHS Regional Emergency Coordinator (REC) can assist with routing requests for resources and information from federal programs or other states.</li> <li>• Maintains a Chemical Hazards Emergency Medical Management (CHEMM) website with robust tools, resources, and training materials provided by subject matter experts which are accessible by first responders and receivers for planning and response.</li> </ul>
Federal Emergency Management Agency (FEMA)/Department of Homeland Security (DHS)/ Office of Emerging Threats (OET)	<p>FEMA/DHS</p> <ul style="list-style-type: none"> <li>• Participates in state planning and exercises for chemical incidents.</li> </ul> <p>OET</p> <ul style="list-style-type: none"> <li>• Provides expert advice, guidance and support to the Federal Bureau of Investigation (FBI) Assistant Director in Charge (ADIC) or Special Agent in Charge (SAC).</li> <li>• Performs consequence management assessment, including pre-incident consequence management planning, initiating requests for modeling and technical analysis, and analyzing potential risks and operational impacts.</li> <li>• Facilitates interagency coordination and situational awareness between ongoing crisis management focused operations and consequence management planning.</li> <li>• Serves as a liaison to State and local government officials for information sharing and information management.</li> <li>• Supports the FBI through contingency planning in support of response, recovery, and mitigation, and provides technical support to facilitate interagency crisis management.</li> </ul>
Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> <li>• Consequence Management Advisory Division (CMAD) serves as EPA's national special team providing leadership, expertise, and response capabilities for Chemical, Biological, Radiological, and Nuclear (CBRN), as well as all hazard events.</li> <li>• PHILIS (Portable High-throughput Integrated Laboratory Identification System) is EPA's suite of mobile laboratories for the on-site analysis of environmental samples contaminated with chemical warfare agents, pharmaceutical-based agents, and toxic industrial compounds.</li> <li>• Airborne Spectral Photometric Environmental Collection Technology (ASPECT) is available to assist local, national, and international agencies supporting hazardous substance response, radiological incidents, and situational awareness.</li> </ul>

Partner	Planning & Response Roles
Other National Professional Organizations for resources	<ul style="list-style-type: none"> <li>Center for Domestic Preparedness (CDP) - offers training for healthcare facilities, first responders, clinicians, and healthcare coalitions.</li> <li>Agency for Toxic Substances Disease Registry (ATSDR) – research and policy development for toxic substances and management.</li> </ul>

## Operational Mission Areas

### Logistics

#### Pre-Hospital Considerations

On-scene information gathering will be critical to guide Incident Command and operations.

- Incident Command will be established according to procedures of responding entity or in accordance with local plan activation.
  - Mutual aid will be activated upon assessment and based on resource needs.
  - Details of chemical agents involved, known exposure risks to responders will be communicated through incident command/safety officer.
- Triage including screening and basic decontamination operations may be a coordinated effort among industry first responders, fire departments, hazmat teams, and law enforcement entities on scene. Prehospital decontamination would include screening (triage) and decontamination operations that could include hazmat teams comprised of fire department personnel, EMS and/or law enforcement in a safe zone or perimeter near the scene.
- Law enforcement may be involved if a suspected terrorist incident prompting response partners on scene to follow forensic guidance – this may impact routine processes for patient triage and decontamination.
- Most Louisiana EMS agencies follow procedures that assume any patient received for transport is already decontaminated by on scene response teams.
- All EMS transports may not be decontaminated prior to hospital arrival.
  - EMS agencies are responsible for ensuring Occupational Health and Safety Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) standard is followed.
  - HAZWOPER First Responder Awareness Level training – minimum training suggested for all EMS personnel, however this level is not sufficient enough to transport or treatment of contaminated patients.
  - EMS personnel designated to enter the danger area to perform rescue or treat contaminated victims must be certified at the First Responder Operations Level.

### Community Reception Activities

- Community reception sites and/or evacuation shelters may be set up for larger scale chemical emergencies.
- Public screening and initial triage may be established by local first responders, EMS, HazMat teams, and other response experts.
- Parishes, state agencies and Emergency Support Functions (ESFs) may have specific plans that can be activated to support community reception or evacuation activities. These include:
  - Parish OHSEPs will conduct shelter operations, establish community reception sites or activate evacuation plans, and activate hazardous materials response teams and supplies.
  - DCFS (ESF-6) may provide shelter support to local shelters.
  - LSP may provide traffic control and evacuation support.
  - DOT maintains evacuation contracts for buses which may be activated and used to move citizens.
  - LDH/OPH (ESF-8) may activate Point of Dispensing (POD) plans for distribution of medical countermeasures; activate shelter plans to support evacuated vulnerable or medical populations.
- Additional resources needed to support local community reception activities should be requested by Incident Command on scene, through local parish offices, or directly to state or federal partners through GOHSEP. Immediate resource requests may include:
  - Wrap around services for community reception sites or evacuation shelters.
  - Decontamination supplies
  - PPE and protective equipment for responders and citizens
  - Scene management equipment, such as signage and cones or barriers

- Support for the distribution of antidotes or other countermeasures
- ESF-8 Network partners of state and regional coordinators will support information sharing to healthcare partners to assist with sheltering-in-place orders, continuity of operations, and routing resource requests from impacted local partners.

## Detection & Identification

- For most incidents involving physical sites (i.e. refineries or plants) or involving properly marked transportation methods (vehicles or railcars), the chemical will be discernable from placards and officials on site.
- Safety Data Sheets may be available and include the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical.
- Incidents not occurring at a physical site or in transit, rather deemed to be an intentional act of terrorism, detecting the substance causing patient illness may be harder to decipher.
  - Louisiana Poison Center is a resource to help identify potential toxic exposures of concern based on reported patient signs and symptoms.
  - The Louisiana Office of Public Health, Laboratory Response Network for Chemical Threats (LRN-C) may also be engaged to assist with collecting samples and determining chemicals of concern routing through LRN-C local, state and national channels.

## Medical Care & Treatment

This section will outline key response functions of the ESF-8 Network and HCC leads in supporting hospitals with clinical evaluation, triage, and treatment by both pre-hospital providers (EMS) and hospital ED clinicians who may receive patients from the scene of an incident.

### *Transport*

Patients will generally present at a hospital by ambulance or privately operated vehicle (POV). Each arrival method should be considered for planning.

- Emergency Medical System (EMS)
  - Patient(s) received at healthcare facilities may already be decontaminated.
  - EMS providers should communicate to ED staff any known substances exposed at the scene, referencing the Safety Data Sheet (SDS) or other reliable resources if available.
  - Patient routing may be coordinated by LERN Communications Center during Mass Casualty Incidents (MCIs) following LERN MCI protocols and using common triage algorithm – START and JumpStart.
  - Trauma patients – those with life threatening illnesses or injuries – may not arrive decontaminated, thus needing decontamination at the ED after stabilization. See Decontamination section.
- Privately Operated Vehicle (POV)/Self-Presentation
  - Patients arriving POV from the scene or an incident may arrive immediately following or within several hours after the event.
  - It is likely the patient will not be decontaminated and may not know the substance of concern or exposure status.
  - Patients may present to the nearest emergency department with signs and symptoms of toxic or chemical exposure but be unaware.

### *Decontamination*

#### Decontamination Priorities

- Prevent secondary contamination by:
  - Establishing scene control
  - Removing contaminated clothing – removes 80-90% of contaminants.
  - Addressing life threatening issues and stabilization.
- Protect responders by:
  - Donning appropriate PPE including respiratory and skin protective clothing.
  - Decontamination team members trained in their response roles.

- Monitoring responders for thermal stress and work hazards.

### Decontamination Considerations

- Self-directed decontamination if appropriate.
- Mass decontamination needs with setup and logistics including tepid water temperatures.
- A back-up or secondary decon location should the primary site be unavailable.
- Decon considerations include needs for vulnerable populations including pediatrics and mobility challenged.
- Plan for technical decontamination of equipment to be reused.

### Hazardous Waste Management

- Ensure proper solids and wastewater/rinsate containment, collection, and disposal.
- Establish a secure perimeter around collected hazardous waste.
- Secure a hazardous waste hauler to remove collected hazardous waste.

### *Exposure Pathways*

There are four mechanisms in which chemicals may be introduced to humans causing illness or injury. These are listed in order of prevalence.

- Inhalation and airborne exposures
- Direct contact
- Ingestion
- Injection

### *Medical Triage and Assessment*

- EMS responders and Emergency Department clinicians should triage and treat according to life threatening injuries or illnesses, such as combined trauma injuries.
- Commonly used triage guidelines such as START, JumpSTART, and/or SALT triage may be applied on the scene by EMS personnel or at the receiving facility Emergency Department.
- Nerve Agent, organophosphate and carbamate, exposures have an array of presenting symptoms. The mnemonics below are commonly used to aid clinicians with recognizing exposures.
  - SLUDGEM – Salivation, Lacrimation, Urination, Diarrhea, Gastrointestinal cramps, Emesis, and Miosis.
  - DUMBBELS – Diarrhea, Urination, Miosis/Muscle weakness, Bronchorrhea, Bradycardia, Emesis, Lacrimation, Salivation/Sweating.
  - Additional, more extreme exposures may result in loss of consciousness, convulsion, paralysis, and ultimately respiratory failure.
- Understanding exposure details including who was exposed; the hazmat involved including physical state; the incident chronology; incident location, and patient signs and symptoms will assist ED staff and clinicians with determining appropriate treatment.

### *Treatment*

- Treatment will be determined by receiving clinicians based on known exposure (type, amount, duration, and route of exposure) along with symptomology, and details outlined in the Safety Data Sheet (SDS).
- Outreach to SMEs and specialized resources such as the Louisiana Poison Center at 1-800-222-1222.
- For treatment and antidotes to nerve agent exposure reference Louisiana's CHEMPACK plan.
- CHEMM website houses triage and treatment tools for first responders and first receivers.
- Specialized training for medical providers including EMS and ED clinicians may assist with readiness for the recognition and medical management of illnesses and injuries resulting from chemical or toxic substance exposures.
  - Advanced HazMat Life Support (AHLS) Provider Course is offered annually by the Louisiana Poison Control Center.
  - Medical Management of CBRNE events
- [Appendix C](#) outlines some of the known hyperbaric treatment capabilities in hospitals across the state.

## OPH LAB

The Office of Public Health (OPH) Laboratory is an in-state resource and a member of the Laboratory Response Network for Chemicals (LRN-C), which allows for the rapid testing of clinical specimens collected from individuals possibly exposed to chemical warfare agents or toxic industrial compounds not routinely tested in the healthcare sector laboratories. Like the LPC, the OPH Laboratory Emergency Preparedness and Response program maintains a 24-hour response capability to assist responders and clinicians with laboratory services to identify chemicals/agents of concern.

## Hospital Surge Strategies

The ESF-8 Network Coalition Response Plan, Regional Preparedness and Response Plans, along with supplemental HPP Grant Resources and Supplies Procedures outline key functions and methods used to assist hospitals with surge activities for all-hazards events. Individual hospitals are responsible for maintaining all-hazard response plans that will outline internal resources, teams, and emergency procedures to use during response to events. This section is intended to outline the anchored components of surge response operations within hospitals in context of chemical emergencies. Appendix C summarizes a survey conducted in September of 2023 to assist with understanding the Chemical Surge Readiness capabilities of Tier 1 hospitals in Louisiana.

## Staff

- Staff understand the facility response plan and individual roles in responding to a chemical/HazMat event.
- Decontamination teams are preidentified and conduct routine training at intervals defined by the facility. The teams' key functions may include:
  - The use of protective equipment, including donning and doffing of PPE.
  - Proper techniques for both wet and dry decontamination of patients.
  - Pre-identified sites and setup procedures for decontamination equipment, including tentage and showers.
  - Proper procedures of how to decontaminate equipment.
- Hospital incident command system (HICS) outlines incident management team roles and responsibilities that may be activated including clinical and non-clinical personnel. Some of the roles that may be engaged during a HazMat/chemical event beyond the decontamination team could include:
  - Clinical
    - Physicians and Nurses
    - Pharmacists
    - Respiratory therapists
    - Radiology technicians
    - Others
  - Non-clinical/Ancillary
    - Housekeeping and dietary staff
    - Security
    - Communications/Public information officer (PIO)
    - Social Services
    - Facilities Maintenance
    - Others
- Clinicians understand where to obtain guidance for clinical treatment protocols such as contacting the Louisiana Poison Center.
- Training resources specific to chemical emergencies may be supplied to staff in the following methods:
  - During routine all-hazards planning workshops or exercises.
  - In anticipation of a known threat or event.
  - At the time of an event, through just-in-time training by way of verbal guidance by lead clinician, or in consultation with an interstate or intrastate clinical health professional.
  - Online resources are available in real-time and include algorithms, videos, and fact sheets for use by providers.
- Decontamination teams understand the decontamination priorities and principles relevant to chemical decontamination.

- Just-in-time (JIT) training and decontamination guidance will be shared by incident command staff in collaboration with subject matter experts from the scene or medical technical specialists within the facility.
- Staff in clinical areas inside the facility where decontamination may need to occur *after* life threatening injuries are treated, may need to be advised on appropriate PPE levels and JIT training for decontamination procedures after patient stabilization.

## Space

### Emergency Department considerations

- External facility decontamination space that accounts for contingencies based on weather conditions.
- Internal facility decontamination area.
- Separate patient screening area for the uninjured.
- Signage to direct patients and EMS to proper screening/decontamination areas separate from routine ED traffic flow.

### In-Patient Bed Availability/Transfer considerations

- Hospitals will identify the ability to provide care and treatment to patients received.
- Hospital MCI surge response plans will outline alternate treatment areas and supplies to be utilized.
- Hospitals will work through existing mechanisms to transfer patients needing higher levels of care outside of their facility. This includes transferring to centers with specialty services, such as Pediatrics and Burn.
- Hospitals may contact the DRC network or LERN Communications Center to assist with identifying available beds for patients needing to be transferred if routine mechanisms are ineffective or they become overwhelmed.
- LERN Communications Center and the DRCs will use the ESF-8 Portal, Resource Management screen to identify available beds by type and critical services available.
- Hospitals and the DRCs will use the *At-Risk Registry* to track patients.

### Specialty Facilities

**Trauma Centers:** A statewide network of trauma hospitals, designation levels I-III are maintained through oversight of the Louisiana Emergency Response Network (LERN). LERN also understands overall capabilities of other acute care, non-trauma hospitals to support with routing patients during MCI incidents. Details about LERN's role in trauma network management and the Louisiana trauma centers can be found at <https://lern.la.gov/trauma/>.

**Burn Hospitals:** Burn beds may be needed for treating patients with burn/blast injuries. The *State's ESF-8 Burn Surge Annex* outlines the key response functions and coordination mechanisms between the four Louisiana burn hospitals and the triggers for activating the Southern Region Burn Call Center during a disaster involving a surge of burned patients.

**Pediatric Hospitals:** Pediatric beds and services may be necessary to assist with treating pediatric patient casualties from a chemical emergency. The state's *ESF-8 Pediatric Surge Annex* highlights the methods in which the ESF-8 network will support pediatric surge into hospitals with existing pediatric capabilities and capacities. As with the designated trauma centers, LERN also assist with oversight for developing and maintain a Pediatric Trauma designation for participating Louisiana hospitals with advanced pediatric capabilities.

## Supplies

Both PPE and pharmaceuticals are essential supplies that may be in demand during a chemical emergency. Access to and proper use of PPE to protect responders providing care and assisting with decontamination will also be a priority. Basic decontamination equipment is typically maintained by larger acute care (Tier 1) hospitals. However, supplemental resources may be requested by local HazMat teams, fire departments, or through the DRC network.

## Antidotes & Therapeutics

Response to an organophosphate release or nerve agent attack may prompt the deployment of the CHEMPACK or buffer packs.

- Details about the Louisiana CHEMPACK Program and the activation and notification procedures surrounding this resource is maintained within the CHEMPACK Plan.
- Activation procedures are well-known within the entities in which they are housed.
- CHEMPACKs can only be deployed through calling the Louisiana Poison Center (LPC).

CHEMPACK CONTAINERS AND BUFFERPACKS PER REGION

REG	HOSP CONT	EMS CONT	BUFFER PACKS*	2 PAM QTY
1	4	4	4	48
2	3	2	3	36
3	1	1	1	12
4	1	1	1	12
5	1	2	1	12
6	1	1	1	12
7	2	3	2	48
8	1		1	12
9	1	1	1	12
<b>TOTAL</b>	15	15	15	204

Poisonings and the antidotes:

Antidote		Poisoning
Atropine		Organophosphates, Carbamates, Nerve agents
Calcium gluconate - IV or IO		Systemic hydrofluoric acid or fluoride poisoning
Calcium gluconate - gel		Hydrofluoric acid skin burns
Calcium chloride		Systemic hydrofluoric acid or fluoride poisoning
Cyanide Antidote Kit	Amyl nitrite	Cyanides, Nitriles, Sulfides
	Sodium nitrite	Cyanides, Nitriles, Sulfides
	Sodium thiosulfate	Cyanides, Nitriles
Hydroxocobalamin		Cyanides, Nitriles
Methylene blue		Methemoglobin-forming compounds
Oxygen		Simple asphyxiants, Systemic asphyxiants, Methemoglobin-forming compounds, Carbon monoxide, Cyanides, Azides & hydrozoic acid, Hydrogen sulfide & sulfides
Pralidoxime (2-PAM)		Organophosphates, Nerve agents
Pyridoxine		Hydrazines

AHLS Provider Manual, 4<sup>th</sup> Ed; Table 3-2

## Decontamination and Personal Protective Equipment (PPE)

- Decontamination equipment needed to physically remove the contamination and may include a decon shower(s), mild soap, tepid water, decon stretchers for the non-ambulatory, and secure storage for the solid and liquid waste among other supplies.
- Occupational Safety and Health Administration (OSHA) provides for protection of the hazmat responder including PPE requirements via the Hazardous Waste Operations and Emergency Response (HAZWOPER), Personal Protective Equipment and Respiratory Protection standards.
  - Personal Protective equipment includes respiratory and chemically protective clothing including boots, gloves, head, and eyewear.
  - PPE is categorized by the level of protection provided with “A” being the greatest and “D” the least protective.
  - Level “C” PPE is generally accepted for hospital “First Receiver” environments.
  - PPE needed for a decon team includes:
    - Power Air Purifying Respirators (PAPRs) with hoods or
    - Air Purifying Respirators (APRs) with protective masks

- Chemical protective suites
- Inner and Outer Gloves
- Boots
- Training – The competencies for decontamination training are provided in the HAZWOPER standard including First Responder “Awareness” and “Operations” level training.

The DRC network can quickly utilize the *Resource Management* application of the **ESF-8 Portal** to understand facility capabilities. This information is updated annually by hospitals and captures the quantity of PAPRs and Decon Tents housed at each facility across the state. This may support resources sharing or coordination for routing patients to facilities with extended capabilities and capacities.

		700 MHZ Radio	Decon Tents	Hazmat PAPRs
Region 1				
Beacon Behavioral Hospital New Orleans	1	0	0	
Bliant Specialty Hospital	0	NA	NA	

## Deactivation and Recovery

- Discussions to determine deactivation procedures after a chemical emergency will occur when initial responses to screen, triage, decontaminate, and route injured patients needing medical care has concluded.
- The ESF-8 Network will continue to support healthcare coalition members who activate their COOP plans until they return to normal operations.
- The ESF-8 Network will collaborate with regional partners, including individual EMS and hospitals who treated patients to reconcile reports of patient casualties from the event.
- Public health partners may coordinate with local authorities to reconcile reports of citizens screened and decontaminated for future monitoring.
- For communities evacuated, re-entry and returning to homes and businesses will be guided by local authorities; hospitals in these areas will follow instruction of local authorities.
- Ongoing investigations may be anticipated by law enforcement requiring continued cooperation by health and medical response partners.
- The health and medical deactivation and recovery may not align with the timeframe for environmental recovery which will involve EPA and LDEQ, among other agencies and partners.
  - If the chemical involved is from a private industry, the private industry will assume responsibility of the recovery and remediation of the chemical. If the incident is during transport, the private industry may hire a third-party to handle the clean-up process.
- ESF-8 will participate in or host After Action Reviews (AARs) of response activities to assess plan viability, identify opportunities, and address gaps where possible.

## Special Considerations

### Behavioral Health

The mental health demands caused by fear during a chemical incident should be anticipated by planners and responders. Hospitals who treat patients impacted by chemical/HazMat injuries have case management and behavioral health teams to treat the immediate behavioral health needs of the patients in their care. However, for the long-term behavioral health impacts on patients, citizens, and responders, a multitude of mental health professionals will be essential. Healthcare coalitions may leverage out-patient providers, both primary care and local mental health services to assist with conducting assessments, providing psychological first aid, and treating any long-term effects caused by the event. The state Office of Behavioral Health (OBH) has programs that may also be leveraged to assist with meeting the demands of behavioral health needs, in the short-term and long-term.

### Consequence Management of “Worried Well”

Local officials as well as front-line providers should account for responding to masses of worried well citizens presenting at local sheltering locations, hospitals, and healthcare facilities. Effective communication will be essential to help manage the

influx of anticipated “worried well”. These communication strategies and considerations can be found in the *Crisis Communications* section.

### *Vulnerable Populations*

Planning resources can be found in abundance for two specific populations – pediatrics and pregnant women. The health impacts and perceived effects of chemical exposure on these sub-groups of citizens and patients is of great concern to planners, responders, and clinicians prompting longer term monitoring. The **CHEMM** website provides resources for consideration when evaluating these unique populations and may be used in conjunction with consulting local specialists to inform care and treatment of these populations.

- Pediatrics - Exposure rates and dosages to various ages of children should be considered.
- Pregnant women – Exposures can cause birth defects in fetuses.

Using planning tools such as the Social Vulnerability Index (SVI), EmPOWER data, and the FEMA toolkit including GIS mapping has allowed planners to identify other groups of citizens that may be considered in this type of event. Some of these population subgroups are outlined in state all-hazards plans, ESF-8 HCC plans, and may be addressed in hospital plans.

- Home bound citizens who may be unable to evacuate without assistance and may have specific medical needs at home, such as oxygen or other electrical dependencies.
- Non-English speaking, hearing and/or visually impaired citizens who may need to receive critical information distributed to communities as well as be able to correspond with responders and clinicians in a hospital.
- Populations without transportation may not seek medical care or will utilize EMS for access to medical care.

### *Crisis Communication*

Many parishes, HCCs, and other emergency management response partners have communications plans that outline staff, such as Public Information Officers (PIOs), responsible for collecting and sharing information on behalf of the organization during emergencies. The inclusion of subject matter experts, including private industry, to help advise on messaging surrounding continued threats and protective measures will be critical during a chemical emergency.

The ESF-8 network, including the LDH Bureau of Media and Communications (BMAC) may be essential partners in assisting GOHSEP and local jurisdictions with preparing a unified message for distribution.

*Appendix E* outlines some of the communications principles and considerations of greatest relevance for healthcare facilities during **chemical** emergencies.

### *Fatality Management*

Hospitals may be expected to notify state or federal authorities that patients have expired due to illnesses resulting from exposures during a chemical/HazMat incident. Patients expiring after presenting at a hospital will already have been decontaminated therefore routine procedures for managing the patients will be applied. Events resulting in large numbers of deceased citizens may trigger the activation of the State *ESF-8 Mass Fatality Plan*. This plan provides a framework for how the state will collaborate with local coroners to manage an event in which handling, storage, and ultimate disposition of human remains will need to be coordinated.

## Glossary & Acronyms

AAR – After Action Review

ADRCs – Administrative Designated Regional Coordinator

AHLS – Advanced Hazmat Life Support

ASPR – Administration for Strategic Preparedness and Response

BEMS – Bureau of Emergency Medical Services

BMAC – Bureau of Media and Communications

CBRN(E) – Chemical, Biological, Radiological, Nuclear, and Explosive

CDC – Center for Disease Control

CERFP – Chemical Enhanced Response Force Package

COOP – Continuity of Operations Plan

CST – Civil Support Team

DCFS – Department of Children and Family Services

DHS – Department of Homeland Security

DRC – Designated Regional Coordinator

ED – Emergency Department

EM – Emergency Management

EMS – Emergency Medical Services

EMS DRC – Emergency Medical Services Designated Regional Coordinator

EPIC – Epic Systems, Corporation

EOC – Emergency Operations Center

EPA – Environmental Protection Agency

ESF – Emergency Support Function

ESF-2 – Communications function

ESF-6 – Mass Care, Emergency Assistance function

ESF-8 – Health and Medical Response function

FBI – Federal Bureau of Investigation

FEMA – Federal Emergency Management Agency

GIS – Geographic Information System

GOHSEP – Governor's Office of Homeland Security and Emergency Preparedness

HazMat – Hazardous Materials

HCC – Healthcare Coalition

HHS – Department of Health and Human Services

HICS – Hospital Incident Command System

ICS – Incident Command System

JCAT – Joint Counterterrorism Assessment Team

JIC – Joint Information Center

JIT – Just in time

LDEQ – Louisiana Department of Environmental Quality

LADOTD – Louisiana Department of Transportation and Development

LANG – Louisiana National Guard

LDH – Louisiana Department of Health

LERN – Louisiana Emergency Response Network

LHA – Louisiana Hospital Association

LSP – Louisiana State Police

OBH – Office of Behavioral Health

OEP – Office of Emergency Preparedness

OHSEP – Office of Homeland Security and Emergency Preparedness

OPH – Office of Public Health

PAPR – Power Air Purifying Respirator

PHERC – Public Health Emergency Response Coordinator

PIO – Public Information Officer

POD – Point of Dispensing

PPE – Personal Protective Equipment

REC – Regional Emergency Coordinator

RMD – Regional Medical Director

SDA – Safety Data Sheets (*formerly MSDS*)

SHO – State Health Officer

SME – Subject Matter Expert

SNS – Strategic National Stockpile

SVI – Social Vulnerability Index

TAG – The Adjutant General

TOC – Tactical Operations Center

UCG – Unified Command Group

US – United States

WebEOC – The Web Emergency Operations Center

WMD – Weapons of Mass Destruction

## Appendices

Appendix A: Other Oil & Gas Infrastructure Map

Appendix B: HAZARDOUS MATERIALS CLASSIFICATIONS, Labels and Placards

Appendix C: Tier 1 Hospital Capabilities Survey Findings, September 2023

Appendix D: State of Louisiana Office of Public Health ChemPack Locations

Appendix E: Louisiana HazMat Teams by Region and Parish

Appendix F: Chemical Crisis Communications for Healthcare Coalition Members

Appendix G:

Louisiana Statewide – Other Oil & Gas Infrastructure



Appendix B

**HAZARDOUS MATERIALS CLASSIFICATIONS, Labels and Placards**

<b>CLASSES</b>	<b>PROPERTIES</b>	<b>EXAMPLES (not inclusive)</b>
Class 1: Explosives	Materials that possess the ability to alight or detonate as a consequence of a chemical reaction.	<ul style="list-style-type: none"> <li>• Nitroglycerine (desensitized)</li> <li>• Fireworks</li> <li>• Ammunition</li> <li>• Dynamite</li> <li>• Mercury fulminate</li> </ul>
Class 2: Gases	Materials that include compressed gases. <ul style="list-style-type: none"> <li>• Flammable/combustible gases</li> <li>• Non-flammable/non-poisonous gases</li> <li>• Toxic/poisonous gases</li> <li>• Oxygen</li> </ul>	<ul style="list-style-type: none"> <li>• Flammable Gas: Hydrogen compressed, ethylene, butylene, acetylene.</li> <li>• Non-Flammable Gas: Oxygen compressed; nitrogen compressed.</li> <li>• Poisonous Gas: Phosgene, sulfur, tetrafluoride, insecticide gases.</li> </ul>
Class 3: Flammable Liquids (and Combustible liquids)	<ul style="list-style-type: none"> <li>• Flammable liquids having a flash point of not more than 140°F.</li> <li>• Materials in a liquid phase with a flash point at or above 100°F that is intentionally heated and offered for transport.</li> <li>• Combustible liquids with a flashpoint above 100°F and below 200°F.</li> </ul>	<ul style="list-style-type: none"> <li>• Acetone</li> <li>• Adhesives</li> <li>• Paints</li> <li>• Gasoline</li> <li>• Diesel</li> <li>• Ethanol/methanol</li> <li>• Some pesticides</li> </ul>
Class 4: Flammable Solids; Spontaneously combustible and Water-reactive substances	<ul style="list-style-type: none"> <li>• Materials that can undergo combustion without outside change to density or pressure.</li> <li>• Materials that emit a flammable gas or react violently when in contact with water.</li> </ul>	<ul style="list-style-type: none"> <li>• Sulfur</li> <li>• Alkali metals</li> <li>• Varnishes</li> <li>• Calcium carbide</li> <li>• Safety matches</li> </ul>
Class 5: Oxidizers and Organic Peroxide	<ul style="list-style-type: none"> <li>• Materials than can start and support a fire through the chemical reaction of oxidation.</li> </ul>	<ul style="list-style-type: none"> <li>• Potassium permanganate</li> <li>• Concentrated hydrogen peroxide</li> <li>• Sodium nitrite</li> <li>• Ammonium nitrate</li> <li>• All oxygen generators</li> </ul>
Class 6: Poison/toxin; Infectious substances and poison inhalation	<ul style="list-style-type: none"> <li>• Materials that are liable to either cause death, serious injury, or harm to human health from skin contact, ingestion, or inhalation.</li> <li>• Materials that are known or reasonably expected to contain a pathogen that is capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans or animals.</li> </ul>	<ul style="list-style-type: none"> <li>• Poisons/toxins: Cyanide, bromobenzyl, methyl bromide, tear gas, botulism.</li> <li>• Infectious agents: Anthrax, Ebola, Pneumonic and Bubonic Plague, Tularemia, Blood Borne Pathogens.</li> </ul>
Class 7: Radioactive Materials	<ul style="list-style-type: none"> <li>• Any material that contains unstable isotopes of an element undergoing decay and emitting radiation.</li> </ul>	<ul style="list-style-type: none"> <li>• Cesium-137</li> <li>• Cobalt-60</li> <li>• Iridium-192</li> <li>• Ameridium-241</li> <li>• Uranium-235</li> </ul>
Class 8: Corrosive Materials	<ul style="list-style-type: none"> <li>• Any corrosive material that can cause significant damage to metals or living tissues through a chemical reaction.</li> </ul>	<ul style="list-style-type: none"> <li>• Sulfuric, hydrochloric, and nitric acid</li> <li>• Sodium, ammonium, and potassium hydroxide</li> <li>• Battery acid</li> </ul>




Class 9: Miscellaneous	<ul style="list-style-type: none"> <li>This designation is assigned to hazardous material that do not fit into the other eight (8) Classes.</li> </ul>	<ul style="list-style-type: none"> <li>Acetaldehyde ammonia</li> <li>Ammonium nitrate fertilizers</li> <li>Asbestos</li> </ul>
<b>Other - Organophosphates</b>		
Organophosphates	<ul style="list-style-type: none"> <li>Man-made chemicals that are the active ingredients of some herbicides, pesticides, and insecticides.</li> </ul>	<ul style="list-style-type: none"> <li>Malathion</li> <li>Diazinon</li> <li>Glyphosate (active ingredient in Roundup)</li> </ul>
<b>Other - Nerve Agents</b>		
G-series	<ul style="list-style-type: none"> <li>G-series nerve agents were named because German scientists first synthesized them prior to and during World War II.</li> <li>Liquids that are volatile at ambient temperatures.</li> <li>Colorless to brown.</li> <li>Odorless to slight fruity odor to slight camphor-like odor.</li> </ul>	<ul style="list-style-type: none"> <li>Tabun (GA)</li> <li>Sarin (GB)</li> <li>Soman (GD)</li> <li>Cyclosarin (GF).</li> <li>V-series: VX, VE, VG, VM, V-gas (the Russian equivalent of VX).</li> </ul>
V-series	<ul style="list-style-type: none"> <li>V-series nerve agents were first synthesized by the British in 1954.</li> <li>Oily amber colored liquids at room temperature, making decontamination very difficult.</li> <li>Odorless and tasteless.</li> </ul>	<ul style="list-style-type: none"> <li>VX (more potent than the agents in the G-series)</li> <li>VE</li> <li>VG</li> <li>VM</li> <li>V-gas (the Russian equivalent of VX)</li> </ul>
A-series (4 <sup>th</sup> Generation FGA)	<ul style="list-style-type: none"> <li>Believed to be developed in Russia between the 1970s and the 1990s as part of Russian nerve agent program FOLIANT.</li> <li>Designed to be undetectable and untreatable.</li> <li>More persistent than other nerve agents and are at least as toxic as VX.</li> </ul>	<ul style="list-style-type: none"> <li>A-230</li> <li>A-232</li> <li>A-234</li> </ul>

# Labels, Placards & Markings

## Labels

 <p><b>DOT</b> Flammable Liquid 3 Labels must be placed on all packages containing flammable liquids. Labels must measure at least 100mm x 150mm and comply with the labeling criteria in 49 CFR, Part 172.100.</p>	 <p><b>Subsidiary Risk</b> Labels must be placed on all packages that contain acids that require a label that complies with the primary and subsidiary hazard.</p>	 <p><b>International</b> Labels are required on primary or subsidiary hazard labels in Classes 2, 3, 4, 5, 6 or 8. Labels must be placed on all packages that may be available for transport as well as for domestic use.</p>	 <p><b>Shipping Name</b> Labels must be affixed to the outside of a container. The bottom of package and to the back of the package. Labels must be placed on the package shipping name and hazard class label both in English and in Spanish. Labels must be placed on the package in English and in Spanish. (49 CFR, Part 172.100) (172.101) (172.102)</p>
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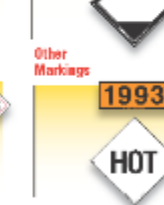
## Placards

 <p><b>Wardet</b> This placard is used for packages containing flammable liquids and gases. Labels and placards must be placed on each side and each end of the container. (49 CFR, Part 172.100)</p>	 <p><b>Blank Placard</b> Labels must be placed on all packages containing flammable liquids and gases. Labels and placards must be placed on each side and each end of the container. (49 CFR, Part 172.100)</p>	 <p><b>International 5.2</b> Labels must be placed on all packages containing flammable liquids and gases. Labels and placards must be placed on each side and each end of the container. (49 CFR, Part 172.100)</p>
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## Labels

<b>CLASS 1</b> 	<b>CLASS 2</b> 	<b>CLASS 4</b> 	<b>CLASS 6</b> 	<b>CLASS 8</b> 	<b>Air Labels and Markings</b> 
	<b>CLASS 3</b> 	<b>CLASS 5</b> 	<b>CLASS 7</b> 	<b>Additional Labels and Markings</b> 	

## Placards

<b>CLASS 1</b> 	<b>CLASS 2</b> 	<b>CLASS 4</b> 	<b>CLASS 6</b> 	<b>CLASS 8</b> 	<b>IMO Markings</b> 
	<b>CLASS 3</b> 	<b>CLASS 5</b> 	<b>CLASS 7</b> 	<b>CLASS 9</b> 	<b>Other Markings</b> 

labelmaster.com

LABELMASTER®

800-621-5808

It is recommended that each healthcare facility have a DOT Emergency Response Guide (ERG). Virtual copies can be found on the US Department of Transportation website or a mobile application can be downloaded.

Appendix C

The Louisiana Hospital Preparedness Program (HPP) in coordination with the hospital DRC network and the Louisiana Poison Center (LPC) conducted a *Hospital Chemical Readiness Survey* in September of 2023. The survey produced an 85% response rate of Tier 1 hospitals (99/116). This survey allowed the ESF8 network of state and regional partners to understand the following aspects of facility level readiness and capabilities for responding to a chemical incident.

- Decontamination and Chemical/HazMat Incident Response Plans
- Decontamination training
- Protective Equipment
- Antidotes, Pharmaceuticals, and hyperbaric capacities

**Summary of Findings:**

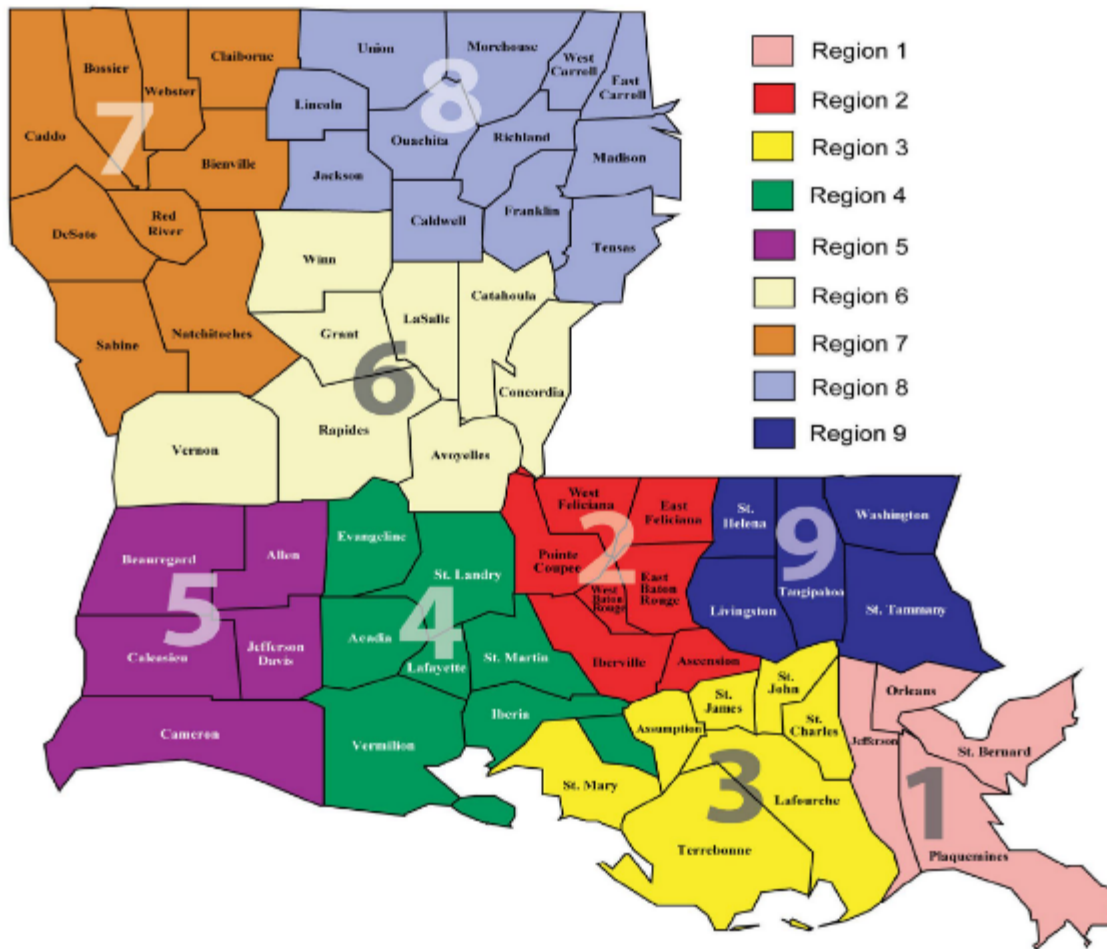
- Roughly 92% of hospitals surveyed have Decontamination Plans.
- 74% of hospitals surveyed have identified personnel for the Decon Team with a large majority reporting they have enough chemically protective PPE for decon team members.
- Lower rates of training were reported, 65-75% report offering refresher training, mostly either every year or every other year, a vast majority (roughly three quarters) expressed interest in training through LANG 62<sup>nd</sup> CST.

**Hyperbaric Treatment Capabilities by Region**

(Facility Name, Number of Patients can treat at a time)	
<u>Region 1</u>	<u>Region 4</u>
<ul style="list-style-type: none"> <li>- East Jefferson General Hospital, 2</li> <li>- Ochsner Baptist, 1</li> <li>- Ochsner Medical Center – Kenner, 3</li> <li>- Touro Infirmary, 4</li> <li>- University Medical Center New Orleans, 2</li> <li>- West Jefferson Medical Center, 3</li> </ul>	<ul style="list-style-type: none"> <li>- Opelousas General (Main and South Campus), 6</li> <li>- Our Lady of Lourdes, 2</li> </ul>
<u>Region 2</u>	<u>Region 5</u>
<ul style="list-style-type: none"> <li>- Baton Rouge General, 3</li> <li>- Lane Regional, 2</li> <li>- Ochsner Medical Center-Baton Rouge, 1</li> <li>- Our Lady of the Lake, 3</li> </ul>	<ul style="list-style-type: none"> <li>- Lake Charles Memorial Health System, 4</li> <li>- West Calcasieu Cameron Hospital, 2</li> <li>- Christus Ochsner St. Patrick’s, 4</li> </ul>
<u>Region 3</u>	<u>Region 6</u>
<ul style="list-style-type: none"> <li>- Terrebonne General, 2</li> </ul>	<ul style="list-style-type: none"> <li>- Christus St. Frances Cabrini, 2</li> </ul>
	<u>Region 7</u>
	<ul style="list-style-type: none"> <li>- Christus Highland, 2</li> <li>- Willis Knighton Bossier, 2</li> <li>- Willis Knighton South, 7</li> </ul>
	<u>Region 8</u>
	<ul style="list-style-type: none"> <li>- Northern Louisiana Medical Center, 2</li> </ul>
	<u>Region 9</u>
	<ul style="list-style-type: none"> <li>- St. Tammany Parish Hospital, 1</li> <li>- PAM Specialty Hospital of Covington, 2</li> </ul>

NOTE: This may not be a complete list - it reflects responses supplied to the September 2023 Hospital Chemical Readiness Survey.

### State of Louisiana Office of Public Health ChemPack Locations



**Region 1: 4 Hospitals and 4 EMS**

**Region 2: 3 Hospitals and 2 EMS**

**Region 3: 1 Hospital and 1 EMS**

**Region 4: 1 Hospital and 1 EMS**

**Region 5: 1 Hospital and 2 EMS**

**Region 6: 1 Hospital and 1 EMS**

**Region 7: 2 Hospitals and 2 EMS**

**Region 8: 1 Hospital and 1 EMS**

**Region 9: 1 Hospital and 1 EMS**

Source: 2023 CHEMPACK Plan

Appendix E

**Hazardous Materials Teams by Region and Parish**

ESF-8 Region	HazMat Units/Teams	LSP – ESU Regional Teams*
1	Jefferson Parish Department of Fire Services Orleans Parish New Orleans Fire Department	Region 1
2	East Baton Rouge Parish Baton Rouge Fire Department	
3	Assumption Parish Assumption Sheriff’s Office Lafourche Parish Lafourche OEP St. Charles Parish St. Charles Industrial Mutual Aid St. James Parish St. James Parish Fire District St. John Parish St. John Parish Department	
4	Lafayette Parish Lafayette Fire Department	Region 2
5	Calcasieu Parish Lake Charles Fire Department Jefferson Davis Parish Jennings Fire Department Private Industry Teams – Southwest Louisiana Mutual Aid Association	
6	No municipal hazmat teams. LSP will be leveraged for response coordination.	
7	Bossier Parish Bossier City Fire Department Caddo Parish Caddo Parish Sheriff’s Office Shreveport Fire Department (supported by Shreveport PD) DeSoto Parish DeSoto Parish Fire District 8 Natchitoches Parish Natchitoches (city) Fire Department	Region 3
8	No municipal hazmat teams. LSP will be leveraged for response coordination.	
9	St. Tammany Parish St. Tammany Fire District #1 St. Tammany Fire District #4 Tangipahoa Parish Hammond Fire Department	Region 1

Information collected from LSP and ADRCs

\*Louisiana State Police’s Emergency Services Unit (LSP ESU) – Hazmat Regional Teams

- LSP’s ESU has 3 regional teams that support hazmat incidents across the state. There are 28 troopers that make of these teams and 16 of them are certified bomb technicians. The ESU can provide explosive ordnance disposal (EOD) K-9 support with 6 explosive detection dogs.

LSP ESU Hazmat Regional Teams		
Team Name	Troop(s)	LDH Regions
Region 1	A, B, L, and C	1, 2, 3 and 9
Region 2	D and I	4 and 5
Region 3	E, F, and G	6, 7, and 8

## Chemical Crisis Communications for Healthcare Coalition Members

### Facility Messaging Audiences

- Public Information for citizens of communities in/near impacted areas.
- Patient/Visitor information for those already in the facility, un-affected.
- Staff and employee communication of the incident.

### Facility Messaging Platforms & Information Sources

- Website, social media, and other media releases – press conferences, statements for publication shared by press.
- Internal notification systems – email, text, in-person briefings
- Utilize credible information sources to help craft message, such as local officials, industry representatives, HICS medical technical specialists, other state response agencies identified as credible sources through ESF-8 network partners as members of the Joint Information Center (JIC) team.

### Hospital Communication Plan Checklist

(Reference: HICS *Incident Planning Guide – Chemical Incident*)

- Identify how the facility receives timely and pertinent information from field command – specifically chemical source information, decontamination provided, and any relevant recommendations for decontamination and worker safety measures needed.
- Designate hospital liaison for communicating status changes and facility resource needs.
- Procedures to provide pertinent incident information to the following areas of the response operations:
  - Decontamination team
  - All treatment areas
  - Security
  - Hospital Command Center
- Procedure to notify field command of hospital screening areas and decontamination location(s), including ingress and egress routes for both EMS and self-presenting public – “worried well”.
- Procedure to notify local parish emergency officials or Emergency Operations Centers (EOCs), ESF-8 Designated Regional Coordinators (DRCs), Louisiana Emergency response Network (LERN), and local EMS agencies of hospital’s emergency operational status.
  - ESF-8 DRCs will assist with sharing operational statuses of other hospitals and healthcare facilities in the impacted area.
- Identification of media briefing area and notification of scheduled briefings.
  - Media briefings provided in conjunction with other local briefings occurring through coordination with the local Joint Information Centers (JIC) and parish EOC.
  - Internal briefings supplied to staff and in-house patients/visitors throughout the event.
- Procedures to track patients associated with the chemical incident.

Other useful Crisis Communications resource links can be found in the table at the end of this document.

### CISA: Secure Your Chemicals: Potential Threats

**SECURE YOUR CHEMICALS: POTENTIAL THREATS**

Chemicals are vital to our economy. They are used to provide refrigeration for our food supply, manufacture fuel for our vehicles, build the microchips that run our smartphones, and develop medicines that maintain our health. But in the hands of a terrorist or an adversary with criminal intentions, some dangerous chemicals could be weaponized to harm a chemical facility, its workers, or the surrounding community.

By considering the potential avenues of attack and approaching security holistically, facility owners and operators can choose cost-effective, efficient security measures that work best to protect their dangerous chemicals from the threats and hazards most likely to occur at their facility.

**Suspicious Activity**  
Suspicious activity is any observed behavior that could indicate potential terrorism or terrorism-related crime.

**Shipping & Receiving**  
Shipments can be diverted or stolen.

**Explosive Device**  
An explosive device can release toxic chemicals or cause an even larger explosion.

**Insider Threat**  
Disgruntled personnel can intentionally cause harm, or other personnel can unwittingly expose the facility to a threat.

**Natural Hazards**  
Natural hazards (e.g., hurricanes, tornadoes, earthquakes, floods) can damage infrastructure and disrupt security operations, leaving chemicals unsecured.

**Active Assailant**  
An active assailant—whether armed with a weapon or using a vehicle as a weapon—can cause damage and inflict injuries and death.

**Drones**  
Drones can be used to disrupt, harass, conduct surveillance, or cause physical injury or destruction.

**Cyberattack**  
Systems and networks that control or aid chemical processes, store proprietary information, maintain chemical inventory, or contain personnel records can be compromised.

**Intruder/Unauthorized Access**  
Whether cyber or physical, an intruder can infiltrate systems, networks, or facilities, or disrupt, steal, or sabotage chemicals, chemical processes, or other proprietary information.

**Power Loss**  
Loss of power, whether from natural hazard or intentional attack, can affect chemical processes that lead to dangerous chemical incidents or disrupt security operations, leaving chemicals unsecured.

Learn more about how you can secure your chemicals from many potential threats at [cisa.gov/chemical-security](https://www.cisa.gov/chemical-security).

## Resources & References

### **State/Regional**

The following references are cited within the Annex and provide fundamental response guidance.

- Louisiana Emergency Operations Plan
- Louisiana ESF-8 Network Coalition Response Plan
- Louisiana Framework for Mitigating Crisis Environments: Crisis Standards of Care Guidance and Resources for Hospitals (CSOC)
- Louisiana ESF-8 Burn Surge Annex
- Louisiana ESF-8 Pediatric Surge Annex
- Louisiana ESF-8 Fatality Management Plan
- Louisiana ESF-8 sponsored Radiological and Chemical Response Lunch and Learn Webinar Series presentations – Fall 2022
- 2022 Louisiana CHEMPACK Plan
- Louisiana ESF-8 Radiological Surge Annex
- 2020 Louisiana Rail Plan
- 2016 Marine Transportation System Booklet
- LSP Emergency Services Unit (ESU) - <https://www.lsp.org/about/leadershipsections/patrol/emergency-services/emergency-services-unit-esu/>

### **National**

The following resources were referenced in the development of this plan.

- Advanced HazMat Life Support (AHLs) Course materials - <https://www.ahls.org>
- Occupational Health and Safety Administration - <https://www.osha.gov/sites/default/files/publications/3152-hospitals.pdf>

### **Chemical Resources**

ASPR Chemical Emergency Considerations for Healthcare Facilities

<https://files.asprtracie.hhs.gov/documents/chemical-emergency-considerations-for-healthcare-facilities-final.pdf>

Chemical Hazards Emergency Medical Management (CHEMM) – Management of the Deceased  
[Management of the Deceased - CHEMM \(hhs.gov\)](#)

### **FEMA, Center for Domestic Preparedness**

Virtual Classroom Offerings: [VILT - Center for Domestic Preparedness \(dhs.gov\)](#)

CDP *YouTube Training* to provide “just-in-time” training. Here are a few examples:

1. Mass Casualty & Disaster Management: <https://www.youtube.com/watch?v=fiqTjEqs604>
2. START Triage Basics: <https://www.youtube.com/watch?v=9QHds10e-G0>
3. 7 Clues to Identify Chemical Hazards: <https://www.youtube.com/watch?v=jwMisoz1PFQ>
4. DOT Hazardous Material Classification: <https://www.youtube.com/watch?v=PCIUtAmKN2c>
5. Chemical Hazard Recognition – TRIC: <https://www.youtube.com/watch?v=i0KvgPxdUS4>
6. Why Fentanyl is so Incredibly Dangerous: [https://www.youtube.com/watch?v=LxyyvW\\_fcqw](https://www.youtube.com/watch?v=LxyyvW_fcqw)

**Additional Hospital and Clinical Focused Resources**

<p><b>Planning &amp; Training Resources</b></p>	<p>Training/Hospital Planning/Clinical Guidance</p> <ul style="list-style-type: none"> <li>• TEEEX – <a href="#">Medical Management of Chem, Bio, Rad, Nuclear, and Explosive Events</a></li> <li>• NIOSH/CDC – <a href="#">Chemical Hazards for Healthcare Workers</a></li> <li>• ORAU/CDC – Internal Contamination Clinical Reference <a href="#">Mobile APP</a></li> <li>• LSU Health New Orleans – <a href="#">Chemical Hygiene Plan</a></li> <li>• Center for Domestic Preparedness – <a href="#">Hospital Emergency Response Training for Mass Casualty Incidents</a></li> <li>• Joint Trauma System Clinical Practice Guideline             <ul style="list-style-type: none"> <li>• <a href="#">CBRN Injury Part 1: Initial Response to CBRN Agents</a></li> <li>• <a href="#">CBRN Injury Response Part 2: Medical Management of Chemical Agent</a></li> </ul> </li> <li>• EMSC – EIIC - <a href="#">Checklist of Essential Pediatric Domains and Considerations for Every Hospital's Disaster Policies</a></li> </ul> <p>Decontamination</p> <ul style="list-style-type: none"> <li>• Decontamination Guidance for Chemical Incident - <a href="https://www.medicalcountermeasures.gov/barda/cbrn/prism//">https://www.medicalcountermeasures.gov/barda/cbrn/prism//</a></li> </ul> <p>Detection/First Responder/Response Guidance</p> <ul style="list-style-type: none"> <li>• DHS PRND – <a href="#">Aid book describes procedures for the use of the first responder PRND equipment</a></li> <li>• Emergency Response Guidebook – <a href="#">Mobile APP</a>, <a href="#">ERG2020</a></li> <li>• OSHA – <a href="#">Best Practices for Hospital-Based First Receivers of Victims from a Mass Casualty Incident Involving the Release of Hazardous Substances</a></li> <li>• OHSA – <a href="#">Best Practices for Protecting EMS Responders during treatment and Transport of Victims of Hazardous Substance Releases</a></li> </ul>
<p><b>Communication Resources</b></p>	<p>Public Monitoring and Messaging</p> <ul style="list-style-type: none"> <li>• CHEMM – <a href="#">Information for the Public</a></li> <li>• FEMA’s Key Planning Factors for a Chemical Incident - <a href="#">Communications for an Informed Public</a>,</li> <li>• Wisconsin Climate and Health Program - <a href="#">Chemical Release Toolkit</a></li> </ul>