

## **Northeastern District Healthcare Coalition Burn Surge Plan**

### **Purpose**

This plan provides guidance to support a burn mass casualty incident (BMC) in which the number and severity of burn patients exceed the capability of HCC member facilities. The plan will identify the experts and specialized resources that exist within and external to the HCC that must be engaged in a mass burn response, and the mechanism/processes that will be used to determine which patients go to which facilities.

### **Scope**

The Burn Plan is applicable to the Northeastern District Healthcare Coalition (NEHCC) as described in the Coalition Response & Preparedness Plan Membership Annex. It may also include entities that are not official members of the coalition but are jurisdictional partners who specialize in Burn/Trauma care and who may be called on as Subject Matter Experts (SME) or to provide assistance.

The command structure and communication plan will adhere to National Incident Management System (NIMS) and the Alabama Incident Manage System (AIMS) as written in the Response & Preparedness Plan.

This Plan seeks to provide recommendations for the stabilization and initial management of burn victims for up to 72 hours when immediate transfer to an American Burn Association (ABA) verified burn center is not feasible.

This Plan will not supersede, replace, and/or serve in place of a facility's own Mass Casualty/Burn Surge plan but will support and assist existing facility plans as needed. This plan does not require a member facility to participate, if in doing so, it places the facility, its patients and/or its employees in jeopardy or places the facility at risk if being unable to respond to its own event.

### **Background**

The Northeastern District Healthcare Coalition (NEHCC) is comprised of the following **11** counties, in the state of Alabama: Blount, Calhoun, Cherokee, Clay, Cleburne, Dekalb, Etowah, Randolph, St. Clair, Shelby, and Talladega.

According to the 2020 Census, the population of the 11 counties in the NEHCC in 2020 was 823,125 individuals.

The following hospitals operate in the Northeastern District:

- St. Vincent's – Blount
- Northeast AL Regional Medical Center – Calhoun
- Northeast AL Regional Medical Center (Stringfellow Campus) – Calhoun
- Floyd-Cherokee Medical Center – Cherokee
- Clay County Hospital – Clay
- Dekalb Regional Medical Center – Dekalb
- Gadsden Regional Medical Center – Etowah
- Riverview Regional Medical Center – Etowah

- Tanner-East Alabama Medical Center – Randolph
- St. Vincent’s – St. Clair
- Shelby Baptist Medical Center – Shelby
- Citizens Baptist Medical Center – Talladega
- Coosa Valley Medical Center – Talladega

\*\*Cleburne County is the only county in the NEHCC that does not have a hospital.

Four (4) hospitals in the Northeastern District have dedicated pediatric units and/or beds.

- Northeast AL Regional Medical Center – Calhoun
- Dekalb Regional Medical Center – Dekalb
- Gadsden Regional Medical Center – Etowah
- Coosa Valley Medical Center – Talladega

\*\*Shelby Baptist Medical Center has a nursery and NICU, but no pediatric unit.

There are 8 hospitals in the district that have a **Level 3 Trauma Rating**:

- Northeast AL Regional Medical Center – Calhoun
- Northeast AL Regional Medical Center (Stringfellow Campus) – Calhoun
- Dekalb Regional Medical Center – Dekalb
- Gadsden Regional Medical Center – Etowah
- Riverview Medical Center – Etowah
- Shelby Baptist Medical Center – Shelby
- Citizens Baptist Medical Center – Talladega
- Coosa Valley Medical Center – Talladega

Eleven (11) hospitals are considered Short-Term Acute Care facilities and two (2) are Considered Critical Access facilities.

#### **Hospitals with Emergency Departments**

All hospitals within the NEHCC have emergency departments, and emergency department boarding is the most common approach used in normal and surge conditions.

#### **Burn Centers**

According to the ABA website, Alabama has 3 burn centers: The University of Alabama at Birmingham (UAB) Children’s Hospital and the University of South Alabama Medical Center Regional Burn Center. The NEHCC does not have a burn center within its boundaries. UAB is within 100 miles of most of the NEHCC facilities. USA is at most a 5-hour drive for most people within the NEHCC boundaries.

#### **Risks**

##### **Waste Isolation Pilot Plant (WIPP)**

Waste Isolation Pilot Plant program is the nation’s only deep geologic long-lived radioactive waste repository. Located 26 miles southeast of Carlsbad, New Mexico, WIPP permanently isolates defense-

generated transuranic (TRU) waste 2,150 feet underground in an ancient salt formation. The U.S. Department of Transportation regulation requires radioactive materials to be shipped on the interstate highway system unless states designate other routes. Major interstates are in Calhoun, Cleburne, Dekalb, Etowah, St. Clair, Shelby, and Talladega Counties.

Every county performs a risk assessment to determine what hazardous risks are posed to the citizens in that county. In addition, each individual facility is encouraged to perform its own risk assessment to determine the risk for that facility. The county EMAs perform a **Threat and Hazard Identification and Risk Assessment (THIRA)** to determine the risk to each county and its inhabitants.

The NEHCC performs a **Hazard Vulnerability Assessment (HVA)** each year to assess the threats to the HCC community. The 2022 HVA determined that the top 4 threats were: Tornados, Supply Shortages, Mass Casualties, and Chemical Terrorism. This document is located as an annex for the Response and Preparedness Plan.

The primary risks for burn traumas are manufacturing facilities that use volatile/combustible materials, traffic accidents where fuel may ignite, structure fires and more. The burn injuries can result from fire, chemical or radiation and each will require a different level of treatment and response.

### **Burn Resources**

The hospitals within the NEHCC do not have burn treatment centers. All cases are referred to UAB, Children's Hospital in Birmingham, or the USA Regional Burn Center in Mobile. Additional regional facilities can be found in Georgia, Florida, Tennessee, and Louisiana. The hospitals in the NEHCC have MOUs and other relationships with these facilities. Many of the hospitals have "sister" hospitals that can assist with treating burn patients.

Each hospital/treatment facility should be able to treat and stabilize a burn victim to allow them to be transported to a receiving Burn Treatment facility. The hospital/treatment facility should have on hand resources needed to treat the burn patient. Each facility will designate a Subject Matter Expert (SME) that can provide treatment advice and information until the patient can be transferred.

### **Planning Assumptions**

- An incident triggering the activation of the NEHCC Burn Plan will happen with little or no warning.
- All acute care hospitals are capable of providing initial triage and resuscitation for burn patients.
- Initially, all local hospitals will follow normal organizational protocols when faced with burn patients.
- In patient care, after initial fluid resuscitation, there is a period of 48 hours or more before definitive burn management is required. The major focus during this time period is supportive care for the patient and determining which patients will most benefit from care at a dedicated Burn Center.
- Federal resources from the Strategic National Stockpile or its Managed Inventory assets to support Burn Centers and other hospitals will take at least 12 hours to arrive, once the Governor has made this request and the request has been approved by the federal government.

- EMS protocols include both direct EMS transport of burn patient(s) from the scene to a Burn Center or EMS transport to a local hospital for initial treatment and stabilization.
- Level 2 trauma centers and Level 3 trauma centers should also plan for a major role in the receipt and care of burn patients and understand their role in the burn management event in their community or state.

## **Concept of Operations**

### **Activation**

The guidelines for activation of the NEHCC are as follows: Any incident/event that completely overwhelms a facility's infrastructure or the ability to care for patients/residents due to natural, infectious, technological, human related or hazardous material incident/event, will justify activation of the NEHCC.

Once a coalition member is aware or suspects that an event will be major, they should follow their facility's protocol and plan to manage the event until they are able to transfer the patients. They should alert the coalition of the event and indicate whether assistance is needed. However, even if assistance is not needed and/or requested, the coalition Burn Plan will be activated, and all appropriate responding facilities will be alerted of the potential surge. The Coalition will maintain situational awareness throughout the lifespan of the event.

### **Notification**

- When an incident or event occurs, the affected organization, or any other NEHCC member may initiate a notification of the HCC.
- The Alabama Incident Management System (AIMS) Administrator for the affected facility will notify the HCC Coordinator and the local EMA, explain the event and give a brief description of needs.
- It would then be determined if activation of the HCC is needed.
- The Communications Coordinator/AIMS Coordinator will utilize the AIMS system to send a notification, both text and email to the HCC.
- If the incident or event is widespread or a major need, the entire membership of the HCC will be notified. Due to the large geographical area of the NEHCC; in the case of a localized event, only facilities/organizations in the near vicinity of the incident/event will be notified.
- After all local resources have been exhausted, then the HCC and/or AIMS Coordinator will contact the local EMA to have the resource request placed in WebEOC to be submitted statewide.

## Roles and Responsibilities

Agency	Conventional	Contingency	Crisis
Local Hospital(s)	<ul style="list-style-type: none"> <li>Maintain minimum stock of burn supplies</li> <li>Stabilize and treat burn patients for up to 6 hours</li> <li>Follow normal organizational referral protocols</li> </ul>	<ul style="list-style-type: none"> <li>Activate internal surge plans</li> <li>Stabilize and triage burn patients and prepare them for transport to multiple facilities</li> <li>Continue to treat patients for up to 6 hours</li> <li>Engage in communication with other response partners</li> </ul>	<ul style="list-style-type: none"> <li>Internal surge plans activated</li> <li>Stabilize burn patients and prepare them for transport to multiple facilities</li> <li>Continue to treat patients for up to 6 hours</li> <li>Be prepared for possible transport delays</li> <li>Engage in communication with other response partners</li> </ul>
EMS	<ul style="list-style-type: none"> <li>Transport burn patients per normal protocols</li> <li>Enact MOUs/MOAs as needed</li> </ul>	<ul style="list-style-type: none"> <li>Enact MOUs/MOAs as needed</li> <li>Engage in communication with other response partners</li> </ul>	<ul style="list-style-type: none"> <li>Notify EMS Regional office of need for resources if applicable</li> <li>Engage in communication with other response partners</li> </ul>
NE Healthcare Coalition	<ul style="list-style-type: none"> <li>Support affected hospital/facility</li> </ul>	<ul style="list-style-type: none"> <li>Activate coalition plans as appropriate</li> <li>Promote information exchange, transportation and patient tracking as required</li> <li>Assist with supply needs as required</li> </ul>	<ul style="list-style-type: none"> <li>Continue to promote information exchange, transportation and patient tracking as required</li> <li>Assist with supply needs as required</li> </ul>
Other NEHCC Members	<ul style="list-style-type: none"> <li>Provide support as needed</li> </ul>	<ul style="list-style-type: none"> <li>Provide support as needed</li> </ul>	<ul style="list-style-type: none"> <li>Provide support as needed</li> </ul>

## Logistics

As needed resources are identified or become scarce, Coalition members will communicate those needs, following the guidelines found in the Response and Preparedness plan, to the coalition through the normal communication methods and will, if necessary, employ the coalition Mutual Aid compact to facilitate the exchange of those resources to facilities in need. (See Mutual Aid Compact in the Response & Preparedness Plan)

### Space

Facilities that may be better able to treat/care for burn patients, will offer to receive burn patients if transportation is advisable and a more qualified Burn treatment facility is unavailable. Facilities will follow their normal protocol for patient transfer.

### Staff

Facilities with staff who are qualified to treat/care for burn patients may offer to share them with a facility that cannot provide the same level of care but transferring of the patient is

unadvisable at the time. As another option, facilities with qualified staff may make them available through telephone, Web or telemedicine communication, to provide instructions or procedures for treating burn patients. In addition, coalition and State SMEs will be available to provide further advice.

### **Supplies**

Through the use of the coalition's Mutual Aid Compact, equipment and supplies that may be Needed to treat the burn patients, can be loaned/provided to the facility in need from any coalition member who can provide assistance.

### **Special Considerations**

This plan is meant to supplement the general all hazard response plan for the NEHCC, specific to the care and treatment of burn patients. In addition, specific attention will be considered for special circumstances, unique to the care and treatment of burn patients.

#### **Behavioral Health**

The psychological effects resulting from burns will also need to be treated. The coalition, as it is able, will make available access to mental health agencies and professionals, specializing in the mental health care of patients who have experienced severe burns. This will go beyond the normal behavioral health care as covered in the general response plan.

#### **Pediatric**

Pediatric patients will pose an additional risk and as such, will require the implementation of the NEHCC pediatric surge plan. Following those guidelines, the NEHCC and/or the receiving facility, will find the most appropriate facility to treat the pediatric burn patient.

#### **Combined Injury**

It is very likely that burn patients may also present with additional injuries. Initial receiving facilities will follow their triage protocol to identify the most appropriate facility to treat the injuries and/or burns. The implementation of the States Crisis Standards of Care (CSC) may play a role in deciding the appropriate course of action.

### **Operations – Medical Care**

Specific medical treatment is required to attend to burn patients. It is critical that our facilities who cannot provide long term care, know and understand what must be done to see to the prompt and urgent care for burn victims.

#### **Triage and Secondary Triage**

Initial triage of burn patients and expectations for hospital transport including patient allocation by number of patients, age, and severity will be conducted by the responding agency, with the help of the local receiving facility or nearest trauma facility. Secondary triage of patients to an

appropriate treatment center for continued care will be conducted by the receiving facility. This critical function may have to be delegated to burn experts outside the immediately affected area, due to competing demands for direct patient care and based on available resources within the coalition. Additionally, triage decisions about expectant management for patients with catastrophic burns will require expert input.

## **Treatment**

The treatment of burn patients will follow the normal protocol for each receiving facility. This information will be shared with other facilities that may also be treating burn patients as well as providing access to specialty consultation for hospitals that are temporarily caring for complex patients and/or a large number of burn patients to ensure the best care possible. The NEHCC will make available the SMEs to those facilities that may need additional advice. It may be necessary for just-in-time training to be conducted to support the care of patients at burn surge facilities that do not normally see/treat burn patients. Should this be necessary, such training will be provided by a qualified medical professional for the treatment of severe burns. If such training cannot be provided in person, any appropriate means available will be used, including telephone, web conferencing and/or telemedicine.

Care is focused on initial stabilization to include:

- Airway, Breathing, Circulation (ABCs)
- Fluid resuscitation
- Pain Management
- Wound care. Priority is to minimize patient pain, infection potential and to decrease
- Time demands on health care staff until definitive burn care is available.
  - Wound care will typically be limited to the application of silver-based long acting dressings. These types of dressings can be applied to burn wounds and left on without having to change them for three to five days.
  - Similar burn wounds as well as grossly contaminated wound will require more frequently daily dressings with Silver Sulfadiazine cream (Silvadene) or other anti-microbial preparations.
  - Facial burns will be treated with anti-bacterial ointment (Bacitracin/Neosporin) whichever the facility has on hand.
  - Scalp and facial hair should be shaved daily.
  - Scalp wounds should be covered with Silver sulfadiazine (Silvadene) cream.

## **Transportation**

A critical element of this, or any healthcare response plan for a mass casualty incident (MCI), is the underlying assumption of the ability and availability of resources to transport patients to facilities that are able to provide optimal care based on the nature of the injuries. When planning for patient transport, it is important to assure that there is enough redundancy to cover the multiple transports that will occur during a BMCI.

It is anticipated that any major burn incidents, Stage II and Stage III incidents could warrant activation of the National Disaster Medical System (NDMS). NDMS is a federal resource involving a nationwide network of civilian and military hospitals that may be mobilized to support major disasters and MCIs. NDMS uses military aircraft to transfer patients from the affected areas to distant locations across the nation. In addition, NDMS can deploy specialized Disaster Medical Assistance Teams (DMATS) to provide basic medical care within the area impacted by the disaster. The nearest NDMS airport for most of the NEHCC is Birmingham-Shuttlesworth International Airport in Birmingham, AL.

Emergency and medical transportation specific to burns is provided by several local and regional companies. Actual availability will be identified during a real event. Additional transportation assets may be located outside of the coalition's boundaries that can be appropriated to assist or supplement existing assets. The transportation needs during a large-scale incident involving burns may be quite extensive. The transferring physician, hospital and EMS staff will work together to identify the resources needed to transport the burn patient(s) in the most efficient and safe manner available at the time.

### **Tracking**

Each facility will follow their protocol for transferring patients to another facility for treatment. They will use their preferred method of patient tracking to ensure safe/prompt transfer. In addition, the transferring facility will inform the coalition of the transfer, including a patient id number or identifier, the facility to which the patient was transferred, and a general description of injuries. This data will be limited to general information and will not be used to identify the patient. No Private, personal information (PPI) will be shared.

### **Deactivation and Recovery**

The deactivation of the Burn Surge plan will begin once all patients have been transferred out of the coalition and/or the initial receiving facilities have returned to normal operations. Deactivation will commence the recovery operation of the coalition to include the resupply of facilities, rest and recovery for the staff, performing an after-action review and developing an Improvement plan and lastly reviewing and updating the Burn Surge plan.