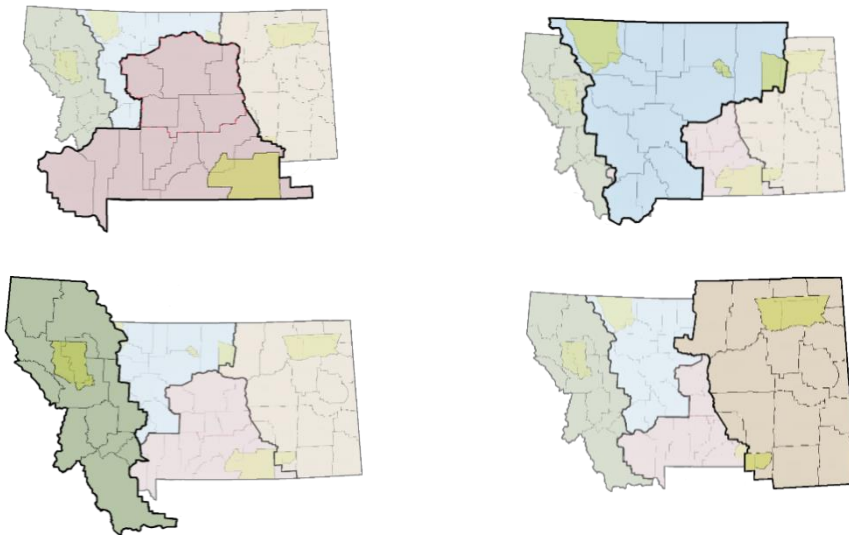


# EASTERN REGION HEALTHCARE COALITION



## BURN SURGE ANNEX

May 2022  
Version 1.2



# PROMULGATION

The Executive Committee of the Eastern Region Healthcare Coalition support and provide this planning tool to aid the healthcare communities within the boundaries of the Eastern Region Healthcare Coalition.



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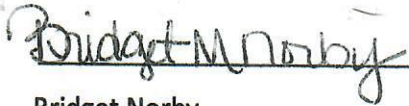
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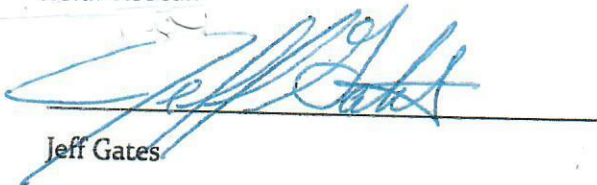
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# SECTION 1: INTRODUCTION, PURPOSE, SCOPE, SITUATION, and ASSUMPTIONS

## 1.1 Introduction

A burn mass casualty incident, or BMCI, is defined as any incident where capacity and capability significantly compromises patient care, in accordance with individual Burn Center, local, state, regional or federal disaster response plans. Smaller incidents within a locality or region of Montana may classify as a BMCI if taxing on the facility, staffing, or resources. In the State of Montana, no Burn Centers exist.

This plan is intended to be flexible to fit the needs of the response, covering all aspects of a tiered approach, to response from the local level up to federal assistance as necessary. It contains guidelines for burn surge in the Region Healthcare Coalition facilities, including resources for staff training and augmentation, supplies and equipment, and special consideration. Participation by hospitals, healthcare systems and their partners is encouraged to ensure the best possible patient outcomes for all those treated within the region. Where possible, the plan leaves the majority of the decisions and processes up to the healthcare entities.

According to the 2017-2022 Health Care Preparedness and Response Capabilities, “All hospitals should be prepared to receive, stabilize and manage burn patients. However, given the limited number of burn specialty hospitals, an emergency resulting in large numbers of burn patients may require HCC and ESF-8 lead agency involvement to ensure those patients who can most benefit from burn specialty services receive priority for transfer. Additionally, burn surgeons may be able to help identify patients who do not require burn center care and who are appropriate for transfer to other health care facilities.”

## 1.2 Purpose

This Burn Surge Annex provides guidance to support a burn mass casualty incident (BMCI) in which the number and/or severity of burn patients exceeds the capability of the Eastern Region Healthcare Coalition (ERHCC) member facilities. The goal of this plan is to provide recommendations and support to responding facilities as able.

## 1.3 Scope

The Burn Surge Annex is an Annex to the larger ERHCC Preparedness and Response Plan and is applicable for any incident that may be classified as a BMCI. This annex is intended for use by the Healthcare coalition to assist in providing coordination during a BMCI. This plan outlines the concept of coordination for incidents wherein the complexity or duration requires regional support in information or resource sharing.

This Burn Surge Annex involves all participating organizations, agencies, and jurisdictions contained within the geographical boundaries of the ERHCC. Many of these participants may have their own protocols for responding to a BMCI. This document is designed to work with those protocols and does not define or supplant any emergency operating procedures or responsibilities for any member agency or organization in the ERHCC. It is not a tactical plan or field manual, nor does it provide Standard

Operating Procedures (SOP). Rather, it is a framework for maintaining the scope of the Coalition and outlining the support that may be available as requested. This plan intentionally does not provide specific or quantitative thresholds for activation or demobilization of organizational structures or processes described herein. Such determinations are situation-dependent and left to incident management. This plan is intended to be compatible with federal, state, and local emergency response plans, promotes the coordination of an efficient and effective response by utilizing the concepts outlined in the National Incident Management System. Implementation is not contingent on the activation of the ERHCC Emergency Preparedness & Response Plan. Activities in this framework are based on established relationships and partnerships with the public, stakeholders, and contributing agencies.

Planning for BMCI emergencies includes medical needs associated with mental, behavioral health, and substance abuse considerations of incident victims and response workers. Services also cover the medical needs of individuals classified as having access, functional, or special needs. The Coalition recommends that all healthcare entities include these special populations within their facility specific plans.

This plan is based on the current capabilities of the ERHCC and will be modified and updated as the Coalition grows. All aspects of this plan will be performed as able upon the request for assistance from any healthcare entity within the region.

## 1.4 Overview/Background of HCC and Situation

The ERHCC encompasses all healthcare organizations and facilities in the Eastern Healthcare Region. Populations served by facilities within this region include two Native American reservations and seventeen rural counties.

The ERHCC's notes the following fire related incidents as possible or likely in the jurisdiction:

- Burns
- Vehicle Accidents
- Wildfires
- Electrical Industry/Burns
- Clandestine Drug Labs
- Burlington Northern Santa Fe Railway/Train Derailments
- Fort Peck Dam
- Oil and Natural Gas Industry
- Agricultural, including anhydrous ammonia and various other chemicals
- Sugar Beet Factory
- Oil Field Chemical Processing Plant
- Fertilizer Plant
- Petroleum Product Storage Unit
- Wind Turbines and Farms

### **Healthcare Facilities**



Any healthcare facility in Montana could encounter a BMCI situation. However, all facilities might not have adequate capabilities to provide optimal and safe care for that patient. Facilities should be aware of Trauma Referral Patterns within the state. The primary medical provider will determine the need and options for patient transfer in the event of a patient with burn injuries that require a higher level of burn care.

In this region there are:

- 0 Hospitals
- 14 Critical Access Hospitals
- 2 Tribal/IHS Hospitals
- 0 HID Assessment Hospitals
- 1 Veteran’s Affairs Hospital
- 14 Clinics
- 18 Ground EMS and Rapid Response Units
- 3 Flight EMS
- 13 Long-Term Care Facilities
- 19 Public Health Departments

## 1.5 Assumptions

The following are the planning assumptions for the purposes of this framework:

- All hospitals providing emergency care may receive burn patients and should be able to provide initial assessment and stabilization before transferring to a higher level of care.
- There are no Verified Burn Centers within the state of Montana. The closest Burn Centers are over 300 miles away from the ACS Level 2 facilities.
- Although there are adequately certified healthcare professionals, there are no licensed burn beds within the state of Montana.
- An incident triggering the activation of the ERHCC Burn Surge Annex will happen with little or no warning.
- Initially, all local hospitals will follow the facility’s organizational protocols when faced with burn victims.
- The major focus for a burn patient is supportive care and determining which patients will most benefit from care at a dedicated Burn Center.
- Care of critical burns is extremely resource-intensive and requires specialized staff, expert advice, and critical care transportation assets.
- Severe burn patients often become clinically unstable within 24 hours of injury, complicating transfer plans after this time frame.
- National burn bed capacity is limited and coordination of patient transfers (destinations and logistics) may take days to achieve when out-of-state capacity is required.
- Federal resources (e.g., ambulance contracts, National Disaster Medical System teams), though potentially available to assist, cannot be relied upon to mobilize and deploy for the first 72 hours.

- The American College of Surgeons Committee on Trauma (ACS-COT) Guidelines for the transfer of patients to a burn center may need to be modified in order to do the greatest good for the greatest number of patients. Guidelines can be found here:
  - <https://www.facs.org/-/media/files/quality-programs/trauma/vrc-resources/resources-for-optimal-care.ashx>

## SECTION 2: CONCEPT OF OPERATIONS

### 2.1 Activation

Activation of this plan will occur upon the request for assistance from any healthcare entity within the region.

The initial response to a burn mass casualty incident will be the responsibility of the local EMS and healthcare organizations and partnered with emergency management agencies, public health, law enforcement and other response agencies, utilizing all available local resources. Existing protocols for incident command, burn center notification, coordination of resources, and distribution of patients will be adhered to. However, local efforts may quickly become exhausted and require external resource, care and coordination assistance.

The ERHCC would fulfill a support role during any Burn Mass Casualty Incident. The following steps outline the potential flow of activations and response:

1. Mass casualty incident involving burns occurs, local 911 notified
2. Local EMS begins notifications, patient triage and distribution from incident scene per existing protocols and procedures. Local facilities may notify the ERHCC to assist with coordination and resource sharing as needed
3. If local response agencies are overwhelmed, the ERHCC may assist in contacting State Trauma and other partners
4. The ERHCC will work with the facility for situational awareness, existing burn center telemedicine programs and appropriate patient transfer agencies in order to help facilitate appropriate transfer to a regional burn bed for definitive care.

### 2.2 Notifications

Notification will be the responsibility of the responding agencies and participating healthcare facilities. The ERHCC will assist with communication and resource needs as requested.

### 2.3 Roles and Responsibilities

Local organizations and agencies within the impacted jurisdiction will have primary responsibility for response, including initial triage and casualty distribution.

The roles and responsibilities of the responding agencies and participating healthcare facilities will be determined by each individual entity. It is the responsibility of the entities to acquire and provide appropriate education and training. The ERHCC does not have the authority to dictate or recommend roles and responsibilities but will provide education and training related to best practices in burn care.

## 2.4 Logistics

Logistics for space, staff and supplies is the responsibility of the responding agencies and participating healthcare facilities. The ERHCC will assist with resource needs as requested.

### 2.4.1 SPACE

There are no licensed burn beds within the state nor Verified Burn Centers. Each facility should follow their own protocols for treating, holding, transporting, and transferring care in regards to burn patients.

### 2.4.2 STAFF

The ERHCC recommends and provides Advanced Burn Life Support training for participating agencies. Facilities are encouraged to utilize Montana Healthcare Mutual Aid System (MHMAS) as needed to request trained staff.

### 2.4.3 SUPPLIES

The ERHCC may assist with facilitating mutual aid to find supplies and resources, including transportation. This may include utilizing EMResource, existing MOUs, volunteer registry, existing cache and access to supply vendors to address resource shortages.

## 2.5 Special Considerations

### 2.5.1 BEHAVIORAL HEALTH

In coordination with direct medical care, behavioral health care may be necessary to support patients and families impacted by a burn injury. Plans should be enacted early in a burn response to address and plan for behavioral health care needs as appropriate. Additionally, due to impact of treating individuals with a burn injury, plans may be required to support a surge in behavioral health needs of patients, family members, community members, healthcare staff and employees during a BMCI. Healthcare organizations should work together to facilitate information coordination and standardizations of resources provided to address behavioral health concerns based on the incident. Behavioral health response may need to continue long after a BMCI response is demobilized.

**Burn Survivor Mental Health.** Given the nature and scope of a burn mass casualty incident, it can be expected that a number of those who witnessed, were injured by, or responded to the event will experience some mental trauma in relation to the incident. Research about trauma in burn survivors indicates that “experiencing some post-traumatic stress symptoms immediately following a burn trauma is normal.” “According to the literature, about 90% of both adults and children with burn injuries report at least one symptom of acute stress disorder right after the traumatic event, but only about 30% develop PTSD. PTSD is more likely to occur if the burn injury is an assault or a repeated trauma (such as ongoing abuse). Burn survivors most at risk for PTSD are those with a history of anxiety disorders (generalized anxiety, panic disorder) or depression. Burn survivors who have a history of traumatic events and past PTSD are also at risk for developing PTSD from the current burn injury (Wiechman, 2017; <https://msktc.org/burn/factsheets/PTSD-After-Burn-Injury>).

The National Institute for Mental Health strongly recommends a thorough psychosocial screen following trauma exposure to help identify individuals at risk for PTSD. Clinicians need to be aware of and utilize a trauma-informed approach, beginning with creating a sense of safety through education about what to

expect, orientation to their care team and unit, and reconnection to known coping tools and support systems. It is also important to note that in addition to traumatic stress, many burn victims also deal with grief from loss (of a home, a loved one, a limb, etc.) and fear that something like this may happen again, and that they have little ability to predict or prevent it.

### 2.5.2 PEDIATRIC

A good planning figure is to assume that a minimum of 25% of victims from any mass casualty incident will be children. It is critical that healthcare facilities, including burn and non-burn centers, have the education and resources necessary to assess and treat pediatric patients. Where telemedicine is not available, image sharing and provider-to-provider discussions can be used to assist in caring for a pediatric burn patient.

### 2.5.3 COMBINED INJURY

Burns with trauma or radiation, chemical injuries increase mortality. Clinical input to support decision-making will be obtained, including decontamination considerations if chemical agents are involved. Initial triage by EMS should focus on traditional trauma triage guidelines when trauma is present; secondary triage providers will need to consider combined injury.

## 2.6 Operations – Medical Care

Operations for all responders providing medical care are the responsibility of the health care entity. The ERHCC cannot assume the responsibility of providing guidance and/or protocol for medical care.

### 2.6.1 TRIAGE AND SECONDARY TRIAGE

The impacted healthcare organizations will immediately begin triage and treatment according to local protocols. During triage, EMS and primary receiving facilities should consider patient allocation by number of patients, age, and severity priority for burn patients. As stated, all hospitals providing emergency care may receive burn patients and should be able to provide initial assessment and stabilization before transferring to a higher level of care. Secondary triage of patients to an appropriate center for continued care will be critical. Hospitals may rely on telehealth to assess these patients based on available resources within the facility.

### 2.6.2 TREATMENT

Treatment of burn patients, including how information will be shared and how burn care specialty consultation will be obtained by the impacted facilities and responding agencies and their approach to patient care should align with best practice protocols. .

## 2.7 Transportation

Considerations for safe inter-facility transport, including prioritization, of stable, unstable and potentially unstable burn patients will be at the discretion of the sending and receiving facilities in concert with the transporting agency.

The decision to transfer a patient to another facility for definitive care is complex, and relies on consideration of a number of factors to determine which patient is transported to which facility, and when.

## 2.8 Tracking

Healthcare facilities will follow routine and/or disaster protocols for tracking patient movement within their hospital system. More uncommon patient movement, including transfers from a facility to a destination facility outside of the hospital system or state may occur.

## 2.9 Rehabilitation and Outpatient Follow Up Services

Burn rehabilitation services, outpatient follow-up services and coordination of continued care following the surge event. Include procedures for repatriation of any patients transferred out of the area as needed by the discharging facility

## 2.10 Deactivation and Recovery

Triggers for incident conclusion include decreased patient volumes and near-normal levels of hospital staffing and supplies. When these triggers occur, demobilization efforts will be activated at the discretion of participating agencies with all appropriate stand-down measures initiated as needed. The Healthcare Coalitions will provide guidance and support as able.

# SECTION 3: MAINTENANCE AND REVIEW

The ERHCC formally reviews all components of this plan biannually. A review group convened by the Executive Committee offers advice and suggestions on appropriate emergency planning and construction of the document. This process allows the coalition to determine if it meets all essential factors, remains applicable, and affords the opportunity to update and change the plan as the coalition changes and grows.

Minor corrections, edits, updates, or adjustments to this document might occur on occasion without a formal review. Changes may also take place as part of the improvement plans from exercise after action reports. All changes are tracked in a versioning method and in the Record of Change log.

# SECTION 4: APPENDICES

Appendix 1: Training and Exercises

Appendix 2: Additional Resources/References

## Appendix 1: Training and Exercises

This plan or any of its components could be exercised separately or in conjunction with other exercises. Exercises will be used under simulated, but realistic, conditions to validate policies and procedures for responding to specific emergency situations and to identify deficiencies that need to be corrected.

Personnel participating in these exercises should be those who will make policy decisions or perform the operational procedures during an actual event (i.e. critical personnel). Exercises are conducted under no-fault pretenses. The HCC will identify and share as many opportunities as possible. The Montana Regional Healthcare Coalitions will offer advanced Burn Life Support classes as able.

## Appendix 2: Additional Resources and References

Western Region Burn Disaster Consortium

Burn Mass Casualty Operations Plan

<https://crisisstandardsincare.utah.edu/opendocs/WRBDC%20BMCI%20Operations%20Plan.pdf>

American Burn Association

<https://ameriburn.org/quality-care/disaster-response/>

Wyoming Department of Health, Healthcare Preparedness Program

<https://health.wyo.gov/publichealth/ems/hospital-preparedness-program/>

ASPR TRACIE/HHS

<https://files.asprtracie.hhs.gov/documents/aspr-tracie-hcc-burn-surge-annex-template-final.pdf>