Healthcare Coalition Burn Surge Annex Template

The 2019-2023 HPP Funding Opportunity Announcement (FOA) requires Healthcare Coalitions (HCCs) to develop a complementary coalition-level burn annex to their base medical surge/trauma mass casualty response plan. This annex aims to improve capacity and capabilities to manage a large number of casualties with incident-specific needs. According to the 2017-2022 Health Care Preparedness and Response Capabilities, due to 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 transport." (Capability 4, Objective 2, Activity 6).

This burn-focused operational annex complements the HCC's Response Plan. It is intended to be a high-level, incident-specific response plan, identifying the experts and specialized resources that exist within the HCC or external to the HCC that are available, the mechanisms/ processes that will be used to determine which patients go to which facilities, and an understanding of how many burn patients each community and specialty facility should plan to receive. Each facility is encouraged to develop more detailed policies/procedures that support their individual operations, but that level of detail is not necessary in this annex.

This template provides general headers and descriptions for a sample HCC burn surge annex. The resources used to develop this template include sample HCC plans and the Health Care Preparedness and Response Capabilities. This document is organized as such:

- Sample plan headings/sub-headings;
- Description and considerations (where appropriate, language from the FOA and Health Care Preparedness and Response Capabilities are used; refer to the full text of the capabilities for additional detail/information); and
- Sample resources/plans that may provide guidance or a template for HCCs to assist in their planning efforts. There is no guarantee the resource(s) listed will fully comply with the capability. A sample annex outline is provided in Appendix A of this document. Appendix B includes a full list of resources referenced in this template.

According to the 2019-2023 FOA, HCCs must develop a series of specialty surge annexes to address pediatric, burn, infectious disease, radiation, and chemical emergencies. It is important to consider trauma, illness, surgical, and mental health topics inclusively, since those caring for patients will likely be working on these situations simultaneously. The FOA states, on page 70, "In addition to the usual information management and resource coordination functions, each specialty surge annex framework should be similarly formatted and emphasize the following core elements:

- Indicators/triggers and alerting/notifications of a specialty event
- Initial coordination mechanism and information gathering to determine impact and specialty needs
- Documentation of available local, state, and interstate resources that can support the specialty response and key resource gaps that may require external support (including inpatient and outpatient resources[1])
- Access to subject matter experts (SMEs) – local, regional, and national
- Prioritization method for specialty patient transfers (e.g., which patients are most suited for transfer to a specialty facility)
- Relevant baseline or just-in-time training to support specialty care
- Evaluation and exercise plan for the specialty function."

Additionally, the FOA states that the burn annex must consider:

- "Local risks for mass burn events (e.g., pipelines, industrial, terrorist, transportation accidents)
- Burn-specific medical supplies
- Coordination mechanisms with American Burn Association (ABA) centers/region
- Incorporation of critical care air/ground assets suitable for burn patient transfer."

Prior to developing any emergency operations plan, HCCs should work with jurisdictional emergency management to conduct or participate in a risk assessment/hazard vulnerability assessment and a resource gap analysis to gather the information listed above and understand their specific risks, hazards, and resources available for a response.

[1] Most of the resources are likely NOT located within the healthcare coalition but coordination with those entities will be required for a successful response.

NOTE TO COALITIONS: Although jurisdictions are not required to use this template nor follow this format, the previously listed elements must be included in their burn annex. There are many acceptable planning methods and document formats. However, HCCs are encouraged to use this template to promote consistent operational planning and formatting of the specialty annexes. The focus of this planning is to facilitate the growth of operational capabilities of coalitions to address specialty casualties. The planning process should be collaborative between hospitals, trauma centers (if applicable), HCCs, burn centers, and other community organizations to discuss, strategize, and plan for the level of care that can be provided and resources available during a burn mass casualty incident (BMCI). This burn annex template is consistent with our base Healthcare Coalition Response Plan format and supports a seamless planning process and facilitated response. The length and complexity of the annex is directly proportional to the diversity of resources and members within the coalition – the annex will be short in rural areas without many resources or regional partners and significantly longer in major metropolitan areas with many partners and facilities to coordinate. Additional ASPR TRACIE resources developed for HCCs include:

- Preparedness Plan, Response Plan, and Recovery Plan templates
- Pediatric Surge Annex Template
- Burn Topic Collection
- Mass Burn Event Overview
- Additional resources that are helpful for HCCs

For more information, visit https://asprtracie.hhs.gov or contact our Assistance Center at 1-844-5-TRACIE or askasprtracie@hhs.gov.

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1. Introduction

Section Headers/ Subheadings	Description and Considerations	Sample Resources
1.1 Purpose	This section describes what the burn surge annex will address and related HCC goals and objectives. **Sample language:** This annex provides guidance to support a burn mass casualty incident (BMCI) in which the number and severity of burn patients exceeds the capability of HCC member facilities. The annex 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 mechanisms/processes that will be used to determine which patients go to which facilities.	ASPR TRACIE Mass Burn Event Overview DC Emergency Healthcare Coalition Mass Burn Incident Specific Annex Illinois Department of Public Health Burn Surge Annex Los Angeles County Emergency Medical Services Agency Burn Resource Manual Michigan Burn Mass Casualty Incident Surge Plan Minnesota Burn Surge Plan and Training Resources University of Utah Crisis Standards of Care (request access or email ASPR TRACIE)
1.2 Scope	This section should include: • Timeframe covered by the plan; • Involved coalition and jurisdictional partners; • General command structure and communication protocols (may refer to base plan); • Definitions of key terms; and • Any necessary disclaimers about the plan (e.g., not to supersede authorities of the participating entities). This section may also describe elements not addressed in the plan and refer the reader to the relevant organizational documents and other specialty annexes such as pediatrics, chemical, radiological (also covered in section 2.5- Special Considerations).	

1.3 Overview/Background of HCC and Situation	This section should include a **general overview** of the HCC and the community relative to burn resources, including: • Members • Demographics • Healthcare facilities, including regional burn centers, trauma centers, other coalition hospitals, transfer agreements (e.g., a description of the healthcare system and potential roles in a BMCI to include burn centers, acute care facilities and their trauma designation) • Local risks for BMCI (e.g., rail, industry, mass gathering, wildfire, pipeline) • Burn resources or capabilities represented in the coalition (e.g., specialty burn centers or non-burn centers that may need to temporarily provide treatment and supportive care to some patients) • Burn centers and resources external to the coalition that will be key partners (e.g., ABA regional coordinating center, ABA burn units, telemedicine support) • Patient transport resources for inter-facility transfer This section may also include a comparison of healthcare facilities' inpatient projected capacity under normal conditions and projections under surge conditions.	
1.4 Assumptions	This section should outline the key points/assumptions of the plan, for example: • All hospitals providing emergency care may receive burn patients and should be able to provide initial assessment and stabilization. • The agencies (emergency medical services [EMS], HCCs, public health, emergency management) within the jurisdiction that will have primary responsibility for response including initial casualty distribution and subsequent triage of patients for forward movement. • The agencies (state public health, emergency management) or facility that will have primary responsibility for support of the response and will coordinate transfers with the closest burn center/ABA regional coordinating facility in accordance with established regional protocols. • State burn plan expectations of preparedness and coordination (if applicable)	

	• Burn centers and Level 1 and Level 2 trauma centers should plan for a major role in the receipt and care of burn patients and understand their role in a BMCI in their community or state. • 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. • 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.	

2. Concept of Operations

Section Headers/ Subheadings	Description and Considerations	Sample Resources
2.1 Activation	This section should include the annex activation process (and levels, if relevant) and indicators/triggers that initiate the plan (e.g., burn patients presenting to multiple hospitals, multiple burn patients requiring transfer to a regional burn center). This section should also define who is contacted to initiate the coordination response and how that is done.	ASPR TRACIE Mass Burn Event Overview DC Emergency Healthcare Coalition Mass Burn Incident Specific Annex Illinois Department of Public Health Burn Surge Annex Los Angeles County Emergency Medical Services Agency Burn Resource Manual
2.2 Notifications	This section should include the alerting/notification strategies specific to a BMCI including who will be notified, by whom, and how. Content should address communication systems and information management and include notification and coordination strategies with specialty facilities.	
2.3 Roles and Responsibilities	This section should provide an outline of roles and responsibilities under the annex for applicable HCC members, stakeholders, and partners. This should include the expected burn care capabilities of each facility and define a specific institution or agency to coordinate the response. This may be the same agency listed in an all-hazards plan or may designate an entity (such as a burn center) to assist with burn patient movement coordination and provide advice. This section should also explain the integration of	

	crisis standards of care principles and how resources are allocated across a region or how clinical policy will be developed during a crisis situation. This section should define HCC, agency, and specialty facility support and coordination roles specific to a BMCI (baseline information sharing, coordination, and other all-hazards roles should be defined in the base response plan): • Define expectations of EMS regarding initial patient distribution from an BMCI and mutual aid for secondary transfers. • Establish who has responsibility for patient movement activities including matching patients to available resources in a BMCI. • Emphasize and discuss the coordination with regional burn centers and identify local, regional, national sub-specialty experts both within and outside the community who would be available to support a response or provide consultation. If applicable/ available, note the burn center's mass casualty disaster plan capabilities, gaps, MOUs, protocols, contact information, and such. • Describe how burn treatment expertise is obtained and integrated into longer-term incidents requiring proactive crisis standards of care decision-making. This crisis standards of care system decision making should be consistent with facility, HCC, and state crisis standards of care plans. • Describe initial coordination and information gathering strategies to determine impact and specialty transportation and inpatient needs. This should include essential elements of information to be gathered on all patients according to coalition needs. • Include documentation of available local, state, and interstate resources and activation procedures that can support the specialty response as well as key resource gaps that may require external support (including inpatient and outpatient resources). This should also include behavioral health support for patients, families, and staff.	Michigan Burn Mass Casualty Incident Surge Plan Utah Crisis Standards of Care Guidelines (request access or email ASPR TRACIE) Western Region Burn Disaster Consortium Burn Mass Casualty Incident Activation Algorithm (request access or email ASPR TRACIE) Western Region Burn Disaster Consortium Burn Mass Casualty Incident Medical Data Form (request access or email ASPR TRACIE) Western Region Burn Disaster Consortium Mass Burn Event: 96-Hour Response Plan (request access or email ASPR TRACIE)
2.4 Logistics	This section should outline the resources and issues for burn incidents and the strategies for the HCC and member facilities to address resource shortages and resource allocation, including how resources are requested and potential sources for burn incident-specific resources (e.g., transportation, supply vendors,	

	and caches). This should include a mechanism for resource allocation when supplies are inadequate to meet demand consistent with the HCC crisis standards of care plans.	
2.4.1 Space	This section can include information on available space (e.g., inpatient burn and burn surge resources), strategies, and regulatory considerations.	
2.4.2 Staff	This section should include strategies for increasing/maintaining staffing levels, including specialty care staff. Comment on the burn training of staff and the use/allocation of burn-trained staff, if applicable. Considerations can also include providing basic burn training to interested trauma surgeons and nurses, staff from Radiation Injury Treatment Network (RITN) medical centers, and staff from pediatric critical care hospitals.	
2.4.3 Supplies	This section should document the coalition-level equipment expectations of member healthcare facilities relevant to a BMCI and coalition-level strategies to ensure adequate levels of supplies and equipment are available. This section may also include coalition-level resources.	
2.5 Special Considerations		
2.5.1 Behavioral Health	This section should include considerations for access to a continuum of stepped-care mental health services for patients, caregivers, and providers with emphasis on burn survivor support. General behavioral health response issues should be addressed in the all-hazards coalition response plan.	ASPR TRACIE Disaster Behavioral Health Resources
2.5.2 Pediatric	This section should include considerations specific to caring for pediatric burn cases including triage, specialty care and transport needs, specialty resources/supplies. Decision-making for patients with both traumatic and burn injuries should be mentioned (e.g., is the regional burn center that receives children capable of caring for trauma and if not, what factors will decide where a pediatric patient goes?)	ASPR TRACIE Burn Topic Collection: Pediatric Considerations ABA Guideline for Burn Care Under Austere Conditions: Special Care Topics

		DC Emergency Healthcare Coalition Initial Management Guidelines for Pediatric Burn Patients State of Michigan Burn Coordinating Center Pediatric Annex for Burn Surge
2.5.3 Combined Injury	Combined injury (i.e., burns with trauma or radiation or chemical injuries) markedly increases mortality and these patients may be better served at trauma and other centers depending on the severity of each injury. This section should address how expert clinical input to support decision-making will be obtained, to include decontamination considerations if chemical agents are involved. Initial triage by EMS should always focus on traditional trauma triage guidelines when trauma is present; and secondary triage providers will need to consider the combined injury.	ABA Guidelines for Burn Care Under Austere Conditions: Special Etiologies: Blast, Radiation, and Chemical Injuries Utah Radiation Injury- ED: Burn Disaster Crisis Standards of Care (request access or email ASPR TRACIE) Utah Initial Management Guidelines for the Pediatric Burn Patient: Burn Injury Guidelines for Care (request access or email ASPR TRACIE)
2.6 Operations- Medical Care		
2.6.1 Triage and Secondary Triage	This section should include considerations for triage of burn patients and expectations for hospital transport including patient allocation by number of patients, age, and severity priority for burn and non-burn hospitals. Secondary triage of patients to an appropriate center for continued care will be critical – this 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. This section	ABA Triage Decision Table Burn Disaster Response Planning in New York City: Updated Recommendations for Best Practices

	should also list who will assist and what information they will need/be provided to support decision-making.	Utah Burn Injury Guidelines for Care (request access or email ASPR TRACIE) Utah Burn Crisis Standards of Care Guidelines (request access or email ASPR TRACIE)
2.6.2 Treatment	This section should include considerations for treatment of burn patients, including how information on patients will be shared and how burn care specialty consultation will be obtained by hospitals that are temporarily caring for complex patients and/or a large number of burn patients to ensure the best care possible (e.g., reaching out to specialty providers from a referral facility for consultation). Also, this section will describe how just-in-time training will be conducted to support care of patients at burn surge facilities and how related information will be circulated to those facilities.	
2.7 Transportation	This section should include considerations for safe inter-facility transport of stable, unstable, and potentially unstable burn patients and prioritization methods for specialty patient transfers. This section should include regional resources for ground and air transport for movement of seriously burned patients.	Utah Prolonged Care of the Burn Patient in a Non-Burn Facility Following a Burn Mass Casualty Incident E-Learning Curriculum: Module 4- Transfer and Transport (request access or email ASPR TRACIE)
2.8 Tracking	This section should include the coalition strategies for patient tracking including any specific burn information that needs to be entered into the system.	National Capital Region Burn MCI Response Plan - Attachment 5: Patient Reporting and Transfer Request Form Western Region Burn Disaster Consortium Burn Mass Casualty Incident Medical Data Form (request access or email ASPR TRACIE)

2.9 Rehabilitation and Outpatient Follow Up Services	This section should discuss burn rehabilitation services, outpatient follow-up services, and coordination of continued care following the surge event, including procedures for repatriation of any patients transferred out of the area as needed.	
2.10 Deactivation and Recovery	This section should include considerations for deactivation of the annex, continuity of recovery efforts, the after-action report process, reimbursement, and analysis and archiving of incident documentation.	

3. Appendices

Section Headers/ Subheadings	Description and Considerations	Sample Resources
3.1 Training and Exercises	This appendix should include relevant baseline or just-in-time training to support burn surge care and evaluation and exercise plan for burn surge.	ASPR TRACIE Burn Topic Collection: Education and Training State of Michigan Burn Coordinating Center Emergency Burn Triage and Management University of Utah Crisis Standards of Care (request access)
3.2 Legal Authorities	This appendix should list applicable legal authorities/regulatory information specific or relevant to mass casualty incidents, Health Insurance Portability and Accountability Act rules, and such. This may refer the reader back to the all-hazard coalition response plan unless burn-related issues are covered in this section. Inter-state issues of staff licensure/sharing or patient transport may be particularly relevant for burn incidents when both providers and patients may cross state lines.	ASPR TRACIE Healthcare-Related Disaster Legal/ Regulatory/ Federal Policy Topic Collection
3.3 Burn Care Referral Resources	This appendix includes resources specific to burn surge planning, referrals, and consultation.	ABA Mass Casualty

3.4 Additional Resources/ References	This appendix lists applicable plans, tools, templates, and/or resources used to develop the HCC burn surge annex. This may include: • Triage decision tables • Patient data forms • Patient transport forms • Clinical guidance tip sheets (e.g., escharotomy, inhalation injury, fluid resuscitation, wound care, nutrition) • Media packages related to first aid/bystander care, and public messaging on what to do and how to take care of a burn	Burn Disaster Response: A Plan for New Jersey National Capital Region Burn MCI Response Plan - Attachment 5: Patient Reporting and Transfer Request Form Utah Burn Crisis Standards of Care Guidelines (request access or email ASPR TRACIE) Western Region Burn Disaster Consortium: BMCI Patient Medical Data Form (request access or email ASPR TRACIE)

Appendix A: Healthcare Coalition Burn Surge Annex Outline Example

1. Introduction

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1.4 Assumptions

2. Concept of Operations

2.1 Activation

2.2 Notifications

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2.4 Logistics

- 2.4.1 Space
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2.5 Special Considerations

- 2.5.1 Behavioral Health
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- 2.5.3 Combined Injury

2.6 Operations – Medical Care

- 2.6.1 Triage and Secondary Triage
- 2.6.2 Treatment

2.7 Transportation

2.8 Tracking

2.9 Rehabilitation and Outpatient Follow Up Services

2.10 Deactivation and Recovery

3. Appendices

3.1 Training and Exercises

3.2 Legal Authorities

3.3 Burn Care Referral Resources

3.4 Additional Resources/References

Appendix B: Resources

ASPR TRACIE Developed Resources:

- Burn Topic Collection
- Disaster Behavioral Health Resources
- Healthcare-Related Disaster Legal/ Regulatory/ Federal Policy Topic Collection
- Mass Burn Event Planning Overview

American Burn Association. (2018). Mass Casualty.

Cancio, L., Sheridan, R., et al. (2016). Guidelines for Burn Care Under Austere Conditions: Special Etiologies: Blast, Radiation, and Chemical Injuries. American Burn Association.

DC Emergency Healthcare Coalition. (n.d.). Initial Management Guidelines for Pediatric Burn Patients.

DC Emergency Healthcare Coalition. (2011). Mass Burn Incident Specific Annex.

Illinois Department of Public Health. (2016). Burn Surge Annex.

Jeng, J., Gibran, N., and Peck, M. (2014). Burn Care in Disaster and other Austere Settings. (Abstract only.) Surgical Clinics of North America. 94(4):893-907.

Leahy, N.E., Yurt, R.W., Lazar, EJ., et al. (2012). Burn Disaster Response Planning in New York City: Updated Recommendations for Best Practices. Journal of Burn Care Research. 33(5): 587-594.

Los Angeles County Emergency Medical Services Agency (EMS). (2010). Burn Resource Manual.

Michigan Bureau of EMS, Trauma, and Preparedness. (2018). Burn Mass Casualty Incident Surge Plan.

Minnesota Department of Health. (2019). Burn Surge Plan and Training Resources.

National Capital Region. (n.d.). National Capital Region Burn MCI Response Plan - Attachment 5: Patient Reporting and Transfer Request Form.

Saint Barnabas Health Care System. (n.d.). Burn Disaster Response: A Plan for New Jersey.

State of Michigan Burn Coordinating Center. (n.d.). Emergency Burn Triage and Management.

State of Michigan Burn Coordinating Center. (2014). Pediatric Annex for Burn Surge.

University of Utah Burn Center. (n.d.). Crisis Standards of Care Portal. (Request Access).

U.S. Army Medical Department, Medical Research and Materiel Command, U.S. Army Institute of Surgical Research. (2016). Burn Care.

Utah Hospital Association. (2018). Utah Crisis Standards of Care Guidelines and Burn Injury Guidelines for Care. (Request from ASPR TRACIE or University of Utah Burn Center CSC Portal).

Utah Hospital Association. (2018). Utah Prolonged Care of the Burn Patient in a Non-Burn Facility Following a Burn Mass Casualty Incident E-Learning (CME and CEUs available). (Access via the University of Utah Burn Center CSC Portal).

Western Region Burn Disaster Consortium. (2018). Mass Burn Event 96-Hour Response Plan. (Request from ASPR TRACIE or University of Utah Burn Center CSC Portal).

Young, A., Graves, C., et al. (2016). Guideline for Burn Care Under Austere Conditions: Special Care Topics. American Burn Association.

Organizations

American Burn Association

- Burn Center Referral Criteria
- Burn Center Regional Map

Radiation Injury Treatment Network