SPARC

SHAWNEE PREPAREDNESS AND RESPONSE COALITION

REGIONAL RESPONSE AND RECOVERY PLAN:

BURN SURGE ANNEX

April 2022

Version 1.0

Shawnee Preparedness and Response Coalition

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Signature Page

This Burn Surge Annex has been reviewed and accepted by the SPARC Executive Board and the coalition member organizations with authority to approve. This plan addresses the domains set forth by the Hospital Preparedness Program (HPP) and is compliant with the principles outlined in the National Incident Management System (NIMS); this plan relies on strong working relationships, and effective networking efforts between all coalition member organizations and partners to manage incidents.

Version 1.0 Approved by the SPARC Executive Board on June 13, 2022.

Record of Revision and Distribution

This document reflects the ongoing work and mission of the Shawnee Preparedness and Response Coalition (SPARC) regional strategies for emergency preparedness and disaster response. Proposed changes shall be reviewed and approved by the SPARC Executive Board. This document will be revised annually or as needed after exercises, planned events and real-world incidents to identify gaps and to define strategies to address gaps with a collaborative approach to regional burn surge preparedness efforts that engages all members of SPARC.

The revised plan will be distributed electronically to each Executive Board Member. A copy of the plan will be posted for the general membership on the SPARC website http://www.sparccoalition.com.

Version Number	Description of Change	Date of Change	Individual Making Change

Person/Title/Agency	Method of Delivery	Date

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ATTACHMENT 20: RECOMMENDED BURN SUPPLY CACHE

Purpose: Provide health care facilities, regions and the state with a standardized list of burn supplies that can be utilized during a burn MCI.

Instructions: This list should be used to develop a burn supply cache at the individual health care facility, regional and state level to care for a projected number of patients that may seek medical care during a burn MCI. The supplies on this list will address the needs of 10 burn patients over a 24 hour timeframe.

Recommended Burn Cache Supplies for 10 Patients

Supplies

• Large burn dressings 24" X 36"	100
• Small burn dressings 18" x 18"	100
• Rolled dressing 4' x 3 yard roll	200
• Super sponges (6 x 6)	500 packages
• Flexible net dressings Sizes: 1, 3, 5, 8, 10	10 boxes for each size
• Non-stick dressing small	40
• Non-stick dressing large	40
• All-purpose solution bowls	40
• Sterile fields	100
• Lactated Ringers (LR)	200
• Intubation supplies	
• Bandage scissors	
• Central line kits	
• Arterial line kits	
• Urinary catheters (various sizes for all ages)	
• NG tubes (various sizes for all ages)	

Medications

• Bacitracin 400 g jar	20
• Silver sulfadiazine (Silvadene) 400 g jar	40
• Morphine (may be part of hospital's disaster pharmaceutical cache)	
• Silver antimicrobial barrier dressings (e.g., Acticoat, Mepilex). These are recommended for burn hospitals only since they have the ability to rotate these items into daily use to avoid expiration.	100

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1. Introduction

A local burn mass casualty incident (BMCI) in Illinois is defined as any event in which local trauma/burn resources are overwhelmed with the number and/or severity of injuries (i.e., patients with ≥ 20% TBSA) that exceeds local capacity to provide effective care without initiating the Mass Casualty Burn Center Referral Criteria. A BMCI can overwhelm the local healthcare system, where the number of casualties can vastly exceed the local resources and capabilities in a short period of time. Within the Shawnee Preparedness and Response Coalition (SPARC) region, there are no burn hospitals or burn centers. Mercy Hospital in St. Louis, Missouri is the designated ABA (American Burn Association) Burn Center for the region. Refer to *Attachment 1: Midwest Burn Center/Units f*or each hospital's capabilities and contact information.

Burn casualties as a result of structural fires, blast emergencies, or chemical burns caused by terrorist attacks or hazardous materials incidents in the Marion Public Health and Medical Services Response Region (MPHMSRR) is likely to exceed the resources of a single jurisdiction and will require surge measures in non-burn facilities.

SPARC regional disaster preparedness planning and surge response involves promoting collaboration among local, regional, and when necessary, state-level SPARC partners to build capacity – the ability to manage a sudden influx of patients and capability – the ability to manage patients requiring very specialized medical care.

This annex has been developed as an adjunct to the *Illinois Department of Public Health (IDPH) ESF-8 Plan: Burn Surge Annex* in an effort to expand the ability to provide emergency burn care (including care of patients that may have to remain at non-burn facilities while awaiting transfer) and prioritize the utilization of limited resources during a burn surge event.

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-related 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)*.

1.1 Purpose

This annex provides guidance to support a BMCI in which the number and severity of burn patients exceeds the capability of HCC member facilities. This 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.

The goal is to ensure the ‘greatest good for the greatest number’ of patients during a BMCI, with the following objectives:

- Plan and coordinate activations, notifications, logistics, and resources
- Identify roles, responsibilities and organizational structure
- Solidify operations, including triage, treatment and patient transfer flow and support

1.2 Scope

This annex outlines the response and coordination of SPARC member organizations and partners including, but not limited to (hospitals, EMS, EMA, LHDs, etc.) to plan for the level of care that can be provided and resources available during a BMCI. Resources for local and regional coordination, as well as non-burn facility support as they care for burn patients prior to transfer, is outlined in this annex.

This document does not circumvent or supersede any organizational or local policies and plans currently in place but is intended to augment and support disaster plans and activities across agencies and disciplines by providing uniform response considerations in the event of a BMCI. This annex will utilize existing command structure and communication protocols as outlined in the SPARC Regional Response and Recovery Plan.

The role of the SPARC in any response, in coordination with other local, state and regional response partners is to support strategic planning, situational awareness, information sharing, and resource coordination in order to assist healthcare facilities when overwhelmed.

In addition to the base Plan, there are specialty annexes that address considerations for specific populations and/or incidents. Refer to *Section 3.2, Additional Resources/ References.*

1.3 Overview/Background of HCC And Situation

HCC Overview

Refer to Section 1.3 of the SPARC Regional Response and Recovery Plan for further detail.

Jurisdictional Risks of a Burn Mass Casualty Incident

The SPARC region faces a variety of risks across the 24-county service area. The HCCs Hazard Vulnerability Analysis (HVA) is reviewed and updated annually to prioritize which hazards or risks most in need of organization focus. Local counties across the region annually update their Multi-Hazard Mitigation Plans (MHMP) to address the impact of specific hazards to the county. The following incidents, with fire-related implications were identified as possible or likely across jurisdictions in the service area that may potentially have an impact on the community and healthcare facilities:

- earthquake
- explosion
- drought
- wildfire

- gas leak
- extreme temperatures (hot weather)
- hazmat
- transportation accidents (train derailments, truck and barge)
- radiological

Scarce Resources

The region has one Level II trauma/non-burn hospital. There are no dedicated pediatric hospitals or burn centers in the region. The following resources are also limited within the region:

- local and regional subject matter experts
- EMS for interfacility transfer
- medical personnel
- available critical care bed

American Burn Association Midwest Burn Region

Missouri is located in the ABA Midwest Burn Region and is therefore part of this Regional Burn Surge Annex. Mercy Hospital in St. Louis is ABA verified and is the designated burn center for the region and should also be contacted as outlined in this Annex. Mercy Hospital may be able to offer additional assistance as it relates to burn surge coordination, communication and patient treatment during a SPARC regional burn surge incident.

Hospitals should follow their normal referral processes for bed availability and guidance in the treatment and care of a burn patient.

Table 1: ABA Verified Burn Center Contact Information

ABA Verified Burn Center	Licensed Beds	Surge Beds	Total Surge Capacity	Contact Information
Mercy Hospital	12	26	36	314-251-6055

Refer to Attachment 1: Midwest Burn Centers/Units for a complete list of each hospital's capabilities and contact information.

1.4 Assumptions

This section outlines the key points/assumptions of this plan, which include:

- All hospitals providing emergency care may receive burn patients and should be able to provide initially treat and stabilization, at minimum, one burn patient for up to 24 hours if unable to immediately transfer to a Burn Center.

- Due to rural geographic location some hospitals may be expected to care for patients beyond initial stabilization and should have plans and resources for extended patient care.
- 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.
- Hospitals should all have current inter-facility transfer agreements.
- 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.
- Federal resources though potentially available to assist, cannot be relied upon to mobilize and deploy for the first 72 hours.
- An effort has been made to be realistic in terms of available resources and capabilities that are subject to change. Flexibility is therefore built into this plan.

2. Concept of Operations (CONOPS)

Response Operations

All disasters should be managed locally. When an incident occurs that meets the definition of a BMCI, resulting in a surge of burn patients that overwhelms local emergency response operations and plans, SPARC partners will consider and assess the need for a regional level response. The following CONOPS are outlined below for a BMCI:

1. The Regional Burn Surge Annex will activate using pre-established procedures.
2. Within the SPARC Regional Response and Recovery Plan, annexes exist that address the needs of specialty populations (e.g., pediatrics and neonatal patients). Depending on the scope of the disaster, these annexes may need to be activated simultaneously in order to thoroughly address the specific needs of the victims (e.g., pediatrics). Efforts have been made to ensure consistency between all annexes that address the needs of specialty populations.
3. SPARC functions as a multi-agency coordination (MAC) group during disasters and public health emergencies to support its members and jurisdictions. The primary role of SPARC is the sharing of information among the coalition membership and the coordination of resources to achieve a combined effort.
4. Each hospital is responsible for organizing itself internally and will operate under Hospital Incident Command System (HICS) in the care of burn patients.
5. All hospitals may have to provide care for burn patients until adequate resources become available to allow for transport to a hospital with burn capabilities.
6. EMS will triage and manage the transport of burn patients from incident scene per existing protocols. The most likely scenario may be EMS transport to non-burn facilities for initial treatment and stabilization and secondary transport to a Burn Center.

7. The RHCC is activated when circumstances dictate this action to support health care operations within the MPHMSRR.
8. The Regional Burn Center once it is notified should continue to admit patients per normal operating protocols until capacity has been met. When capacity has been met due to inter-facility transfer, local hospitals will notify the RHCC, who will then notify IDPH.
9. In a BMCI, local and regional resources and efforts may become exhausted. State resources may be required and coordination with the State Burn Coordinating Center. Refer to the *IDPH ESF-8 Plan: Burn Surge Annex* for a state level response.

Telemedicine options: Telephone/telemedicine may need to be made available to facilities caring for burn patients beyond 24 hours.

2.1 Activation

This Plan should be activated in accordance with Section 2.3.2.2 of the current SPARC Response and Recovery Plan. The activation of this annex includes information sharing and coordination across all response partners.

1) The identifying organization should notify the RHCC or by sending out an alert notification through SIREN.
2) The RHCC will make notifications to the IEMA-OHS Duty Officer, IDPH Duty Officer and SPARC Executive Board. The notification should take place as soon as it is suspected that a local medical response may exceed resource capabilities by utilizing the appropriate notification procedure.
3) Hospitals will activate individual facility surge plans to manage a BMCI.

Indication/Triggers

- EMS responds to a BMCI
- Hospitals have exceeded their current capacity and normal operations, and activated their internal surge plans
- Hospitals are unable to identify receiving hospitals for critical patients

2.2 Alerts/Notifications

- Communication may be managed in a variety of methods and will follow those established in the ESF-8 Plan and SPARC Regional Response and Recovery Plan.
- The *Burn Medical Incident Report Form* may be utilized to communicate necessary information about the annex activation with affected response partners and those entities that may be called upon to assist during the incident. Hospitals will alert staff internally to activate BMCI protocols and prepare for a potential surge of patients.
- The RHCC is notified and will provide initial notification of an actual or potential BMCI to coalition membership and coordinate with hospital members to facilitate the flow of communication through:

- Situational awareness information (e.g., incident details, estimation of number of victims, number of transported and/or admitted victims, number of possible victims at the scene, etc.)
- Immediate bed availability
- Action items (e.g., conference call, frequent bed availability updates, etc.)

2.3 Roles and Responsibilities

A BMCI requires efficiency and coordination. All plans and strategies implemented within SPARC reinforce the understanding that events begin and end locally. Response roles for SPARC members, stakeholders and partners are summarized in the table below.

Primary Agency	**Roles and Responsibilities**
Shawnee Preparedness and Response Coalition (SPARC)	• Serve as a hub for communication and coordination of a public health response • Response strategy planning among all SPARC members
State Agencies	**Roles and Responsibilities**
Illinois Department of Public Health (IDPH)	• Coordinate regional, state, and federal health and medical disaster response resources and assets to local operations • Communicate with RHCC for intelligence gathering, information dissemination, additional resource requests, and coordination of efforts • Collaborate with IEMA-OHS on the RFMRs for burn specific resources from hospitals, local health departments, alternate care sites, alternate treatment sites and temporary medical treatment stations
Illinois Emergency Management Agency and Office of Homeland Security (IEMA-OHS)	• Coordinate state resources/collects information to request disaster declaration (state and federal) as indicated • Work with specific agencies within jurisdiction(s) to gain situational awareness of the BMCI • Collaborate with IDPH on the request for medical resources for burn specific resources from hospitals, LHDs, alternate care sites, alternate treatment sites and temporary medical treatment stations • Collaborate with IDPH to fulfill the request for medical care by activating the Illinois Medical Emergency Response Team (IMERT) as indicated
Illinois Law Enforcement Alarm System (ILEAS)	• Coordinate mutual aid response, emergency response and the combining of resources for

	public safety and terrorism prevention and response throughout the state of Illinois
Support Agencies/Facilities/Organizations	**Roles and Responsibilities**
Regional Hospital Coordination Center (RHCC)	• Primary organization for the coordination of ESF-8 Public Health and Medical Services in the MPHMSRR • Coordinate regional burn training and exercises with all healthcare partners in the region • Consult with IDPH and the regional HCC to determine the prioritization process for the allocation of medical equipment and supplies in its region • Coordination and deployment of burn specific supply/equipment caches to affected entities • Distribute situational awareness information to and from healthcare organizations
Resource Hospitals	• Provide care for burn patients who arrive at the facility to the best of the facility and practitioners' ability • Provide patient families at their facility with information about the event and education about components of the response that may involve their family member's care (e.g., coordination of care and transfer processes) • Maintain recommended cache of burn supplies • Assist with the communication and RFMRs for burn specific resources as indicated in the IDPH ESF-8 Plan • May facilitate identifying providers for interfacility transfers • Function as a liaison between the EMS associate and participating hospitals within their system and the RHCC • Assist with the communication with EMS providers within their EMS system • 911 agencies provide prehospital lifesaving and initial burn instructions to callers

All Other Hospitals	• Provide care for burn patients who arrive at the facility to the best of the facility and practitioners' ability • Provide patient families at their facility with information about the event and education about components of the response that may involve their family member's care (e.g., coordination of care and transfer processes). • Maintain recommended cache of burn supplies • Communicate and submit RFMR for burn resources as necessary as indicated in the IDPH ESF-8 Plan
Local Health Departments (LHDs)	• ESF-8 lead in its local jurisdiction • Assist hospitals in acquiring supplies from the SNS, specific to burn patients, as requested, following processes identified and incorporated into their existing plans and IDPH ESF-8 Plan • Maintain communication and provide situational awareness updates, specific to burn patients, hospitals and IDPH as indicated • Support role of ESF-6 providing emergency shelter within the affected area(s) • Collaborate with local EMA and RHCC on TMTS selection, establishment, and operation in their jurisdiction. • Host a Medical Reserve Corp (MRC) unit within the jurisdiction or affiliation with an alternative volunteer unit
Emergency Medical Services (EMS)	• 911 agencies provide prehospital lifesaving and initial burn instructions to callers. • Establish Incident Command on scene, depending on type of incident • Provide initial triage/treatment and patient tagging during a BMCI • Safely transport burn patients per existing protocols • Provide ongoing situational awareness of medical disaster or emergency response to RHCC/designee and to the receiving health care facility. • Consult with EMS System Coordinator to inform RHCC of patient movement
Emergency Management Agency (EMA)	• Coordinate with IEMA-OHS to deploy state resources • Support fatality management surge • Receive and coordinate the use of medical care teams (IMERT), upon request

	• Forward requests for medical assistance; SPARC Agency Representatives will notify the RHCC • Coordinate non-medical request for resources (RFR) • Help support ICS during response efforts
American Red Cross (ARC)	• Support role for ESF-6 Mass Care (i.e., sheltering, feeding, distribution of emergency supplies and reunification services) establishing and running emergency shelters within the affected area(s) • Provide basic health support services at Red Cross facilities • Provide disaster related mental health and psychological first aid for the affected population and disaster workers • Facilitate the dissemination of public information, messaging and education for the affected population • Coordinate the provision of blood and blood products through the American Association of Blood Banks Disaster Task Force as requested • Coordinate with hospitals and coroners to provide appropriate casualty and/or patient information for purposes of family reunification • Coordinate with the affected jurisdiction for potential Multi-Agency Resource Center (MARC) operations.
Mutual Aid Box Alarm System (MABAS)	• Provide emergency response assistance – assets include: fire engines, ladder trucks, heavy rescue squads, ambulances, emergency medical technicians (EMTs) and hazardous material teams
First Responders (Law Enforcement, Fire Service)	• Provide security, traffic, crowd control, and other functions of local and state law enforcement. • Facilitate evacuations and door-to-door check
Non-Governmental Organizations (NGOs)	• Upon request, may provide shelter, food, clothing and other basic needs of survival during a BMCI • Serve as conduits of information to populations difficult to reach during emergencies (the elderly, refugees, etc.)
Other SPARC Members	• Support coalition coordination efforts • Maintain situational awareness and common operating picture with other coalition members and community members • Share goods and services to their capability

ABA Burn Center	• Provide patient care • Activate facility and regional surge capacity plans to accommodate multiple patients • Assist with patient triage for forward movement • Support facilities providing care for burn patients in the region via telephone or telemedicine • Assist with coordination of burn resources
The information listed below provides the roles and responsibilities outlined *in addition* to the roles and responsibilities outlined in the sections above as it relates to this annex and the response during a burn MCI.	
Level I and Level II Trauma/Non-Burn Hospitals	Refer to the IDPH ESF-8 Plan: Burn Surge Annex, Section 3.2.6 (2)
Non-Burn/Non-Trauma Hospitals	Refer to the IDPH ESF-8 Plan: Burn Surge Annex, Section 3.2.6 (3)

2.4 Logistics

Limited supplies and equipment are maintained at the most local level as feasible to meet the needs of Coalition members.

Hospitals will activate their pre-existing surge plans to identify strategies to maximize scarce resources and prepare for any necessary shifts into and out of conventional, contingency and crisis standards of care.

Supply chain management will be handled at the individual-facility level. Member facilities will follow the ESF-8 Plan and this plan for requesting burn resources. The RHCC will coordinate the movement of resources with IDPH and IEMA-OHS upon request.

2.4.1 Space

All appropriate and available space will be identified for burn care during a BMCI event (e.g., inpatient burn and burn surge resources). Space conducive to burn care should be identified and categorized as follows:

- Conventional spaces: areas where burn care is normally provided (e.g., Burn Centers.)
- Contingency spaces: areas where care could be provided at a level functionally equivalent to usual care (closed units, regular beds being used as burn beds), i.e., surge units.
- Crisis spaces: areas where sufficient care could be provided when usual resources are overwhelmed (i.e., Alternate Care Sites, Alternate Treatment Sites, Temporary Medical Treatment Stations).

2.4.2 Staff

During a BMCI, hospitals will be responsible for determining staffing levels. Hospitals can cross-train clinical personnel or utilize ‘just-in-time-training’ of non-clinical staff to assist in care of a burn patient. In the MPHMSRR, specialty care staff will be needed to assist with

both adult and pediatric burn patients. SMEs may be utilized for consultation of burn training of staff and use/allocation of burn-trained staff The American Burn Association offers guidelines for adult and pediatric just-in-time response resources located on the ABA website, as needed.

Resources you may wish to consult include:

- Just-in-Time Training Summary Sheet: Patient Care Priorities for the First 24 hours in Burn Mass Casualty for Non-Burn Physicians

Burn Care Training Resources

Prior to a BMCI, SPARC will offer opportunities for burn training and education to member facilities. The American Burn Association assists with the management of burn disasters. ABA offers Advanced Burn Life Support and/or Trauma Life Support, providing knowledge for the immediate care of the burn patient up to the first 24-hours post injury. The ABA also has a host of training materials available to members on their website. Refer to the Appendices, Section 3.1. Burn Care Referral Resources for URL:

- Fact Sheet
- Membership
- Education
- Referral criteria for a burn patient to an ABA center (PDF-11KB)
- Verified Burn Centers provide advanced support for complex cases and are accredited by The American College of Surgeons (ACS) Committee on Trauma

2.4.3 Supplies

Hospitals, regardless of their burn capabilities, should maintain adequate supplies to provide initial treatment and stabilization of burned victims from a mass burn event for at least 24 hours. The *Recommended Burn Supply Cache (See Attachment 2)* was developed to assist healthcare facilities with burn care supply planning in the State of Illinois. Hospital members of SPARC may consider utilizing the *Hospital Burn Surge Checklist (See Attachment 2.1)* to assist in developing a burn supply cache at the regional level to care for burn patients over a 24-hour timeframe.

List 1: Recommended Burn Cache Supplies:

	Supplies:	
☐	Large burn dressings 24”X 36”	100
☐	Small burn dressings 18” X 18”	100
☐	Rolled dressings 4’ x 3 yard roll	200
☐	Super sponges (6 x 6)	500 packages
☐	Flexible net dressings	
	Sizes: 1, 3, 5, 8, 10	10 boxes of each size
☐	Non-stick dressing small	40
☐	Non-stick dressing large	40

- ☐ All-purpose solution bowls 40
- ☐ Sterile fields 100
- ☐ Lactated Ringers (LR) 200
- ☐ Intubation supplies
- ☐ Bandage scissors
- ☐ Central line kits
- ☐ Arterial line kits
- ☐ Urinary catheters (various sizes for all ages)
- ☐ NG tubes (various sizes for all ages
- ☐ Ventilators
- ☐ Bair Huggers
    - ☐ Other items (e.g., mylar emergency blankets) that can be used to keep burn patients warm.

Medications:

- ☐ Bacitracin 400 g jar 20
- ☐ Silver sulfadiazine (Silvadene) 400 g jar 40
- ☐ Morphine (may be part of hospital's disaster pharmaceutical cache)
- ☐ Silver antimicrobial barrier dressings 100
  (e.g., Acticoat, Mepilex). These are recommended for burn hospitals only since they have the ability to rotate these items into daily use to avoid expiration.

The RHCC has a cache of supplemental burn supplies "push pack" located in two different areas throughout the region needed for hospitals burn surge capability and capacity.

Resource Request Coordination

When this annex is activated, the request for burn specific medical resources by a partner hospital will follow the same pathway as the request for other medical resources. The requesting entity will complete the ICS *2132RR* form and submit it through the *RFMR process* as outlined in the IDPH ESF-8 Plan.

2.5 Special Considerations

2.5.1 Behavioral Health

In the event of a BMCI, it can be expected that a number of those who witnessed, were injured by, or responded to the event will experience some psychological trauma.

- The American Red Cross (ARC) can be called upon by the hospital IC to provide mental health services for patients, caregivers, and providers.
- Some local health departments in the region also offer behavioral health services or may have agreements in place with local organizations that provide these services.

Resources and/or training in Psychological First Aid may be provided to SPARC member facilities (upon request) to ensure burn victims treated in the jurisdiction receive treatment

and available burn survivor support. Burn survivor support resources may also be provided through the American Burn Association, accessed online at: ABA Burn Survivor Resources.

2.5.2 Pediatrics

In the event of a BMCI in the region, resources required for the care of neonates and children are limited as are the number of pediatric specialty hospitals. Specific considerations to caring for pediatric burn patients include triage, specialty care and transport needs, specialty resources/supplies, and decision making for those pediatric patients with both traumatic and burn injuries. Notifications should be made at the earliest possible time in order to engage specialty care transport units both air and ground, trauma and tertiary care centers, neonatal intensive care units, etc.

Refer to *SPARC Pediatric Surge Annex f*or the care and planning of pediatric patients during a surge at the coalition level.

Pediatric Burn Treatment & Supplies

Healthcare facilities, including burn and non-burn centers should have the education and resources necessary to assess and treat pediatric patients. The *Pediatric Burn Care Guidelines* may be utilized to provide guidance to practitioners at non-burn hospitals for the first 96 hours of care during a BMCI.

Mercy Hospital in St. Louis is ABA verified and is the designated Burn Center for the region with pediatric capabilities. Mercy Hospital may be able to offer additional assistance as it relates to burn surge coordination, communication and pediatric patient treatment during a SPARC regional burn surge incident.

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. Combined injury will be addressed and treated according to facility and agency protocols. Specialty resources will be requested as needed.

2.5.4 Radiological Burns

A large-scale radiological release could result in a significant surge of patients, including those who may not have actually been exposed, but seek medical attention anyway. A coalition-level CBRNE Annex will be underway to plan for, respond to and recover from chemical/ biological/ radiological/ nuclear and explosive incidents that can result in mass casualties.

2.5.5 Crisis Standards of Care

A BMCI may greatly impact the availability of appropriate hospital beds, trained staff and resources. When numbers of seriously ill patients greatly surpass the capability of available care capacity and normal standards of care can no longer be maintained, there will be a need to implement CSC. Coalition member organizations should refer to the *SPARC Crisis*

Standards of Care Annex to provide support related to conventional, contingency, and crisis care to best assign resources appropriate to the scope and magnitude of the incident.

2.6 Operations-Medical Care

- The first three phases of burn care include response, rescue, and resuscitation, all of which are initiated by first responders and EMS providers.
- All partner EMS systems and hospitals in the MPHMSRR maintain 24-hour emergency services that may have to provide initial care and treatment of a burn patient. Consideration should be given to utilizing the closest most appropriate facility during a BMCI.
- During a large-scale incident, normal interfacility transfer patterns may be disrupted. Hospitals that typically transfer acutely ill/injured burn patients to hospitals with burn capabilities may need to care for these patients for longer periods of time until they are able to transfer these patients to a higher level of care.

Special considerations will be given to consultation and collaboration with specialty care facilities throughout the course of preparedness, response, and recovery efforts. The sections below include considerations for the care and treatment of burn patients in a BMCI:

2.6.1 Triage and Secondary Triage

Primary triage will be performed at the first encounter with the patient by EMS in the field. EMS and hospitals should be familiar with and may utilize the *Burn Triage Guidelines* regardless of their burn capabilities to assist with transfer decision-making during a BMCI.

EMS will follow their system protocols for response to a BMCI and triage using state approved MCI triage methods (START/JumpSTART©) and coordinate with local medical control to divide the patients based on their needs and resources available. Re-evaluation of primary triage after additional assessment and/or interventions will be performed on site.

Secondary triage of patients to an appropriate center for continued care will be critical – this function may have to be delegated to burn care experts outside the immediately effected area, due to competing demands for direct patient care and based on available resources within the Coalition.

The *Burn Medical Incident Report Form* may be utilized to provide requests for burn resources and to communicate those patients needing interfacility transfer.

Fatality Management

In a typical MCI, most of the fatalities occur on scene. Hospitals should determine appropriate plans and procedures for fatality management with local medical examiner and/or county coroner in the event of a BMCI.

2.6.2 Decontamination

Mass decontamination of survivors of a mass casualty event before they report for medical care may be as simple as disrobing the patient and providing clean covering or setting up of decontamination corridors, safe areas, and medical triage areas. Prehospital and ER medical guidance for specific chemical exposures should follow individual facility plans. Upon request, the RHCC will help to coordinate additional decontamination resources. Recommendations for specialty populations such as pediatrics, at-risk and functional and access needs/special healthcare needs should be considered.

2.6.3 Treatment and Transfer Coordination

In a BMCI, a hospital may treat adults, children, or both. The *Adult Burn Care Guidelines* and *Pediatric Burn Care Guidelines* may be utilized to provide guidance to practitioners at non-burn hospitals for the first 96 hours of care during a BMCI.

Transfers of burn patients from non-burn facilities will be coordinated at the jurisdictional (and potentially regional) level to prevent duplication of effort and to maximize efficiency of the process. Hospital staff will work together to identify the resources needed and for prioritization methods for specialty patient transfer. Hospitals should follow their normal referral processes for bed availability and guidance for the treatment and care of a burn patient. Hospitals should all have adult and pediatric interfacility critical care consultation and/or transfer guidelines that include burn transfer criteria.

Burn Subject Matter Experts (SMEs) may not be accessible for assisting with the coordination of patient movement in a BMCI until the IDPH ESF-8 Plan: Burn Surge Annex is activated.

The designated regional burn center should continue to provide medical consultation until these patients are able to be transferred to a higher level of care. The *Burn Patient Transfer Form* may be utilized as a method of communicating medical and treatment information when burn patients are being transferred to another facility for care.

Resources you may wish to consult include:

- Adult Burn Care Guidelines
- Pediatric Burn Care Guidelines
- Burn Center Referral Criteria

2.7 Transportation

Transportation resources will be important resources used to decompress the burn surge response in the region. The region has limited air and ground transport resources. If necessary, mutual aid may be activated to support response efforts in a BMCI.

Neonatal and some specialty patients may require specialized transport teams. Hospital IC will work with EMS to coordinate appropriate transportation resources, including staffing. All EMS requests for patient transports should follow normal operating procedures.

2.8 Patient Tracking and Reunification

During a BMCI, family members may become separated. The tracking of burn patients is crucial to aid in reunification of family and will be conducted in accordance with accepted policies and procedures for patient movement and discharge.

- Electronic patient tracking may be available to assist with the coordination of patient movement during a BMCI (e.g., EMTrack). Healthcare facilities should follow documentation protocols for tracking patient movement.
- The American Red Cross (ARC) Patient Connection Program may be available during a BMCI as an additional resource to track burn patients.

2.9 Rehabilitation and Outpatient Follow Up Service

Healthcare facilities should coordinate rehab and outpatient follow-up services according to treatment protocols as determined by the practitioner.

Depending on incident parameters, rehabilitation and follow up services for burn patients may exceed current capabilities within the MPHMSRR.

- Rehabilitation: facilities will only be able to provide rehabilitation services to a limited numbers of burn patients and may require assistance from the Burn Centers. Facilities may need to transfer patients out of the region or coordinate with IDPH.
    - Mercy Hospital Burn Center provides high-quality patient care for burn patients from time of injury through rehabilitation.
- Outpatient services: Outpatient services for patients may be limited in the event of a burn MCI. Clinical guidance by a burn specialist may need to be distributed to outpatient providers. Any burns requiring outpatient follow up may need to have physical therapy, occupational therapy, and other issues addressed.

2.10 Demobilization, Deactivation and Recovery

Demobilization will be conducted in accordance with *Section 2.3.2.5.8* and deactivation of this plan will be conducted in accordance with *Section 2.3.2.5.9* of the current *SPARC Regional Response and Recovery Plan* with recovery operations conducted as necessary to resume to normal operations and a state of readiness.

Each involved jurisdiction should follow its pre-established plan for the recovery process. SPARC will remain a resource throughout the recovery process assisting with reunification, coordinating ongoing mental health support and support of ESF-6 Mass Care as it relates to displaced families.

2.10.1 After-Action Reporting

Following a surge event, response partners will have the chance to discuss strengths, weaknesses and opportunities for improvement related to operational responses. Findings

will be captured in an after-action report (AAR) and distributed to all partners in the response, denoting lessons learned from the response to be included in future SPARC planning processes.

2.10.2 Reimbursement

All participants should track activities and expenses incurred during the event for possible reimbursement from appropriate sources.

2.10.3 Review and Approval

This Plan will be revised as needed, reviewed, and approved annually by the SPARC Executive Board and the coalition member organizations with authority to approve. The review process will incorporate lessons learned from an exercise, activation, and any new planning developments. Subject matter experts will be consulted if needed.

Supporting partners are responsible for maintaining and reviewing their own internal plans.

2.11 Training and Exercises

SPARC assists coalition partners with training and exercises to the extent possible and appropriate to meet the requirement set forth by the Hospital Preparedness Program (HPP). Burn Surge training and exercises will be planned to include relevant baseline or just-in-time training to SPARC hospital partners on burn patient management when requested.

The American Burn Association offers online training courses to prepare clinicians to assess burn injuries and make treatment decision for the first 24 hours following a burn incident. Cost of training may be at the discretion of the requesting facility.

2.12 Legal Authorities

1) The primary authority within each EMS region for coordinating EMS System licensed providers in response to an emergency medical incident(s) as a result of a disaster or other large scale event rests with the EMS system(s) medical director(s).
2) IDPH is the lead agency for all public health and medical response operations in Illinois. IDPH is responsible for coordinating regional, state, and federal health and medical disaster response resources and assets to local operations such as the Illinois Medical Emergency Response Team (IMERT), the Strategic National Stockpile (SNS), temporary medical treatment stations (TMTS), etc.
3) The RHCC shall have authority to coordinate supplemental supply/equipment caches as outlined in the approved Regional Response and Recovery Plan and IDPH ESF-8 Plan.
4) Illinois Compiled Statutes, 210 ILCS 50, Emergency Medical Services (EMS) Systems Act, as amended
5) Illinois Administrative Code, 77 III. Admin. Code 515, Emergency Medical Services and Trauma Code, as amended
6) IEMA-OHS is Authority Having Jurisdiction (AHJ) for the state of Illinois and is responsible for coordinating the State's response and recovery programs and

activities and supporting local EMAs when response efforts far exceed local capabilities.

7) EMA is the lead agency for response coordination in their jurisdiction.

3. APPENDICES

3.1 Burn Care Referral Resources

- 2.4.2. Staff
  - http://ameriburn.org/wp-content/uploads/2020/03/austere-guidelines-just-in-time-training.pdf

Burn Care Training Resources:

- https://ameriburn.org/
- https://ameriburn.org/education/abls-program/
- https://ameriburn.org/who-we-are/media/burn-incidence-fact-sheet/
- https://ameriburn.org/who-we-are/
- https://ameriburn.org/education/
- http://ameriburn.org/wp-content/uploads/2017/05/burncenterreferralcriteria.pdf
- https://ameriburn.org/quality-care/verification/
- https://www.facs.org/about-acs/governance/acs-committees/committee-on-trauma/
- https://ameriburn.org/public-resources/burn-survivor-resources/

- 2.5.1 Behavior Health
  - http://ameriburn.org/wp-content/uploads/2017/05/guidelines_for_burn_care_under_austere_conditions_.2.pdf

American Red Cross (ARC)

- National Dispatch **1-833-583-3111**
- Illinois Region Hotline **1-844-319-6560**

*See *Attachment 3* for ARC map of Illinois and point of contact information.

3.2 Additional Resources/References

- 2019-2023 HPP Funding Opportunity Announcement (FOA) https://www.grants.gov/web/grants/view-opportunity.html?oppId=313435
- 2017-2022 Health Care Preparedness and Response Capabilities https://www.phe.gov/Preparedness/planning/hpp/reports/Documents/2017-2022-healthcare-pr-capablities.pdf

- Multi-Hazard Mitigation Planning http://greateregypt.org/hazard-mitigation-planning/
- SPARC Regional Planning Documents https://www.sparccoalition.com/planning-documents/

SPARC Regional Response and Recovery Plan
SPARC Pediatric Surge Annex
SPARC Crisis Standards of Care Annex

- Illinois Department of Public Health (IDPH) ESF-8 Plan: Burn Surge Annex
  https://www.luriechildrens.org/globalassets/documents/emsc/disaster/state-plans/burnsurgeannexnov2016public.pdf
  OR
  https://dph.illinois.gov/content/dam/soi/en/web/idph/files/publications/burn-surge-annex-november-2016-101017.pdf

- Patient care guidelines within the Burn Surge Annex that can assist practitioners when providing medical care to burn patients during a burn MCI include:
  - Adult Burn Care Guidelines
    https://www.luriechildrens.org/globalassets/documents/emsc/disaster/state-plans/burnsurgeannexadultburncareguidelinesnov2016.pdf
  - Pediatric Burn Care Guidelines
    https://www.luriechildrens.org/globalassets/documents/emsc/disaster/state-plans/burncareguidelinesjune2017.pdf
  - ABA Burn Center Referral Criteria
    https://ameriburn.org/wp-content/uploads/2017/05/burncenterreferralcriteria.pdf

3.3 Acronyms

AAR	After Action Report
ABA	American Burn Association
ABLS	Advanced Burn Life Support
ATLS	Advanced Trauma Life Support
BMCI	Burn Mass Casualty Incident
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosives
CSC	Crisis Standards of Care
EMA	Emergency Management Agency
EMS	Emergency Medical Services
ESF-8	Emergency Support Function 8
HCC	Health Care Coalition
HICS	Hospital Incident Command System
IC	Incident Commander

ICS	Incident Command System
MAC	Multiagency Coordination
MCI	Mass Casualty Incident
MPHMSRR	Marion Public Health and Medical Services Response Region
POC	Point of Contact
RFMR	Request for Medical Resources
RHCC	Regional Hospital Coordinating Center
SME	Subject Matter Expert
SPARC	Shawnee Preparedness and Response Coalition
TBSA	Total Body Surface Area
TMTS	Temporary Medical Treatment Station
URL	Uniform Resource Locator

3.4 Attachments

1. Midwest Burn Center/Units
2. Recommended Burn Supply Cache
3. American Red Cross Map and Point of Contact Information

Attachment 1: Midwest Burn Centers/Units

MAY 2022

Midwest Burn Centers/Units

HOSPITAL / CITY	PEDIATRIC CAPABILITIES	PHONE NUMBER
Illinois		
** John H. Stroger Jr. Hospital of Cook County, Sumner L. Koch Burn Center, Chicago	X	312-864-1000
** Δ Loyola University Medical Center - Maywood	X	708-216-3988
Memorial Medical Center - Springfield	X	877-662-7829
OSF St. Anthony Medical Center - Rockford	X	800-252-5433
** University of Chicago Medical Center - Chicago	X	800-621-7827
Indiana		
** Δ Eskenazi Health, Richard M. Fairbanks Burn Center, Indianapolis		317-880-6900
** Indiana University Riley Hospital for Children Burn Unit, Indianapolis	X	877-447-4539
Lutheran Hospital Regional Burn Center, Fort Wayne	X	260-435-4720
Iowa		
** University of Iowa Burn, University of Iowa Hospitals and Clinics, Iowa City	X	319-354-5000 or 319-356-2496
Kentucky		
University of Louisville Hospital Burn Center, Louisville		502-562-3983 or 502-562-8008
Michigan		
Bronson Methodist Hospital, Kalamazoo		269-341-8037
** Children's Hospital of Michigan, Detroit	X	313-966-5343 or 877-994-8436
** Detroit Receiving Hospital Burn Center, Detroit		313-745-3078
Hurley Medical Center, Flint		810-262-9000
Spectrum Health Regional Burn Center, Grand Rapids	X	616-391-9250
** Δ University of Michigan Trauma Burn Center, Ann Arbor	X	734-764-3289
Minnesota		
Essentia Health – Duluth (Miller-Dwan Burn Center), Duluth	X	217-727-8762
** Δ Hennepin County Medical Center Burn Center, Minneapolis	X	612-873-4262
** Regions Hospital Burn Center, St. Paul	X	800-922-BURN (2876)
Missouri		
Barnes Jewish Hospital, St. Louis		314-362-9175
Children's Mercy Hospital Burn Unit, Kansas City	X	816-234-3520
Mercy Hospital Burn Center, Springfield	X	417-820-2974
** Mercy Hospital, St. Louis	X	314-251-6055
St. Louis Children's Hospital, St. Louis	X	800-678-4357
University of Missouri Hospital, Trauma/Surgical/Burn Center, Columbia		573-882-2876

** *American Burn Association, Burn Center Verification*

Δ ***State Burn Coordinating Center: These are lead burn coordinating hospitals designated by each state within the Great Lakes Healthcare Partnership Program to assist during disasters. More information on Illinois' burn disaster planning can be found in the IDPH ESF-8 Plan: Burn Surge Annex (state health & medical disaster plan).***

EMSC
Illinois Emergency Medical Services for Children
2022

MAY 2022

Midwest Burn Centers/Units

HOSPITAL / CITY	PEDIATRIC CAPABILITIES	PHONE NUMBER
Ohio		
** Children's Hospital Medical Center of Akron	X	330-543-4567
CR Boeckman Regional Burn Center, Akron	X	330-543-8224
** MetroHealth Medical Center, Cleveland	X	216-957-5433
Miami Valley Hospital Regional Adult Burn Center, Dayton		937-208-2126
** Nationwide Children's Hospital, Columbus	X	614-722-3900
** Δ Ohio State University Medical Center, Columbus		614-293-2876
** Shriners Hospital for Children/Shriners Burn Hospital, Cincinnati	X	513-872-6201 or 800-875-8580
St. Vincent's Hospital Burn Center, Toledo		419-251-4734
University of Cincinnati Medical Center Burn Center, Cincinnati		513-584-8199
Wisconsin		
** Ascension Columbia St. Mary's Hospital Regional Burn Center, Milwaukee		414-585-1163
Children's Hospital of Wisconsin, Milwaukee	X	414-266-2000
** Δ University of Wisconsin Hospital and Clinics, Madison	X	608-263-6796 or 608-263-1490

** *American Burn Association, Burn Center Verification*

Δ ***State Burn Coordinating Center: These are lead burn coordinating hospitals designated by each state within the Great Lakes Healthcare Partnership Program to assist during disasters. More information on Illinois' burn disaster planning can be found in the IDPH ESF-8 Plan: Burn Surge Annex (state health & medical disaster plan).***

EMSC
Illinois Emergency Medical Services for Children
2022

Attachment 2: Recommended Burn Supply Cache

ATTACHMENT 20: RECOMMENDED BURN SUPPLY CACHE

Purpose: Provide health care facilities, regions and the state with a standardized list of burn supplies that can be utilized during a burn MCI.

Instructions: This list should be used to develop a burn supply cache at the individual health care facility, regional and state level to care for a projected number of patients that may seek medical care during a burn MCI. The supplies on this list will address the needs of 10 burn patients over a 24 hour timeframe.

Recommended Burn Cache Supplies for 10 Patients

Supplies

• Large burn dressings 24" X 36"	100
• Small burn dressings 18" x 18"	100
• Rolled dressing 4' x 3 yard roll	200
• Super sponges (6 x 6)	500 packages
• Flexible net dressings Sizes: 1, 3, 5, 8, 10	10 boxes for each size
• Non-stick dressing small	40
• Non-stick dressing large	40
• All-purpose solution bowls	40
• Sterile fields	100
• Lactated Ringers (LR)	200
• Intubation supplies	
• Bandage scissors	
• Central line kits	
• Arterial line kits	
• Urinary catheters (various sizes for all ages)	
• NG tubes (various sizes for all ages)	

Medications

• Bacitracin 400 g jar	20
• Silver sulfadiazine (Silvadene) 400 g jar	40
• Morphine (may be part of hospital's disaster pharmaceutical cache)	
• Silver antimicrobial barrier dressings (e.g., Acticoat, Mepilex). These are recommended for burn hospitals only since they have the ability to rotate these items into daily use to avoid expiration.	100

Attachment 2.1: Hospital Burn Surge Checklist

SPARC Healthcare Organizations – Region V
Hospital Burn Surge Assessment

Directions: Use the checklist below to assess your hospital's burn surge preparedness.

Hospital/Facility Name:
Name/Title of Person Completing Assessment:
Date:
Contact Information: Email: Phone:

Structure for Planning and Decision Making

Yes	No	
☐	☐	Burn Surge planning has been incorporated into disaster planning and exercises for the hospital?
☐	☐	Do you have telehealth capabilities available?
☐	☐	Does your facility have telehealth/telemedicine agreements with a Burn Center for additional assistance?
☐	☐	Does your facility have the capability to stabilize burn patients should the burn centers become saturated?
☐	☐	In addition to EMS Services, do you have access to specialty care transport services during a burn surge event?
☐	☐	At least 1 Provider is trained in Advanced Burn Life Support (ABLS)?
☐	☐	Do you have a plan to provide just-in-time burn care training?
☐	☐	Does your facility have written agreements with burn referral centers to expedite patient transfer?
☐	☐	Aside from the RHCC, are there other agencies/organizations that you could coordinate with for assistance (staff, space, resources)?
☐	☐	Do you have access to subject matter experts (SMEs) if needed?
☐	☐	Does your facility have contingency plans for keeping patients warm during a BMCI?
☐	☐	Does your facility have adequate supplies to initially treat and sustain at least one very burned patient for up to 24 hours during a burn mass casualty incident?
☐	☐	Does your facility have the recommended burn cache supplies to stabilize 10 burn patients over a 24-hour timeframe? Please indicate with a (✓) in the box, and then indicate the quantity that your facility has on hand.

Supplies:	**Quantity:**
☐ Large burn dressings 24"X 36"	_____
☐ Small burn dressings 18" X 18"	_____

- ☐ Rolled dressings 4' x 3 yard roll _____
- ☐ Super sponges (6 x 6) _____
- ☐ Flexible net dressings Sizes:
  - 1 _____
  - 3 _____
  - 5 _____
  - 8 _____
  - 10 _____
- ☐ Non-stick dressing small _____
- ☐ Non-stick dressing large _____
- ☐ All-purpose solution bowls _____
- ☐ Sterile fields _____
- ☐ Lactated Ringers (LR) _____
- ☐ Intubation supplies _____
- ☐ Bandage scissors _____
- ☐ Central line kits _____
- ☐ Arterial line kits _____
- ☐ Urinary catheters (various sizes for all ages) _____
- ☐ NG tubes (various sizes for all ages) _____
- ☐ Ventilators _____
- ☐ Bair Huggers _____
- ☐ Other items (e.g., mylar emergency blankets) _____ that can be used to keep patients warm. Please specify on the lines provided below:

  _____ _____

  _____ _____

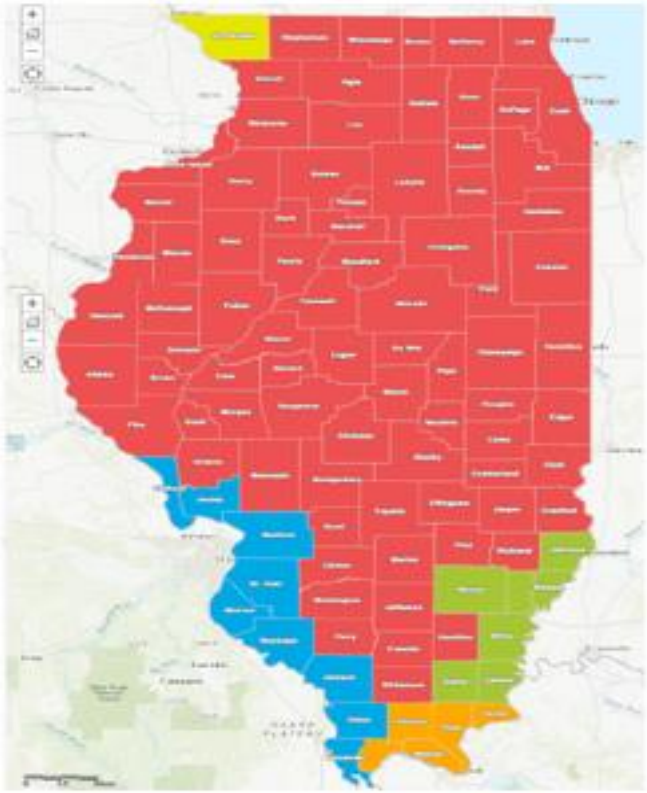
  _____ _____

Medications:

- ☐ Bacitracin 400 g jar _____
- ☐ Silver sulfadiazine (Silvadene) 400 g jar _____
- ☐ Morphine (may be part of hospital's disaster pharmaceutical cache) __
- ☐ Silver antimicrobial barrier dressings (e.g., Acticoat, Mepilex). These are recommended for burn hospitals only since they have the ability to rotate these items into daily use to avoid expiration. _____

Attachment 3: American Red Cross Map and POC Information

American Red Cross



		Red Cross Point of Contact			
County	State	Name	Phone	Email	Red Cross Chapter
Alexander	IL	Jennie Sahagun (Interim)	314-409-3896	jennie.sahagun@redcross.org	Southeast Missouri
Jackson	IL	Jennie Sahagun (Interim)	314-409-3896	jennie.sahagun@redcross.org	Southeast Missouri
Randolph	IL	Karla Templeton	314-303-2010	karla.templeton4@redcross.org	Greater St Louis
Union	IL	Jennie Sahagun (Interim)	314-409-3896	jennie.sahagun@redcross.org	Southeast Missouri
Pope	IL	Lacy Boling (DPS) 270-349-4776 lacy.boling@redcross.org or Linda Porter (DPM) 270-570-0395 linda.porter@redcross.org			Kentucky Region
Johnson	IL				Kentucky Region
Pulaski	IL				Kentucky Region
Hardin	IL				Kentucky Region
Massac	IL				Kentucky Region
White	IL	Claire Will DPM - 812-605-4298 Brandon Kempf DPS- 812-677-4086			Indiana Region
Gallatin	IL				Indiana Region
Saline	IL				Indiana Region
Hamilton	IL	Jamie Beaver, DPM jamie.beaver@redcross.org 309-222-5838			Illinois Region
Franklin	IL				Illinois Region
Williamson	IL				Illinois Region
Perry	IL				Illinois Region