

Michigan's Plan for Burn Mass Casualty Incidents

Lessons Learned, Teams Built, and Resources Created Over a Decade

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Key Points

- Burn disasters will occur.
- Local burn center resources and personnel will be overwhelmed.
- Immediate transport of all casualties to definitive burn care will be impossible.
- Resuscitation, the most pressing need, can be rendered by non-burn facilities.
- Tremendous needs exist for practical burn care training to support preparedness efforts.

Michigan Burn Mass Casualty Plan

- Plan developed and implemented starting in 2009
- Living document; currently on version #24
- Coordinated effort by:
 - Michigan DHHS / BETP
 - State Burn Coordinating Center (SBCC)
 - Regional HCC Medical Coordination Centers (MCCs)
 - All Michigan Burn Centers
 - Designated Burn Surge Facilities (BSFs)
- Designed to supplement (not replace) other preparedness efforts (ABA)
- Engages participants across disciplines: ED physicians and nurses, Burn surgeons and nurses, EMS, MCCs, community hospitals, administrators, State EOC, MDHHS, CHECC
- Plan provides guidance for:
 - Uniform triage of burn patients
 - Categorization of hospital resources
 - Caches of critical burn surge supplies based on regional population and surge capacity needs
 - A multi-modal communication plan for the management of a burn mass casualty incident
 - Staff and training readiness for patient care
 - Coordinated care during transfer to burn centers



BMCI Surge Plan Components

Burn Surge Facilities (BSFs)

- Trauma Centers in all 8 Healthcare Coalitions across the State of Michigan have been designated as BSFs
- 14 BSFs currently in the State of Michigan
- BSFs will help to collect, triage, resuscitate, stabilize and organize burn casualties prior to transport to definitive burn care
- BSFs provide initial resuscitation and stabilization, but no operative management

Training

- Nurses from each BSF trained in ABLS and in the State BMCI Surge Plan
- Hands-on, online, and classroom training
- EMS training modules and special transport forms developed and delivered
- Multimedia modules also available for education/review/just-in-time use
 - Online (www.michiganburn.org)
 - DVD in BSF supply caches
 - Paper in BSF supply caches

Database

- Designed for patient tracking and resuscitation management
- Serves as communication mechanism between BSFs and SBCC
- Used to triage and prioritize patients for transfer to Burn Centers
- HIPAA compliant

Website

- Video training modules
- Burn Plan & Pediatric Attachment
- Forms, Protocols & Guidelines



Burn Supply Caches at Each BSF

- Acticoat (long-lasting dressing)
- Silvadene
- Training DVDs Manual

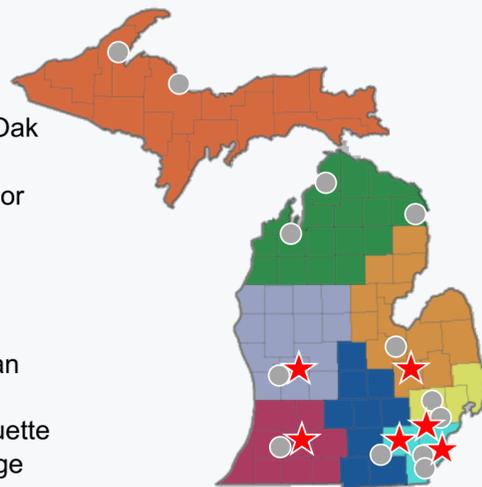
Pediatric Go Bags (at flight services)

- Oxygen masks
- Endotracheal tubes
- GlideScopes/blades
- IOs and Pediatric IVs
- Pediatric Foleys



Burn Surge Facilities (BSFs) & Michigan Burn Centers (BCs)

- Sparrow Hospital
- Henry Ford Allegiance
- McLaren Oakland
- William Beaumont-Royal Oak
- Henry Ford Hospital
- St. Joseph Mercy-Ann Arbor
- St. Mary's of Michigan
- Borgess Medical Center
- St. Mary's Health Care
- Munson Medical Center
- McLaren Northern Michigan
- Mid Michigan Alpena
- UP Health Systems-Marquette
- UP Health Systems-Portage



- University of Michigan*
 - Children's Hospital of Michigan*
 - Detroit Receiving Hospital*
 - Hurley Medical Center
 - Bronson Methodist
 - Spectrum Health
- *ABA Verified

- Burn Surge Facility
- Burn Center

State Burn Coordinating Center (SBCC)

Clinically-based multidisciplinary burn teams with strong technical, education and coordination capabilities: Primary: University of Michigan Backup: Detroit Receiving Hospital

Support Preparedness

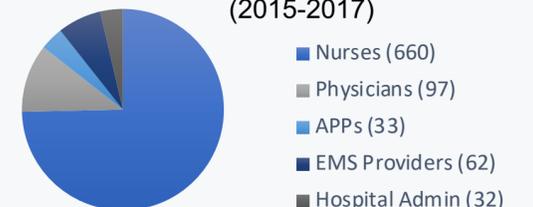
- Maintain website www.michiganburn.org
- Support hands-on training of personnel
- Development of protocols
- Rotation and updating of burn supply caches
- Patient tracking and resuscitation database
- Exercise development and execution

Coordinate Clinical Care during MCI

- Activate burn surge capacity at BSFs and BCs
- Provide real-time consultation to BSFs
- Triage and coordinate transfer from BSFs to BCs
- Provide medical situational awareness and expertise to state agencies

Results

- 14 BSFs activated with trained personnel
- 884 people trained in ABLS and the plan (2015-2017)



Lessons Learned

- Strong leadership and funding from a statewide agency is essential.
- It is important to overcome natural competition to bring together diverse stakeholders.
- Successful adoption requires free and centralized practical training and resources.
- Development and frequent updating of digital resources is necessary to sustain plan.
- The plan must balance the needs of diverse regions (e.g., rural vs. urban) and populations.

Key Resources

The Michigan Burn Casualty Incident Plan, training materials, downloadable worksheets, and more are available at:
www.MichiganBurn.org