

**Miami-Dade County Healthcare Coalition
Burn Annex**

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1. Introduction

1.1 Purpose

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 MDCHPC member facilities. The annex will identify the experts and specialized resources that exist within and external to the MDCHPC that must be engaged in a mass burn response and incorporate concepts and principles of medical surge to best assign resources appropriate to the scope and magnitude of the incident.

The annex will also include recommendations for the stabilization and initial management of burn victims for 24 to 72 hours when immediate transfer to an ABA verified burn center is not feasible.

1.2 Scope

This plan will be reviewed and updated annually by the MDCHPC. Lessons learned as they emerge from After Action Report/ Improvement Plans following real events or planned training exercises will be incorporated into the annex. This plan is not intended to supersede the authorities of the participating entities.

For the purpose of this annex, any event that would cause more than a 50% surge among burn centers in Miami-Dade County would be considered a burn mass casualty incident (BMCI). In terms of Miami-Dade County, there are 55 burn beds, and a burn surge would include at least 82 burn patients requiring immediate care.

1.3 Overview/Background of HCC and Situation

1.3.1 Coalition Overview

The Miami-Dade County Healthcare Preparedness Coalition membership includes hospitals and health systems, emergency management, public health, EMS providers, long-term care providers, behavioral and mental health providers, specialty service providers (dialysis, pediatrics, urgent care, district Medical Examiners, funeral directors, etc.), support service providers (laboratories, pharmacies, blood banks, poison control, etc.), primary care providers, community health providers, and other healthcare and response stakeholders. There are 32 acute care hospitals, 2 of which are ABA verified burn centers and 4 stand-alone emergency departments in Miami-Dade County.

It is becoming increasingly difficult to preserve and pass on the collective expertise of existing burn experts for the future because the frequency of major burns is declining due to several public health, public safety, and other interventions. In addition, burn care has been dropped from the standard curriculum of surgical training in the United States over a decade ago.

Across the United States, there are 133 burn centers staffed by approximately 300 burn surgeons, comprising approximately 2000 specialty burn beds.

Miami -Dade County has 2 accredited burn centers with approximately 55 burn beds. This may not be sufficient regarding resources to manage an influx of patients in a Burn Mass Casualty Incident (BMCI). But with additional training, pharmaceuticals, medical supplies, and equipment, all acute care facilities will have the personnel and resources to adequately manage critical burn patients.

Capacity and capability can be enhanced through:

- a) The provision of pharmaceuticals, medical supplies, and equipment required to manage burn patients.
- b) The provision of training and resource materials on the management of burn patients.

The MDCHPC Burn Surge Annex was developed using its members and subject matter expert support. This multi-disciplinary group included the Medical Directors and administrative staff from our two burn centers and the county EMS agency. The burn centers served in leadership capacities as it relates to burn surge coordination, communication, and patient treatment during a burn surge incident.

This plan will be reviewed and updated annually by the MDCHPC. Lessons learned as they emerge from After Action Report/ Improvement Plans following real events or planned training exercises will be incorporated into the annex. Please see [Appendix 3.6](#) for the BMCI Tabletop Exercise After-Action Report and Improvement Plan. The After-Action report and Improvement plan was created after The MDCHPC and its members participated in a virtual tabletop exercise facilitated by FEMA’s Emergency Management Institute. The exercise had a BMCI scenario and the MDCHPC had the opportunity to participate as a player along with several other coalitions and organizations across the nation. The After-Action report addresses strengths, weaknesses, lessons learned, and identified gaps for the improvement plan.

Miami-Dade County Burn Centers Subject Matter Experts and Burn Annex Task Force:

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1.3.2 Local Risk for Mass Burn Events

According to the Threat Hazard Identification Risk Assessment Plan (THIRA) 2015 that is routinely updated by Miami-Dade County Office of Emergency Management, the County identifies three main types of hazards in the following order: Natural, Technological, and Human-Caused. Natural hazards may include disease outbreak, drought, hurricanes, flooding, storm/storm surge, lightning, wildfire, and more. Technological hazards may include coastal oil spills, hazardous material release, nuclear power plant release, structural fire, transportation incident, and water/wastewater incident. Human-caused incidents may include active shooter, civil unrest, food borne illness incident, terrorism (chemical, cyber, explosive, and radiological), and mass migration.

According to the aforementioned information presented in the THIRA, there are several hazards that can cause mass burn events in Miami-Dade County. Such hazards may include, but are not limited to, wildfires, hazardous material release, structural fire, transportation incidents, and terrorism. Planning for a mass burn event is crucial due to the high likelihood of some of the previously mentioned hazards to occur. Miami-Dade County is one of the top 10 counties with the highest population in The United States and the largest county in Florida, not to mention the fact that it is a major tourist destination for local and international travelers. Planning for a Mass Burn Event will prove useful to Miami-Dade County's Burn Center, and Trauma Centers.

1.3.3 Burn Centers

A Burn Center provides a comprehensive team approach to the care of burn victims. The specialized clinical team, including burn/trauma surgeons, advanced practice providers, nurses, skilled technicians, occupational therapists, physical therapists, respiratory therapists, social workers, clinical nutritionists, pharmacists, and psychologists provide care throughout the duration of stay for each patient.

Burn Center Verification is overseen by the American Burn Association (ABA) Verification Committee with endorsement of the American College of Surgeons Committee on Trauma (ACS-COT). The burn center verification process incorporates principles of quality assurance and continuous improvement. It is transparent, and respects confidentiality. The purpose of burn center verification is to maintain burn center quality by promoting patient safety, cost containment, regional education and outreach, injury prevention, innovation and research, and advocacy.

The goal of the committee is to promote improvement of burn care, within the context of an inclusive and integrated system. The VRC strives to continually make the process objective, fair, consistent, evidence-based, timely, up-to-date, helpful, and efficient

The State of Florida Trauma Standards also address burn care; however, both the ACS and the State of Florida follow the ABA's criteria regarding burn center and burn care specifics. In addition, the Burn Center Director for each center maintains open communication with

directors of other burn centers throughout the state as well as the Southern Region Coordination Center (SRCC). Disaster facilitators have access to essential contact information, predetermined regional burn center capabilities, information on regional transport capabilities, and a spreadsheet of ground transportation distances between all Southern Region burn centers (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV) from the SRCC.

1.3.4 Burn Centers of Florida Map

The below map shows available Burn Centers in the state of Florida. There are 85 ABA verified burn beds and 42 non-verified burn beds for a total of 127 beds with the potential to surge to a higher volume. In south Florida, and Miami-Dade County specifically, there are 2 Burn Centers: University of Miami/Jackson Memorial Burn Center, and Kendall Regional Burn Center with 55 verified burn beds and 27+ burn surge beds.



1.3.5 MDCHPC's Burn Centers

Within Miami-Dade County there are 2 ABA verified burn centers, The University of Miami/Jackson Memorial Burn Center, and Kendall Regional Burn Center.



[Miami Burn Center](#)

University of Miami Jackson Memorial Burn Center

1800 NW 10th Ave

Miami, Florida 33136

Region: Southern (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV)

Disaster Contact Emergency Phone: (305) 585-2876

Total Number of Beds: 30

Surge Capacity: 45

Type of Burn Center: Adult & Pediatric

ABA Verified Burn Center: Yes



Kendall Regional Burn Center

11750 SE 40 St.

Miami, Florida 33175

Region: Southern (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV)

Disaster Contact Emergency Phone 24/7: (877) 549-9337

Total Number of Beds: 25

Surge Capacity: 37

Admission Ages: Adults & Pediatrics

ABA Verified Burn Center: Yes

1.3.6 Burn Surge Centers

All trauma centers have the capabilities to treat and stabilize burn patients. They will not have the full capacity as a designated burn center and will be classified as Burn Surge Centers.

Miami-Dade County has the following non-burn Trauma Centers:

Jackson Memorial Hospital – South

Aventura Hospital

Nicklaus Children’s Hospital – Pediatric

The following outlines the number of burn surge beds that each trauma hospital can make available in case of a BMCI:

Trauma Center	Burn Bed Surge Capacity
Aventura Hospital	12
Jackson Memorial Hospital - South	10
Nicklaus Children’s Hospital	6
Holtz Children’s Hospital (Jackson)	10

1.3.7 Non-Burn Center Acute Care

Burn injured patients may receive care at non-burn centers if they are not critically ill, have a less than 10% total body surface area, have not suffered concomitant trauma, or have burn injuries that do not otherwise meet the transfer criteria set forth by the ABA.

1.4 Assumptions

- An incident triggering the activation of the MDC Burn Surge Plan will happen with little or no warning.
 - EMS protocols include both direct EMS transport of burn patient(s) from the scene to a Burn Center or EMS transport to local hospital for initial treatment and stabilization.
 - All acute care hospitals can provide initial triage and resuscitation for burn victims.
 - Initially, all local hospitals will follow normal organizational protocols when faced with burn victims.
-

- In patient care, after initial fluid resuscitation, there is a period before definitive burn management is required. The major focus during this time period is supportive care for the patient and determining which patients will most benefit from care at a dedicated Burn Center.
- Level 1 and 2 trauma centers that are not burn centers are designated as Burn Surge Centers (BRC) and have the capability to initially treat and stabilize, burn patients for 72 hours if unable to immediately transfer to a Burn Center. They must be prepared to accept burn patients in the event of a burn disaster. Each trauma center has a pre-identified number of potential burn beds they can make available in case of a BMCI.
- MDC Burn Centers can surge for a total capacity of 82 burn patients of varying acuities. Anything over would require EOC and state burn centers involvement. Each of the state burn centers have regional burn surge protocol/procedures in place to address coordination between their neighboring regions.
- Southern Regional Coordination Centers (SRCC) will be notified for the transfer of patients to out-of-state burn centers with available capacity. This is determined only after all in-state options are exhausted and all in-state burn centers are contacted for potential transfers.
- Federal resources from the Strategic National Stockpile or its Managed Inventory assets to support state Burn Centers and other hospitals will take at least 12 hours to arrive once the Governor has made this request and the request has been approved by the federal government.

2. Concept of Operations

2.1 Activation

This plan will be activated upon rapid identification and communication to the local jurisdiction of a potential BMCI incident. This plan can be initiated by any of Miami Dade county's hospitals, health clinics and offices, local health departments, emergency medical services, or County Emergency Operations Centers when a potential BMCI occurs.

A BMCI incident will result in 83 or more burn patients or exceeds burn care resources available. EMS/Hospitals in consultation with the Local Burn Lead Specialist, if immediately available, request assistance. ESF-8 activates the Burn Surge Plan.

Note:

1. *If a Local Burn Lead Specialist is unavailable, a Remote Burn Lead Specialist preferably from within the state may be contacted.*
2. *OEM Duty Officer is notified by County Warning Point (CWP) of all MCIs above level 2 (20 patients)*

2.2 Notifications

The Coalition has redundant communication capabilities with its members and has demonstrated its effectiveness during real world incidents including the COVID-19 pandemic. During blue skies, the Coalition uses Constant Contact to share information on meetings, plans,

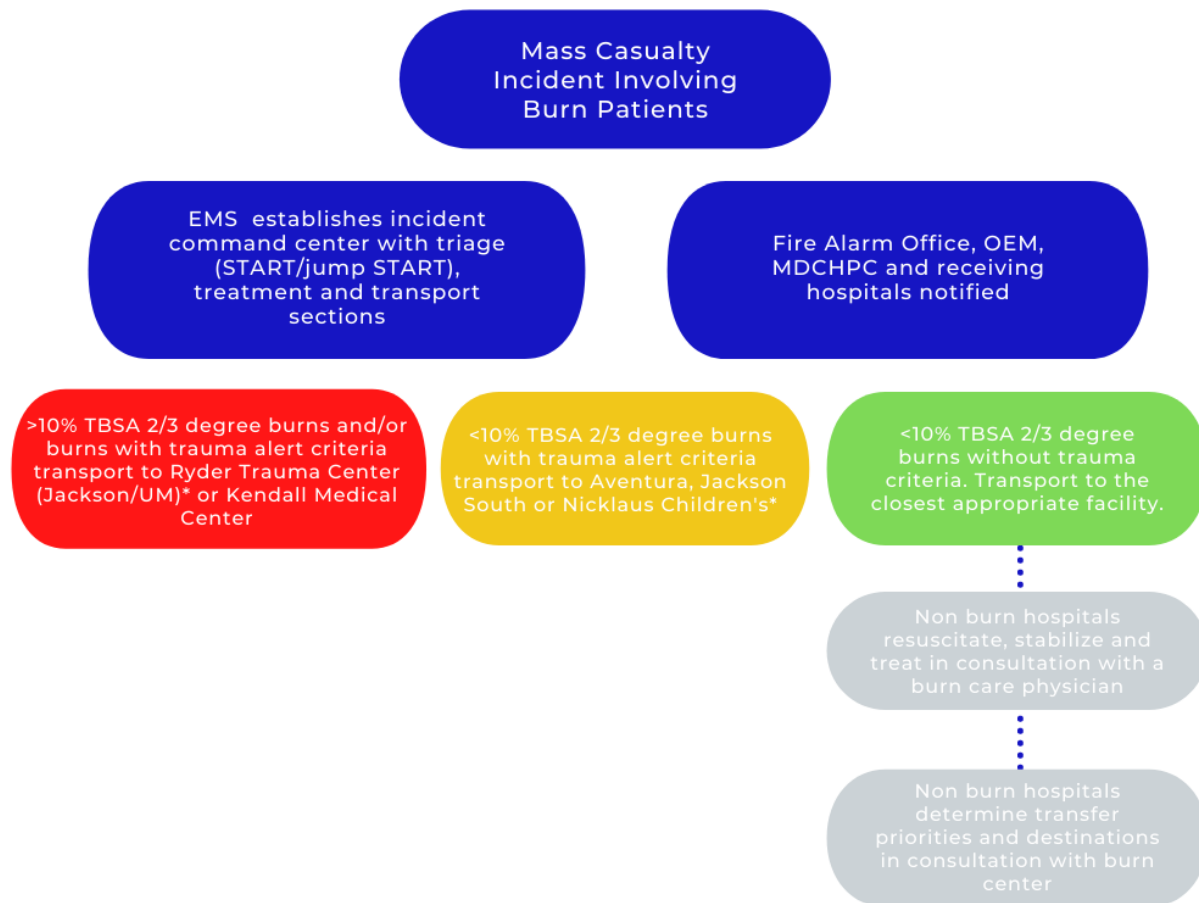
trainings, and exercises with its members. During exercises and gray skies, the Coalition uses the Everbridge health alert network to share information with members. During a BMCI, Everbridge system is the usual method of notification via mass notification alerts. The OEM or burn centers would notify each other of a possible BMCI depending on who receives the initial alert.

2.3 Roles and Responsibilities

2.3.1 Command and Coordination

The Incident Command System (ICS) is a management system that is used to achieve optimal command and control within an organization as well as seamless inter-agency coordination during any type of emergency. It uses a clearly defined chain of command with a limited span of control. The overarching goal is to assist Emergency Management and Emergency Support Function 8 (ESF-8) with the National Preparedness Goals mission areas: Prevention, Protection, Mitigation, Response, and Recovery as it relates to healthcare disaster operations.

- **State Role:** The Florida Department of Health (FDOH) State Surgeon General is responsible for the overall direction, management and control of all Department personnel and resources committed from the state. Once the State Emergency Response Team (SERT) is activated this plan is incorporated into the established state emergency management structure.
 - **Regional Role:** The State and local ICS structure will expand and contract as the situation warrants. If an area command or multi-agency coordination system (MAC) is used, it will follow Regional Domestic Security Taskforce (RDSTF) geographical boundaries.
 - **Local Role:** The Health and Medical Emergency Support System (ESF - 8) will coordinate and manage the response to an incident and will utilize the incident command system (ICS).
 - **EMS Role:** During a BMCI, EMS transport burn patients from the scene to burn centers or a local hospital for initial treatment and stabilization.
 - Major/critical burn patients or any burn patients meeting trauma criteria shall be transported to the most appropriate burn center.
 - Minor burn patients not meeting trauma criteria shall be transported to the most accessible receiving facility.
 - **Hospital Role:** Hospitals are responsible for acute health care service provision. All hospitals providing emergency services should be equipped to initially assess and stabilize burn victims for up to 72 hours. Please refer to the following resources for hospital personnel: [Appendix 3.2](#), [Appendix 3.2.1](#), [Appendix 3.2.3](#), [Appendix 3.2.4](#)
 - When local resources are overwhelmed, the hospital should call other State Burn Centers and request their assistance before contacting Southern Region Burn Coordination Center.
 - Hospitals are to follow normal organizational transfer protocols and American College of Surgeons (ACS) transfer criteria with respect to burn victims
-



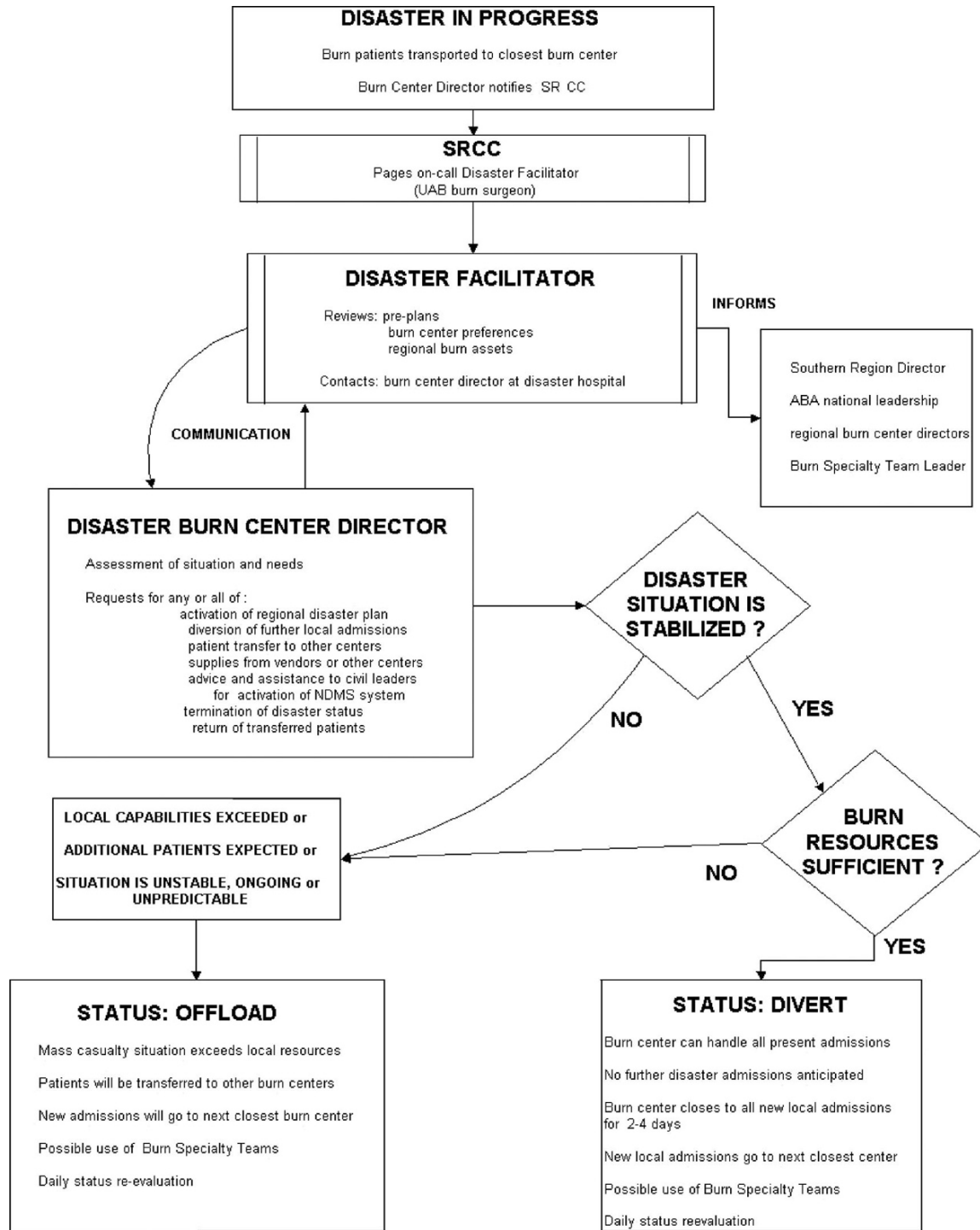
- Coalition Role:** The Coalition’s role in information sharing is to monitor communications from local and State ESF8 and share information with member organizations that is not provided via other partners, such as regional status. Informational posts are monitored, and relevant information is forwarded or included in the daily situation report. County situation reports are reviewed for situational awareness. The Coalition will also be a main source of information sharing among hospitals receiving patients during a BMCI to identify any supply needs, facilitate patients transfers, and coordinate supply delivery when needed.
 - Burn Center Roles:** All five state American Burn Association (ABA)-designated Regional Burn Centers maintain plans to manage regional burn surge capabilities in the event of a mass casualty incident or other disaster. The Southern Region encompasses Burn Centers located along the southeast and gulf coasts of the United States extending from Virginia through Texas, including West Virginia, Kentucky, Tennessee, Arkansas, and Oklahoma. For a BMCI occurring anywhere within the Southern Region of the United States, the Southern Region Coordination Center (SRCC) serves as a communications and coordination center to support Burn Center(s) with burn bed census and/or patient triage and transfer. A BMCI is defined as any incident where capacity and capability significantly compromises patient care, as identified in accordance with individual Burn Center(s), state, regional or federal disaster response plans.
-

Upon request by a referring Burn Center, the SRCC will conduct a bed census of Southern Region Burn Centers to support and assist with regional efforts for patient triage and transfer.

To request SRCC assistance contact: SRCC at University of Alabama at 800-359-0123.

The diagram below demonstrates how the SRCC plan revolves around two key personnel: the Burn Center Director at the center experiencing the emergency and an experienced burn surgeon located at a distance from the disaster site who functions as a disaster facilitator.





2.4 Logistics

ESF-8 is responsible for resource management include logging, tracking, and vetting resource requests across the HCC and in coordination with the ESF-8 lead agency. The state uses WebEOC to track all mission requests.

2.4.1 Transfer/Tracking

Transportation resources are important resources used to decompress the burn surge response, by transferring some of the more acutely injured or ill to other facilities. The primary purpose of patient movement and tracking within the plan is to decompress overwhelmed healthcare facilities through an equitable distribution of patients. Achieving surge equilibrium is generally the trigger that moves the level of disaster to out of crisis surge capacity back to either a contingency or conventional surge capacity. Priority of transfer is determined by facility resources and the patient's probability of survival. Probability of survival is based on TBSA, patient's age and co- morbidities. Please see Referral Criteria in [Appendix 3.2.6](#)

Priority of transfers:

1. Major/critical burn patients at a non-BRC.
 2. Major/critical burn patients at a BRC.
 3. Minor burn patients at a non-BRC.
 4. Minor burn patients at a BRC
-

Once a receiving facility has been identified and confirms acceptance of the patient(s), the requesting hospital transfer center will coordinate a clinical provider call between the requesting facility and the receiving facility.

The appropriate EMS asset will be assigned based on the level of care required during the transfer, the acuity of the patient, and the destination.

2.4.2 Staff

Maintaining appropriate staffing in healthcare facilities is essential to providing a safe work environment for healthcare personnel (HCP) and safe patient care. Healthcare facilities must be prepared for potential staffing shortages and have plans and processes in place to mitigate them. Plans may include communicating with HCP about actions the facility is taking to address shortages, maintain patient and HCP safety and providing resources to assist HCP with anxiety and stress.

Health care facilities should be in communication with local healthcare coalitions, federal, state, and local public health partners (e.g., public health emergency preparedness and response staff) to identify additional HCP (e.g., hiring additional HCP, recruiting retired HCP, using students or volunteers), when needed. The state of Florida has an approved vendor list that includes nursing and support staff through contractual augmentation. This was tested in the real-world pandemic response.

2.4.3 Supplies

Resource management include logging, tracking, and vetting resource requests across the HCC and in coordination with the ESF-8 lead agency. This is done at the county level ESF-8. The state uses WebEOC to track all mission requests.

During a BMCI, all hospitals will need to have enough supplies to care for burn patients for up to 72 hours until they are transferred to a burn center. Please see [Appendix 3.4](#) for a recommended supply list for non-burn centers and burn centers.

The process for redistribution of available resources in the event of a medical surge event is outlined below:

- If a Coalition member organization needs assistance during a disaster response (staff, equipment, supplies, or other resources), the member organization submits a request to the County Emergency Operations Center (EOC). It is the county's responsibility to try to fulfill the organization's request.
- If the County EOC is unable to fulfill the request, the County submits requests to the State EOC through WebEOC. Once a request has been received by the State EOC from a county, it is initially processed by the County Liaison Desk under the direction of the Operations Support Branch, who verifies the information. From there, it is assigned to the proper branch for tasking to the appropriate ESF. If the ESF can meet the provisions of the request, resource information is forwarded to the county EOC. If the ESF cannot provide the requested resources, it is then forwarded to the Logistics Section, who will work with either private vendors or through the Emergency Management Assistance Compact (EMAC) to secure the resources. If the resources are identified from private sources, the vendor information is given to the county emergency operations center.
- The Coalition has a cache of resources that may be available to coalition members among request.
- The [Supply Chain Annex](#) is also used as a reference during resource shortages and allocation.

2.4.4 Deactivation and Recovery

Demobilization can be done by scaling back services as they are no longer needed. Each agency involved is responsible for demobilization, and overall demobilization is coordinated by the EOC/EDF-8. Tasks associated with this include:

- Coordinate demobilization with Agency Representatives.
- Identify surplus resources and probable release time.
- Develop incident check-out function for all units.
- Evaluate logistics and transportation capabilities to support demobilization

2.4.5 Rehabilitation and Outpatient Follow Up Services

Burn rehabilitation starts within the first 24 hours of admission, where a burn patient is evaluated by a Burn Center trained physical and occupational therapists. They are then seen for

therapy daily while admitted to the hospital and can be seen by the same burn-trained OT/PT during their follow-up appointments in the outpatient burn clinic.

Outpatient Burn clinic is held 4-5 days a week, and a patient can self-refer, may be referred upon discharge from the Emergency Department, or may be referred from a rehab center, SNF, or other facility.

UHealth/Jackson Miami Burn Center has a **Burn Survivor Support Group** for patients and families that meets bimonthly on the second and fourth Wednesday of each month, from noon to 1 p.m. The support group is facilitated by burn psychologists and survivors.

2.5 Special Considerations

2.5.1 Behavioral Health

Disaster Behavioral Health responders work with survivors, families, responders, and the community to assist with the mitigation of emotional, psychological, and physical effects of a disaster, natural or man-made. Disaster behavioral health responders apply the concepts of psychological first aid to help those affected overcome the initial impact of shock, denial, and depression when confronting disasters. For example, **UHealth/Jackson Miami Burn Center** has a **Burn Survivor Support Group** for patients and families that meets bimonthly on the second and fourth Wednesday of each month, from noon to 1 p.m. The support group is facilitated by burn psychologists and survivors.

2.5.2 Pediatric

Both verified burn centers within Miami-Dade County treat adults and pediatric patients. However during a Burn MCI, pediatric burn cases may be transported to Nicklaus Children's and Jackson Memorial's Holtz Children Hospitals which are not burn centers but can be called upon to stabilize patients for up to 72 hours. While there, they would be expected to be assessed, stabilized, and promptly transferred to a burn center if space is available and they meet the ABA Criteria for Burn Center Referral. Severe or larger burns meeting transfer criteria should be transported to a verified pediatric burn center within Miami-Dade County. The following are a few crucial items to keep in mind for pediatric burn patients:

- Airway Control:
 - Younger children and those with larger burns are more likely to require intubation due to the smaller diameter of the child's airway and the need for significant fluid volumes during resuscitation
 - Airway edema increases significantly after fluids are started; therefore, prophylactic intubation is preferred because the ensuing edema obliterates the landmarks needed for successful intubation

 - Breathing
 - Stridor or noisy breath sounds are indicators of impending upper airway obstruction.
-

- Significant burns to the nasal passage of infants < 6 months can cause airway compromise due to obligate nose breathing.
- Pediatric patients have smaller and more delicate lungs that are susceptible to barotrauma.
- Initial Resuscitation/Fluid Management
 - Pediatric patients can compensate and maintain their heart rate during the early phases of hypovolemic shock; this may lead into under-resuscitation.
 - Oral resuscitation may be considered for awake alert pediatric patients with small burns using flavored sport drinks and/or an equal electrolyte maintenance solution.
 - A maintenance dextrose fluid may be required for very young children
 - Temperature regulation is more difficult due to the thinner skin, body surface area to mass ratio and the lack of subcutaneous tissue.
- Wound Assessment
 - The child's head is relatively larger and the legs smaller. The head and neck represent 18% TBSA (double that of an adult 9%).
 - The Palm method is extremely easy and is very helpful when the burns are scattered over the body. With this method and using the PATIENT'S hand as a guide, the palmar surface is equal to 1% of the patient's body. Please refer to [Appendix 3.2.3](#)
- Pain Control
 - Oral pain medications should be reserved either for patients with very minor burns or patients with no other options for pain control.

Please see Pediatric Considerations in [Appendix 3.4](#). The MDCHPC also has a Pediatric Annex that can be referenced during a Pediatric MCI. A recommended supply list for patients with both traumatic and burn injuries within a BMCI are also provided here. Please see [Appendix 3.4](#).

3. Appendices (links)

[3.1 Training and Exercises](#)

The Miami Dade County Healthcare Preparedness Coalition tested this Burn Surge Annex through a Tabletop Exercise. The Coalition participated in FEMA's Emergency Management institute virtual tabletop exercise series burn mass casualty incident scenario. The exercise was held on April 14th, 2022, through Zoom portal with FEMA's Emergency Management institute. Players included local ESF-8, Office of emergency management, EMS/Fire Rescue, Miami Dade County's 2 verified burn centers, and trauma hospitals and acute care centers from Miami-Dade and Palm Beach County.

3.2 Just in Time Training & Additional Resources

3.2.1 Combined Injury

The following are recommendations adapted from “Guidelines for Burn Care under Austere Conditions: Surgical and Nonsurgical Wound Management” (2017) developed by the physician leadership of the American Burn Association.

- Before assisting anyone, verify scene safety. Once you reach the patient with a burn injury, follow with general assessments for airway, breathing, circulation and address any potential for spine injuries with application of cervical collar and spinal immobility, if indicated. Follow disaster triage procedures for determining the priority of care needs. Always treat life threatening trauma injuries first.
- Identify and train a wound care team. Prepare a venue for wound care. Protect burn patients from extremes of temperature, especially prevent hypothermia and unprotected sun exposure as possible.
- Determine availability of topical antimicrobials and other wound care supplies.
- Use a potable water supply and soap to clean loose debris from burns. Then apply antimicrobial ointment to non-adherent gauze and place on open wounds and secure with dry gauze for once daily dressing changes.
- Provide adequate multimodal narcotic and non-opioid analgesia and anxiolysis.
- For patients with minor burns (<10% TBSA), consider having them perform their own wound care or help each other if resources are limited.

American Burn Association. (2018). *Advanced Burn Life Support Course – Provider Manual 2018 Update*. Chicago.

Cancio, L. C., Barillo, D. J., Kearns, R. D., Holmes, J. H., Conlon, K. M., Matherly, A. F., Cairns, B. A., Hickerson, W. L., & Palmieri, T. (2017). *Guidelines for Burn Care Under Austere Conditions: Surgical and Nonsurgical Wound Management*, 34(4), 203-214. <http://doi.org/10.1097/BCR.0000000000000368>

3.2.2 Triage and Secondary Triage

Below are 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.

- If facility resources are overwhelmed, triage according to the “Resource Triage Diagram for Burn Injury in a Disaster” (see Rule of Nine’s below). To estimate Total Body Surface Area (TBSA) burn use the “Rule of Nines” or Palmar Method. Note: Only 2nd and 3rd degree burns are tallied.
- Direct exposure to ionizing radiation (even as low as 2-6 Gy) may change the above triage categories (worsened outcomes).
- Consider concomitant injuries from the effect of the blast.
- Follow Advanced Trauma Life Support (ATLS) guidelines.

Secondary triage of patients to an appropriate center for continued care will be critical – this function may have to be delegated to burn experts at the 2 verified burn centers in Miami-Dade

County. If the number of burn patients exceeds the capacity available at Miami-Dade County and neighboring county Trauma Centers and verified burn centers, the MDCHPC and the local jurisdiction having authority may contact The SRCC to assist with patient placement.

3.2.3 Rule of Nine's & Palmer Method (Rule of Palms)

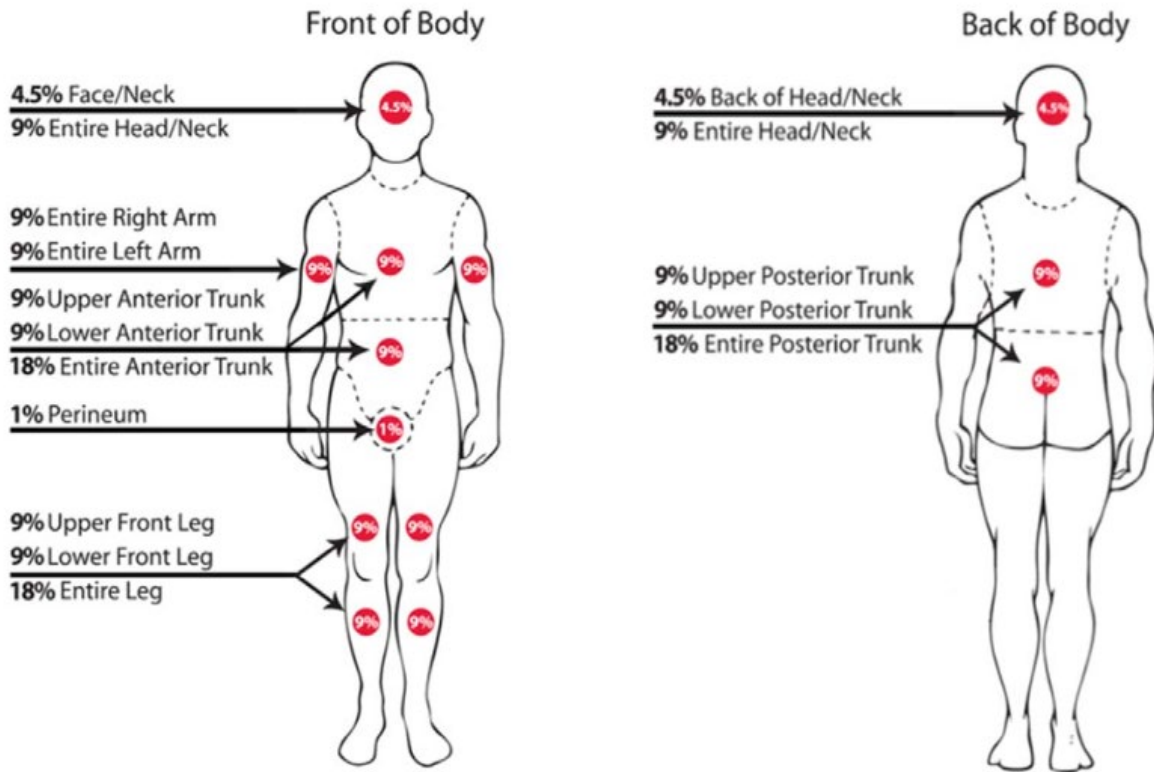
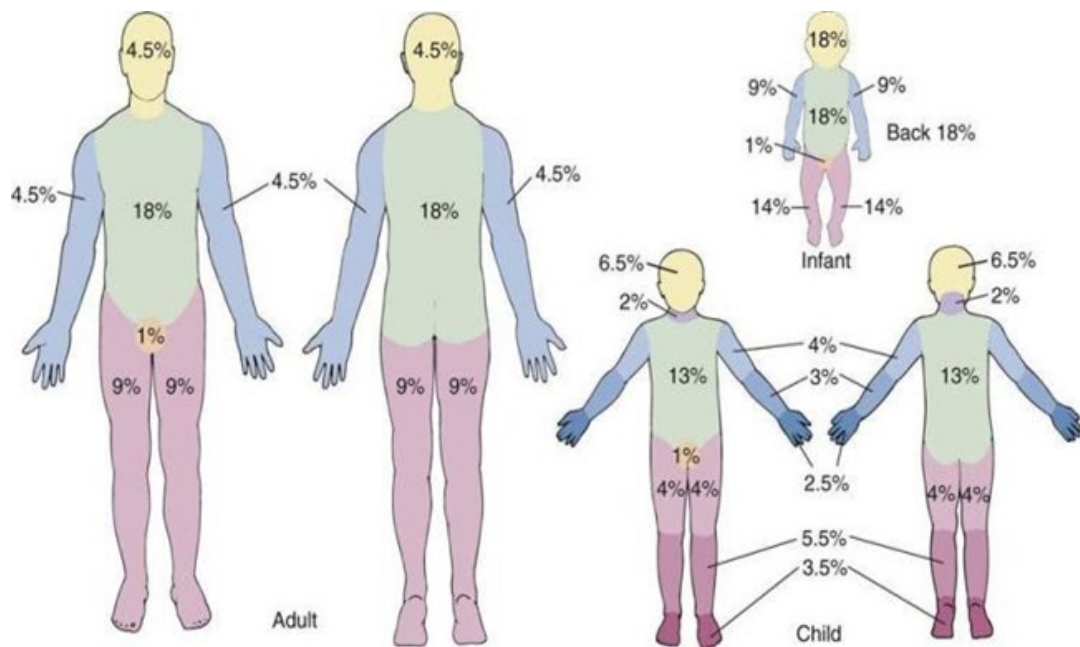


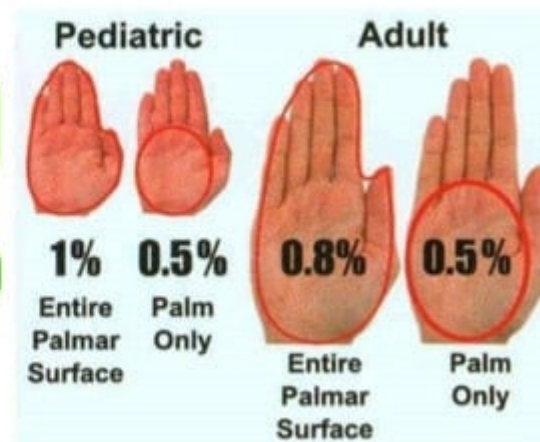
Figure 1. Depiction of the Rule of Nine's and Palmar Method of burn size estimation. For the Rule of Nines, each body region has a surface area in a multiple of nine. In the Palmar Method, the patient's palm represents approximately 1% of that patient's BSA. Reprinted with courtesy from The Burn Center at Saint Barnabas Medical Center, Livingston, New Jersey.



Rule of Palms

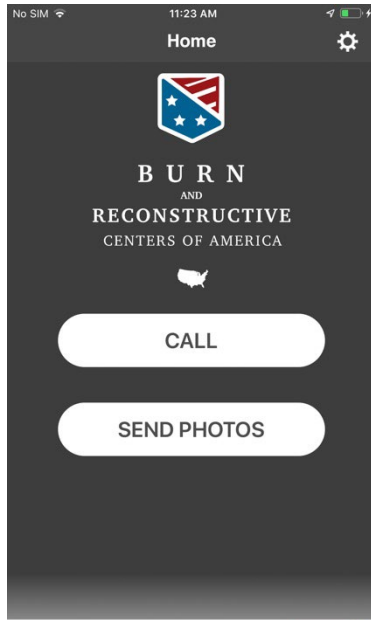
Use PATIENT's hand & ENTIRE palmar surface

Good for TBSA < 15%



3.2.4 Treatment

For Trauma Centers that are not verified burn centers, they are encouraged to use as many resources as they can to properly triage incoming burn patients. [The Burn Referral App](#) has proven to be a very useful tool for providers to communicate and consult with each other in real time. Medical providers can immediately connect with burn practitioners and share patient photos and information to assist in the assessment of a burn or wound injury. This can be a vital part of the process of determining a course of care. The app should always be used in conjunction with a phone call to The Burn & Reconstructive Centers of America's (BRCA) burn hotline at [855-863-9595](tel:855-863-9595).



Sign Out

Sign Out

3.2.5 Just-in-Time Training Summary Sheet

Patient Care Priorities for the First 24 hours in Burn Mass Casualty for Non-Burn Physicians
(Based upon "Guidelines for Burn Care Under Austere Conditions")

3.2.6 Referral Criteria

Burn Center Referral Criteria

A burn center may treat adults, children, or both.

Burn injuries that should be referred to a burn center include:

1. Partial thickness burns greater than 10% total body surface area (TBSA).
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
3. Third degree burns in any age group.
4. Electrical burns, including lightning injury.
5. Chemical burns.
6. Inhalation injury.
7. Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
8. Any patient with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient may be initially stabilized in a trauma center before being transferred to a burn unit. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.
9. Burned children in hospitals without qualified personnel or equipment for the care of children.
10. Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

3.3 Burn Care Resources

[Guidelines for Burn Care Under Austere Conditions – Special Care Topics](#)

[Guidelines for Burn Care Under Austere Conditions – Special Etiologies, Blast, Radiation, & Chemical](#)

[Guidelines for Burn Care Under Austere Conditions – Airway & Ventilators](#)

[Pediatric Considerations](#)

[Mass Burn Event Overview](#)

[Just-in-Time Training Summary Sheet](#)

[Southernregionmciplan.pdf \(ameriburn.org\)](#)

[Disaster Response – American Burn Association \(ameriburn.org\)](#)

[Advanced Burn Life Support \(ABLS\)](#)

[American Burn Association. \(2018\). Advanced Burn Life Support Course – Provider Manual 2018 Update.](#)

[State of Michigan Burn Coordinating Center](#)

3.4 Supporting Documents
Supply Chain Mitigation Strategy
Revised Recommended Supply List for a BMCI
Pediatric Surge Annex

3.5 Abbreviations and Acronyms

Abbreviation/Acronym	Definition
ABA	American Burn Association
MDFR	Miami-Dade Fire Rescue
OEM	Office of Emergency Management
ABLS	Advanced Burn Life Support
SRCC	Southern Region Coordination Center
EMS	Emergency Medical Services
ED	Emergency Department
MDCHPC	Miami-Dade County Healthcare Preparedness Coalition
HCC	Health Care Coalition
MCI	Mass Casualty Incident
BMCI	Burn Mass Casualty Incident
TBSA	Total Body Surface Area
BRC	Burn Resource Center
ACS	American College of Surgeons
CWP	County Warning Point
TTX	Tabletop Exercise
IP	Improvement Plan
AAR	After-Action Report
JIT	Just-in-Time Training



Burn Mass Casualty Incident Virtual Tabletop Exercise

After-Action Report/Improvement Plan

April 14th, 2022; 1200-1600

April 15th, 2022

Burn Mass Casualty Incident

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Burn Mass Casualty Incident

PREFACE

After an incident concludes, organizations should reach consensus on identified strengths and areas for improvement and develop a set of improvements that directly addresses core capability gaps. This information is recorded in the After Action Report/ Improvement Plan (AAR/IP) and resolved through the implementation of concrete recommendations, which should be prioritized and tracked as part of a recommendation program. This would include the improvement planning process.

This AAR was produced with the help, advice, and assistance of the responding Organization. The purpose of publishing an AAR is to document effectiveness and overall incident performance. It serves as a compendium of lessons learned, outlines recommended recommendations, and provides the basis for planning, training and responding to future incidents. The Miami-Dade County Healthcare Preparedness Coalition (MDCHPC) and its local, state, federal and Non-Governmental Organizations (NGO) partners are committed to providing an accurate analysis of incident responses.

Program participants are encouraged to provide input relating to the incident and response to the incident Point of Contact (POC) Tamara Turk, MDCHPC, Training & Exercise Coordinator, Tamara.Turk@SMRT7.OnMicrosoft.com

Burn Mass Casualty Incident

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ADMINISTRATIVE HANDLING INSTRUCTIONS

1. The title of this document is the Burn Mass Casualty Incident Virtual Tabletop Exercise After Action Report/Improvement Plan (AAR/IP).
2. For information on this exercise, please contact the following POC:

Tamara Turk
Training & Exercise Coordinator
Miami-Dade County Healthcare Preparedness Coalition
305-510-3644
Tamara.Turk@SMRT7.OnMicrosoft.com

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Burn Mass Casualty Incident

EXECUTIVE SUMMARY

The scenario for this exercise involves a large-scale fire at a local nightclub with over 275 civilians at the premises. The incident resulted in approximately 80 burn patients ranging from first to third degree burns with the majority being first degree superficial burns. There were a total of 20 deaths resulting from the fire. The main objectives for the exercise are to enhance situational awareness and effectiveness in sharing essential elements of information, the demonstration of an effective response to a Burn Mass Casualty incident, and identification of resources to assist in stabilizing burn patients before their transfer to a verified burn center. The core capabilities are Medical Surge and Health Care and Medical Response Coordination.

The objectives for this incident were:

ENHANCE SITUATIONAL AWARENESS AND EFFECTIVENESS IN SHARING EEIS: IN CONJUNCTION WITH OR THROUGH ESF 8, LOCAL COALITION PARTNERS CAN DEMONSTRATE THE ABILITY TO ENHANCE SITUATIONAL AWARENESS BY SHARING ESSENTIAL ELEMENTS OF INFORMATION (EEIS).

EFFECTIVE RESPONSE TO A BURN MASS CASUALTY INCIDENT: HEALTH CARE ORGANIZATIONS, AND THE HCC, IN CONJUNCTION WITH ESF 8, WILL NEED TO RESPOND TO A SURGE IN DEMAND FOR HEALTH CARE SERVICES AS A RESULT OF AN EMERGENCY. THIS WILL REQUIRE A COORDINATED APPROACH TO SHARE INFORMATION AND RESOURCES, INCLUDING STAFF, AND ENSURE THE STEWARDSHIP OF BEDS, MEDICAL EQUIPMENT, SUPPLIES, PHARMACEUTICALS, AND OTHER KEY ITEMS TO PROVIDE THE BEST POSSIBLE CARE UNDER SUCH CONDITIONS.

IDENTIFICATION OF RESOURCES TO ASSIST IN STABILIZING BURN PATIENTS BEFORE THEIR TRANSFER TO A VERIFIED BURN CENTER: HEALTH CARE FACILITIES SHOULD SUCCESSFULLY DEMONSTRATE THEIR KNOWLEDGE OF APPROPRIATE RESOURCES AVAILABLE TO THEM IN CASE THEY ARE PRESENTED WITH BURN/TRAUMA PATIENTS AS A RESULT OF A BMCI. THIS PARTICULAR OBJECTIVE IS AIMED AT HOSPITALS THAT ARE NOT VERIFIED BURN CENTERS AND MAY NOT NECESSARILY HAVE ABLS (ADVANCED BURN LIFE SUPPORT) TRAINED PROVIDERS ON STAFF.

The purpose of this report is to analyze incident results, identify strengths to be maintained and built upon, identify areas for improvement, and support the development of recommendations.

CLOSING:

The Virtual Tabletop Exercise for a Burn Mas Casualty Incident addressed all the objectives and provided an opportunity for participating players and their organizations to demonstrate the effectiveness of Emergency Operations Plan (EOPs), Standard Operating Guidelines (SOGs), and Standard Operating Procedures (SOPs). Planners should use the results of this incident to review and update their respective agency's EOPs, SOGs, and SOPs.

Burn Mass Casualty Incident

SECTION 1: OVERVIEW

Incident Name	Virtual Tabletop Exercise (VTTX) Burn Mass Casualty Incident
Incident Date(s)	April 14 th 2022
Incident Location(s)	Virtual Exercise (Zoom)
Scope	This is a discussion-based exercise, planned for four hours hosted by the Emergency Management Institute (EMI) and conducted with multiple remote video teleconference sites.
Mission Area(s)	Response, Recovery
Core Capabilities	Medical Surge Healthcare & Medical Response Coordination Health & Social Services
Objectives	<ul style="list-style-type: none"> • Enhance situational Awareness by identifying and sharing EEIs • Identification of resources to assist in stabilizing burn patients before their transfer to a verified burn center • Identification of methods to support responders in their recovery with behavioral health monitoring programs
Threat or Hazard	Fire
Scenario	Fire at a nightclub, including large numbers of patients that triggers a burn mass casualty incident (BMCI)
Participating Organizations	Hospitals, Trauma Centers, Verified Burn Centers, ESF-8, Local Healthcare Coalition, and Fire/EMS from Miami-Dade and Palm Beach County

Burn Mass Casualty Incident

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SECTION 2: ANALYSIS OF CORE CAPABILITIES/OBJECTIVES

Identification of resources to assist in stabilizing burn patients before their transfer to a verified burn center

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Medical Surge

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: All participating hospitals were aware of and knew how to access care at the specialize burn centers in their region. They also were aware of American Burn Association (ABA) as a resource and which (ABA) region they were in.

Strength 2: Several participating (non-burn center) hospitals have increased their capacity by training all their trauma nurses in ABLS (Advanced Burn Life Support) so that they may assess, stabilize and promptly arrange transfer to a verified burn center wen space becomes available.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1.1: Non-trauma centers lack awareness on the probability that they will receive patients who self-transport or is transported by EMS to the nearest provider to seek urgent care.

Analysis: There was a clear consensus that non-trauma centers need to be educated on the possibility that they will be seeing trauma/burn patients in the event of an MCI. Patients will be transported or self-transport themselves to any facility/provider. Therefore, non-trauma centers must be prepared to assess, stabilize, and possibly admit patients for up to 72 hours. They should have the necessary pharmaceuticals, supplies, equipment, and knowledgeable staff in place to care for such patients until they can be transferred.

Recommendation: Educate all acute care non-burn hospitals that they may be called upon to take care of burn patients for up to 72 hours during a burn MCI. Provide yearly ABLS courses to all healthcare providers within the region. Share Just in Time training materials with all non-burn centers to educate their staff on how to care for and stabilize burn patients until they can be transferred to a burn center.

Area for Improvement 1.2: Triage of burn patients needs to be properly trained on in order to assign burn patients to correct facilities.

Burn Mass Casualty Incident

Analysis: As per ABA, protocols state that all burn patients with >10% TBSA, second-degree and all third-degree burns are to be transported to the nearest Verified burn center.

Recommendation: Ensure that all Fire/EMS staff are well versed in triaging burn patients to assign them to the best facility for their medical care. ABA recommends palmar method and rule of 9's for triage to determine transport destinations. Information on aforementioned triage recommendations can be found in MDCHPC's Burn Surge Annex.

Burn Mass Casualty Incident

Enhance situational Awareness by identifying and sharing EEs

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Healthcare & Medical Response Coordination

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Participating players clearly identified essential elements of information relevant to the scenario

Strength 2: Established methods for sharing EEI's were shared including new and innovative technologies that some players will consider incorporating with their organizations.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 2.1: Reduce turn around time for Fire/EMS to get bed census counts for hospitals.

Analysis: EMS/Fire Rescue does not have real-time access to bed census counts for local and regional hospitals. They rely on their capability chart which gives an estimate of the type and number of patients for hospitals surge capacity numbers.

Recommendation: Identify a universal system or software that EMS/Fire can have direct access to locate information on bed census numbers. Suggest that WebEOC display each hospital staffed burn bed numbers and ED capacity from AHCA as they are being updated daily.

Area for Improvement 2.2: There is no clear method for tracking patients.

Analysis: There is no clear method for tracking patients, especially for patients that are being transferred between hospitals. This issue seems to be a universal issue that was not only expressed by our group, but by other groups from around the country attending the virtual tabletop exercise. HIPAA regulations, funding, and a lack of an entity willing to champion this truly challenging limitation all contribute to this issue. Additionally, during an MCI, EMS and Fire are prioritizing getting the patients to hospitals as quickly as possible to minimize loss of life. Therefore, tagging, and documenting patients is just not possible when responding to a large-scale incident with many moving parts.

Recommendation: While RFID technology is an ideal solution for this issue, implementing it has many challenges and it would need to be accepted and adopted by all organizations to fully streamline the patient tracking process. The most feasible option is to further strengthen our family reunification processes and maintain proper communication protocols between hospitals to help families reunite with loved ones.

Burn Mass Casualty Incident

Identification of methods to support responders in their recovery with behavioral health monitoring programs

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Health & Social Services

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Participating players clearly identified documented plans that outline their efforts to address behavioral health among their team members. A myriad of resources were provided and shared among the players to take back to their organizations and share with their team members.

Strength 2: Telehealth has been vastly improved due to its major adoption during the COVID-19 pandemic. It is now being utilized to provide behavioral health services, stress first aid and psychological first aid to first responders who are more comfortable getting this service through telehealth. Peer support groups have also been created since a many first responders prefer talking about their mental health concerns with their peers instead of sharing their thoughts with strangers who would not know what they go through on a daily basis.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 2.1: Stigma still associated with seeking mental health services

Analysis: EMS/Fire Educate first responders on mental health resiliency and removing the stigma associated with seeking mental healthcare.

Recommendation: Educate first responders on mental health resiliency and removing the stigma associated with seeking mental healthcare. Conduct Train-the-trainer stress first aid programs to enable team member to coach each other on mental health resiliency when needed. Sharing free mental health service resources through the healthcare coalition to increase awareness on available resources to first responders.

Area for Improvement 2.2: Some first responders do not realize the effect of an event on their mental health until they are burnt out and well in need of medical attention for their mental health.

Recommendation: Organizations can conduct annual mental health evaluations on their team members to ensure everyone is on good health and ready to face the next challenge. Some players already have this established and it would be beneficial to use their methods as an example.

Incident

APPENDIX A: IMPROVEMENT PLAN (IP)

The Improvement Plan (IP) specifically details what actions will be taken to address each recommendation presented in the After Action Report (AAR), who or what agency will be responsible for taking the action, and the timeline for completion.

*Capability elements: Planning, Organization/Equipment, Training, Exercise and Evaluate/Improve

Core Capability	Issue/Area for Improvement	Recommendation	Primary Responsible Organization	Responsible Organization POC	Start Date	Completion Date
Medical Surge	Non-trauma centers lack awareness on the probability that they will receive patients who self-transport to the nearest provider to seek urgent care.	Share Just in Time training materials with all non-trauma and non-burn centers to educate their staff on how to care for and stabilize burn patients until they can be transported to a burn center.	MDCHPC, joint effort with Jackson Health System Burn Team	Tamara Turk	Ongoing	
Medical Surge	Triage of burn patients on scene needs to be reviewed to effectively designate patients to the proper hospital	Review triage instructions/flow charts to include specific triage methods for burn patients. New triage instructions should guide providers on how and who to assign to	Fire/EMS		TBD	

Incident

Core Capability	Issue/Area for Improvement	Recommendation	Primary Responsible Organization	Responsible Organization POC	Start Date	Completion Date
		be transported to the local verified burn center				
Healthcare & Medical Response Coordination	Reduce turnaround time for Fire/EMS to get bed census counts for hospitals.	Identify a universal system or software that EMS/Fire can have direct access to locate information on bed census numbers. Suggest that WebEOC displays bed census numbers from AHCA as they are being updated daily	TBD			
Healthcare & Medical Response Coordination	There is no clear method for tracking patients.	While RFID technology is an ideal solution for this issue, implementing it has many challenges and it would need to be accepted and adopted by all organizations to fully streamline the patient tracking process. The most feasible option is to further strengthen our family reunification processes and maintain	TBD			

Incident

Core Capability	Issue/Area for Improvement	Recommendation	Primary Responsible Organization	Responsible Organization POC	Start Date	Completion Date
		proper communication protocols between hospitals to help families reunite with loved ones.				
Health & Social Services	Stigma still associated with seeking mental health services	Educate first responders on mental health resiliency and removing the stigma associated with seeking mental healthcare. Conduct Train-the-trainer stress first aid programs to enable team member to coach each other on mental health resiliency when needed. Sharing free mental health service resources through the healthcare coalition to increase awareness on available resources to first responders.	MDCHPC	Tamara Turk	Ongoing effort	
Health & Social Services	Some first responders do not realize the effect of an event on their mental health until they are burnt	Organizations can conduct annual mental health evaluations on their team members to ensure	Each organization is responsible for implementing			

Incident

Core Capability	Issue/Area for Improvement	Recommendation	Primary Responsible Organization	Responsible Organization POC	Start Date	Completion Date
	out and well in need of medical attention for their mental health.	everyone is on good health and ready to face the next challenge. Some players already have this established and it would be beneficial to use their methods as an example.	this if they choose to			

Burn Mass Casualty Incident

APPENDIX B: INCIDENT PARTICIPANTS

Participating Organizations
Federal
FEMA/EMI : Lead Facilitator
State
FDOH/ESF-8
Local
Fire/EMS Miami Dade County, Fire/EMS Palm Beach County
Miami Dade County Healthcare Preparedness Coalition, Palm Beach County Medical Society
Jackson Health System, Nicklaus Children’s, Kendall Regional, UHealth, Baptist Health Systems
Healthcare District Palm Beach County, St. Mary’s Medical Center Palm Beach County
Other Partners

Burn Mass Casualty Incident**APPENDIX C: ACRONYMS**

Acronym	Definition	Acronym	Definition
AAR	After Action Report	NGO	Non-Governmental Organizations
ADA	Americans with Disabilities Act	POC	Point of Contact
ARC	American Red Cross	PPE	Personal Protective Equipment
ARES	Amateur Radio Emergency Services	RAD	Radiological
CBRNE	Chemical, Biological, Radiological, Nuclear, & High-Yield Explosives	SOG	Standard Operation Guidelines
CERT	Citizens Emergency Response Team	SOP	Standard Operation Procedures
COOP	Continuity of Operation Plan	SUA	Standard Use Agreement
EM	Emergency Management	TTX	Tabletop Incident
EMA	Emergency Management Agency	USAR	Urban Search and Rescue
EMS	Emergency Medical Services	VOAD	Voluntary Organizations Active in Disaster
EOC	Emergency Operations Center	WMD	Weapons of Mass Destruction
ESF	Emergency Support Function	BMCI	Burn Mass Casualty Incident
EOP	Emergency Operation Plan	MCI	Mass Casualty Incident
FE	Functional Incident	EI	Essential Elements of Information
FEMA	Federal Emergency Management Agency	ABA	American Burn Association
FSE	Full-Scale Incident		
HAZMAT	Hazardous Material		
HSEEP	Homeland Security Incident and Evaluation Program		
IAP	Incident Action Plan		
ICP	Incident Command Post		
ICS	Incident Command System		
IP	Improvement Plan		
JIC	Joint Information Center		
LEPC	Local Emergency Planning		
MOU	Memorandum of Understanding		
NIMS	National Incident Management System		
NWS	National Weather Service		

Burn Mass Casualty Incident**APPENDIX D: CORE CAPABILITIES**

Core Capabilities (32)	Mission Areas	Description
Access Control and Identity Verification	Protection	Apply a broad range of physical, technological, and cyber measures to control admittance to critical locations and systems, limiting access to authorized individuals to carry out legitimate activities.
Community Resilience	Mitigation	Enable the recognition, understanding, communication of, and planning for risk and empower individuals and communities to make informed risk management decisions necessary to adapt to, withstand, and quickly recover from future incidents.
Critical Transportation	Response	Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.
Cybersecurity	Protection	Protect against damage to, the unauthorized use of, and/or the exploitation of (and, if needed, the restoration of) electronic communications systems and services (and the information contained therein).
Economic Recovery	Recovery	Return economic and business activities (including food and agriculture) to a healthy state and develop new business and employment opportunities that result in a sustainable and economically viable community.
Environmental Response/Health and Safety	Response	Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.
Fatality Management Services	Response	Provide fatality management services, including body recovery and victim identification, working with state and local authorities to provide temporary mortuary solutions, sharing information with mass care services for the purpose of reunifying family members and caregivers with missing persons/remains, and providing counseling to the bereaved.
Fire Management and Suppression	Response	Provide structural, wildland, and specialized firefighting capabilities to manage and suppress fires of all types, kinds, and complexities while protecting the lives, property, and the environment in the affected area.
Forensics and Attribution	Prevention	Conduct forensic analysis and attribute terrorist acts (including the means and methods of terrorism) to their source, to include forensic analysis as well as attribution for an attack and for the preparation for an attack in an effort to prevent initial or follow-on acts and/or swiftly develop counter-options.
Health and Social Services	Recovery	Restore and improve health and social services networks to promote the resilience, independence, health (including behavioral health), and well-being of the whole community.

Burn Mass Casualty Incident

Housing	Recovery	Implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience.
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Burn Mass Casualty Incident

Core Capabilities (32)	Mission Areas	Description
Infrastructure Systems	Response, Recovery	Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.
Intelligence and Information Sharing	Prevention, Protection	Provide timely, accurate, and actionable information resulting from the planning, direction, collection, exploitation, processing, analysis, production, dissemination, evaluation, and feedback of available information concerning threats to the United States, its people, property, or interests; the development, proliferation, or use of WMDs; or any other matter bearing on U.S. national or homeland security by Federal, state, local, and other stakeholders. Information sharing is the ability to exchange intelligence, information, data, or knowledge among Federal, state, local, or private sector entities, as appropriate.
Interdiction and Disruption	Prevention, Protection	Delay, divert, intercept, halt, apprehend, or secure threats and/or hazards.
Logistics and Supply Chain Management	Response	Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains
Long-term Vulnerability Reduction	Mitigation	Build and sustain resilient systems, communities, and critical infrastructure and key resources lifelines so as to reduce their vulnerability to natural, technological, and human-caused threats and hazards by lessening the likelihood, severity, and duration of the adverse consequences.
Mass Care Services	Response	Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.
Mass Search and Rescue Operations	Response	Deliver traditional and atypical search and rescue capabilities, including personnel, services, animals, and assets to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.
Natural and Cultural Resources	Recovery	Protect natural and cultural resources and historic properties through appropriate planning, mitigation, response, and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and best practices and in compliance with appropriate environmental and historical preservation laws and executive orders.
On-scene Security, Protection and Law Enforcement	Response	Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all

Burn Mass Casualty Incident

		traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.
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Burn Mass Casualty Incident

Core Capabilities (32)	Mission Areas	Description
Operation Communications	Response	Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.
Operational Coordination	All	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
Physical Protective Measures	Protection	Implement and maintain risk-informed countermeasures, and policies protecting people, borders, structures, materials, products, and systems associated with key operational activities and critical infrastructure sectors.
Planning	All	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
Public Health, Healthcare and Emergency Medical Services	Response	Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support, and products to all affected populations.
Public Information and Warning	All	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
Risk and Disaster Resilience Assessment	Mitigation	Assess risk and disaster resilience so that decision makers, responders, and community members can take informed action to reduce their entity's risk and increase their resilience.
Risk Management for Protection Programs and Activities	Protection	Identify, assess, and prioritize risks to inform Protection activities and investments.
Screening, Search and Detection	Prevention, Protection	Identify, discover, or locate threats and/or hazards through active and passive surveillance and search procedures. This may include the use of systematic examinations and assessments, sensor technologies, or physical investigation and intelligence.

Burn Mass Casualty Incident
