CENTRAL FLORIDA REGIONAL DOMESTIC SECURITY TASK FORCE

MEDICAL SURGE RESPONSE PLAN

June 2012

INFORMATION CONTAINED IN THIS DOCUMENT IS CONFIDENTIAL PURSUANT TO FLORIDA STATE STATUES 281.301 AND F.S. 119.07(3) (ee); (CH 2002-67)

CONTENTS

1.0 **Introduction:**

This regional medical surge plan is designed to be an operational guide in the event of a catastrophic medical surge response in any of the 9 counties in Region 5. Primary response assets are housed in the more densely populated counties including: Orange (including City of Orlando), Osceola, Lake, Brevard, Seminole and Volusia. The intent is to effectively integrate regional medical, health and community resources during a large-scale emergency which exceeds the ability of the health care system by coordination of pre-hospital, hospital and contingency alternate care sites.

Medical Surge is described by three distinct types. Traditional surge involves one or more hospitals and is managed using only internal surge plans and resources. Contingency surge involves 1 or more hospitals and is managed using mutual aid in addition to the internal surge plans and resources. Crisis surge occurs when local and mutual aid capacity is exceeded, requiring a coordinated regional response with assistance from State and Federal resources. Crisis surge often requires a long term response and recovery. This plan primarily focuses on Crisis surge.

This plan will work in conjunction with the jurisdictional authorities and responsibilities outlined in the emergency operations plans of the hospitals, local health departments, primary care agencies, skilled nursing facilities, and county emergency management and service agencies. All steps and actions taken during the planning and operational phases of the medical surge plan activation shall focus on **maximum use of resources to provide rapid access to treatment and care**. (Reference: Regional Catastrophic Incident Response Plan, Region 5, Version 7.3)

This plan is compliant with the National Incident Management System (NIMS), and depends on strong working relationships, and effective networking efforts between all partners using an All-Hazards Incident Management Team (IMT) or Multi-Agency Coordination (MAC) Group approach.

2.0 Plan Initiation

This plan can be initiated by any of the region's hospitals, local health departments, emergency medical services, or County Emergency Operations Centers when local jurisdiction's capabilities are exceeded through consultation with Region 5 Health and Medical Co-Chairs.

2.1 Activation Criteria

This plan may be activated under the following conditions and triggers:

- Flood, fire or other damage(including bombing or chemical attack) to an existing acute care facility such that evacuation of patients is necessary or significant space is unsuitable for required services (ER, Surgical Suite, Laboratory closure)
- Similar damage to some other healthcare facility resulting in significant injury, need for evacuation, or damage resulting in unusable ambulatory care space.

- Mass casualty incident (MCI) due to an incident generating a surge in the demand on the health care system above 110-125% of normal impatient bed capacity.
- Local Hurricane of magnitude to produce wide spread injury and loss of services.
- Major dislocation of people (mass migration, hurricane displacement) to such an extent that there is anticipated or actual need for increased ambulatory care needs. This may include a large number of tourists or visitors who will be unable to leave the area due to disruption of transportation routes.
- Any CBRNE (Chemical, Biological, Radiological/Nuclear and Explosive) event or extreme weather event (e.g. tornados, wild fires, hurricane, flooding, etc.) generating a surge in demand on the health care system above 110-125% of normal inpatient bed capacity. It should be anticipated that this surge may include the worried well, who may clog emergency rooms and urgent care clinic sites.
- Any increase in patients due to pandemic, a communicable disease emergency, or comorbidities of such an incident, such that the health care demand exceeds available services or resources.
- Declaration by the Centers for Disease Control or the Florida Department of Health of pandemic stage five (alert phase).

3.0 Planning Assumptions

This plan takes an all-hazards approach, while using standard state and local planning scenarios for Central Florida.

This plan uses the following general assumptions:

3.1 Non-critical casualties will arrive at the emergency department first which can lead to the inundation of facilities and depletion of resources.

3.2 Non-critical disaster patients will out-number critical patients in ratios from *4:1* to *25:1,* depending upon the particular incident scenario at hand.

3.3 Crisis standards of care are used when this plan goes into effect. These are triggered by shortages of equipment, supplies, pharmaceuticals, beds, personnel, and sources of transportation. Responding agencies have these standards of care, and their use is outlined in their Emergency Operations Plan.

3.4 Region 5 Domestic Security Task Force (RDSTF) members and partners are trained and knowledgeable regarding the implementation and execution of this plan.

3.5 The regional resources will work in full cooperation with the appropriate Emergency Operations Centers (EOC) and Hospital Incident Command centers.

3.6 All hospitals have emergency plans which address medical surge

capacity (or Mass Casualty Incidents) and capabilities. A target measure is for the 38 hospitals in Region 5 to have a total of approximately 20 % additional surge beds beyond their normal capacity for a medical surge event.

3.7 All agencies receiving mass casualty trailers and medical surge response caches will have a local deployment plan for mobilization of assets in local incidents and in response to regional mutual aid requests.

3.8 Full cooperation, collaboration, communication and coordination between the Regions' hospitals and the County Emergency Operations Centers must be established in order to maximize the effectiveness of this plan.

3.9 Each of the 9 counties in Region 5 has a Mass Casualty Incident (MCI) plan and Alternate Care Site (ACS) plan (also known as Alternate Medical Treatment Site Plan-AMTS) and hospitals have an approved Disaster Response Plan. These plans are consistent with the State planning requirements and processes.

3.10 Bed availability is not the same thing as emergency room capacity. Emergency Room care may be available when beds are not.

3.11 Each RDSTF partner agency will make a concerted effort to provide its Employees with information on how to effectively prepare personally (including family members) for a disaster situation.

3. 12 The plan participants will work together to see that patients not needing hospitalization are referred to appropriate care and resource agencies.

3.13 Medical Legal Liability-In a mass casualty situation, the quality of medical care may be compromised due to the need to care for large numbers of patients injured in the incident as compared to the number of medical professionals needed to work with them. The focus on disaster with a medical surge involves changes from individualized care to group care out of the necessity to do the best possible for all those involved. The State of Florida has adopted the **START** and **JumpSTART** systems of triage as the state standard and is codified in Section 14 of the Florida Incident Field Operations Guide (FOG). Liability protection for volunteers and first responders is noted in the Good Samaritan Act and in F.S. Chapter 110 afforded volunteers registered with the Florida Department of Health (Medical Reserve Corps, State Medical Response Team, Disaster Behavioral Health Team, Special Needs Shelter Team, and others).

3.14 If a Multi-Agency Coordination Group (MAC) is deemed necessary by incident command leadership, members of this Region, especially the Health and Medical Co-Chairs, may be tasked with setting up the healthcare component to assist with the response. Whether or not a MAC is deemed necessary for coordination of the medical

surge capacity, the protocols and resources in this plan are available to help guide the response. (Multi-Agency Coordination Group Operations Guide, August 2012)

4.0 Concept of Operations

All disasters should be managed locally. When local resources are overwhelmed, a tiered system is used, moving from local, to county, to the region, to the state (intrastate and interstate), and the federal level in order to secure the needed resources.

The intent is to create a coordinated network between the region's hospitals, local health departments, emergency management services, county EOCs and partner agencies which enables these critical entities to respond to and recover from, a catastrophic medical surge in Region 5.

The methods used to handle patient surge generated by a public health emergency or disaster will be dependent upon the type of scenario presented, existing resources and capacity within patient treatment facilities. For organizational purposes, these methods can be divided into six surge response levels:

Level	Type of Response	Scope
Level 1	Facility	"In-place" surge coverage by healthcare facilities
Level 2	Multiple Facilities	Coordinated surge coverage by healthcare facilities
Level 3	Community	LEOC coordinated – Medical Surge response
Level 4	***Regional***	*LEOC coordinated – Medical Surge response (Regional Strike Teams/Mutual Aid)*
Level 5	State	SEOC coordinated – State Medical Surge Resources (State Medical Response Team/DOH Strike Teams)
Level 6	Federal	Support to State response – Multiple medical surge Resources (Federal resources, Strategic National Stockpile, Disaster Medical Assistance Team, etc.)

Level *2* and 3 scenarios will require greater "mutual aid" agreement activation between hospitals and emergency response agencies to coordinate patient movement, sharing of resources and treatment bed capacity. Levels 4 through 6 necessitate the establishment of a Medical Surge response, the involvement of local and Regional Emergency Management and the implementation of an incident management system to coordinate activities and manage resources.

5.0 Strategic Goals

The strategic goals identified below are defined in State and Regional strategic plans and operational plans to meet health and medical disaster needs.

a. Triage
b. Treatment
c. Bed and other resource coordination
d. Communications
e. Transportation
f. Public/media information
g. Recovery

These goals are addressed in the following sections:

5.1 Triage

All partner agencies should be familiar with the **START** (Simple Triage and Rapid Transport) triage system as the accepted disaster triage system for the State and Region's EMS agencies. The region will also use the **JumpSTART** system for all pediatric patients, ages 1-8 years. Both of these systems will be exercised, weaknesses noted, and corrective action plans implemented and re-tested.

In order to manage the medical surge brought on by a regional disaster, patients must be effectively evaluated and referred to the site they can receive appropriate care. Only the most acutely injured or ill should be treated at the hospitals. Others should be cared for at alternate care sites and other identified sites (urgent care, physician offices, skilled nursing facilities, special needs shelters) until the situation and surge returns to a stable state and normal operations. It is important for those in charge of triage to be familiar with local and regional service resources.

Patient tracking for a mass casualty incident starts at the initial point of care and includes a patient name or other identifier; as available demographic information including home address, age, gender and ethnic group; and basic medical assessment of injuries. At the very least, the triage tag system can be used to track patients until a more detailed process is implemented once administrative resources arrive at the treatment site. Region 5 will use the State of Florida triage tag system produced by Disaster Management Systems, Inc. for initial pre-hospital triage.

5.2 Hospital Bed Capacity/Emergency Room Access

Each hospital in Region 5 has a medical surge plan (Mass Casualty Plan) in place which identifies the hospital's inpatient bed surge capacity (20% required in the State of Florida) in a local or regional disaster (Appendix :Hospital Capability Matrix). This plan addresses the medical surge which exceeds the required bed capacity of affected hospitals and the Alternate Care Site resources to reduce the demand on emergency room (temporary) beds during a disaster. Each hospital should familiarize itself with the capacity and capabilities of hospitals in our region in order to facilitate appropriate patient transfer when required.

Hospital bed management and tracking is a local responsibility maintained at the local level by the licensed healthcare provider. Florida Hospital Association has developed a medical surge plan for state-wide bed coordination with State Emergency Management and Agency for Health Care Administration (AHCA). Bed availability is communicated to the State in the ACHA Emergency Status System (ESS) based on the HAvBED Standards. The ESS system is only active during disaster activation by the State. Currently the State and Florida Hospital Association are developing the EMResouce information system to manage, report and track hospital beds.

5.3 Alternate Care Sites (ACS)

Alternate Care Sites provide pre-hospital triage and care to reduce the demand on Emergency Room and Hospital beds to provide medical surge care to those injured in a disaster. ACSs function on a stratification of care by utilizing triage or sorting systems to determine prioritization. Utilizing **START** and **JumpSTART** triage, patients are assessed and treated at the ACS and when necessary, transferred to the next level of care.

ACS capability and resources are available at a County, Regional and State levels to facilitate Regional response. In Region 5, 6 county Medical Surge trailers (100 patient), 8 hospital Medical Surge trailers (100 patient) and 1 Regional ACS cache (State Medical Response Team 5)(500 patient), have been developed for regional response to disasters. These assets, while purchased under multiple grants (UASI, MMRS, and HRSA) and housed in agencies identified in the grants, are for regional response. Additionally, the 6 small (100 patient) and 1 large (250 patient) Mass Casualty caches distributed to counties under MMRS grants add to the Medical Surge capacity. Total anticipated patient capacity for Medical Surge is 2650 patients. The goal is a capacity surge of 500 patients per million population, or 1500 patients. These resources exceed the target goal. As such, the Regional combined Alternate Care Site resources identified above should be prepared to treat between 75 to 125 patients per hour or 900 to 1500 patients over a 12 hour period.

Deployment of local medical surge assets will be based on the scale of the incident and response needs as determined locally. County and hospital Medical Surge trailers assets may be utilized locally, in mutual aid requests and as regional response assets in disasters. Management and coordination of these assets rest with the agency they are housed under and maintained by memoranda of agreement.

The Regional ACS cache may be utilized in local and other non-declared incidents at the discretion of the SMRT 5 Commander, with fiscal accountability for restoring the cache to operational status falling on the requesting agency. For declared disasters, the request for deployment of the cache and support team is through the State. (State Medical Response System, Standard Operating Guidelines, 2012)

5.4 Transportation

Transportation of patients is a vital part of the triage and treatment process and should be well coordinated between the triage sites, the hospitals and emergency medical services with the assistance of the emergency operations centers (ESF 8 representative) as is required. Dispatch centers will be available if needed for assistance. Ambulance resources beyond local and mutual aid response are coordinated with the State under the Florida Ambulance Deployment plan (Florida Ambulance Deployment Standard Operating Procedure, Version 1.2, January13, 2012)

5.5 Overcrowding and Diversion

Multi-agency coordination with local transportation resources will be required in the event of a mass casualty incident (MCI) requiring activation of ACS and hospital bed coordination. During an MCI, it will be a critical function of the emergency management system to arrange transportation of casualties to designated ACS sites and hospitals, and from hospitals to facilities capable of caring for additional patients such as skilled nursing facilities, special needs shelters or other identified sites. The County Emergency Operations Center can assist if needed or if a MAC is established, resource coordination for additional capacity may be implemented.

Hospitals should notify their County Emergency Operations Center (CEOC) when they are reaching maximum capacity. Hospitals with open beds must be willing to accept patients from hospitals which are overwhelmed. They may request, however, that already screened, or stable patients be transferred to another appropriate facility in order to open up more beds and manage the influx in patient volume. The local EOC or IMT/MAC will work with the State and local health departments and hospitals to reallocate supplies and transfer patients to hospitals with available beds. The State will assume coordination (plans) of patient transfers out of state if all hospitals in the state are full and all resources expended.

5.6 Staffing Needs

Staffing will be a concern during implementation of this medical surge plan for all service providers. Each provider is expected to have established and practiced plan to deal with the provision of adequate staffing rotation during a disaster. Hospitals, city and county Emergency Operations Centers will work together to maximize staffing availability when the individual agency actions to achieve needed staffing are not successful.

Working relationships and when possible Memoranda of Agreement (MOA) with medical schools, nursing schools, nurse aid and medical assistant programs, staffing agencies and the Medical Reserve Corps and other volunteer agencies, should be in place to support staffing needs in a disaster.

In a declared disaster, Florida Statues, Sections 110.501-504 provides for the use of volunteers to support day to day Florida Department of Health operations and public health emergencies. The Chapter 110 Volunteer Program establishes the policies and procedures which apply to all Department of Health entities. Volunteers who have been vetted and approved under Chapter 110 are considered "affiliated" volunteers and are afforded certain protections under the statute.

Should adequate staffing not be available despite the regions' best efforts, the State EOC should be contacted for assistance by the County EOC/IMT/MAC.

5.7 Equipment and Supplies

It is important for all partner agencies and hospitals to cooperate with each other by performing mutual exchange of needed equipment and supplies as necessary. The County EOC may be able to assist with finding needed equipment and supplies from other resources (health department response caches, county response caches, vendor managed inventory contracts activated in disasters). Documentation of transfer and receipt of materials or resources is vital to maintaining cache readiness and to the financial process to rehabilitate the cache.

5.8 Emergency Communication:

The primary form of communication for Region 5 will be the use of data and message communications (EMResouce, ETeam) and by phones, both land line and cellular.

Radios should be used as the next form of voice communication. Hospitals should have their 800 MHz hospital common channel in operation at all times, and should have an additional 800 MHz radio to use as needed to communicate with their emergency medical service providers, public health agency, and County Emergency Managers. Each agency needs to know the channels utilized during response and ensure radios are programed and tested. HAM radios (VHF, USH and HF) can be used with licensed personnel or ARES volunteers are available to operate them. Regional Communications exercises should be conducted annually.

Data and message communication by email, wireless systems and text messaging can be utilized. Approved agency systems which provide data security and where applicable meet HIPPA requirements are preferred and based on individual agency policy. Region 5 will utilize EMResource to document daily ER status (off load, hospital bed status), share hospital status information; report Special Needs Shelter status (Evacuation Module) and other reports as required by incident.

5.9 Public Communication/Media

The Region will use a Joint Information System (JIS) in a regional disaster and a Joint Information Center (JIC) will be used as needed by the counties. The public information

officers will coordinate with partner agencies and work in concert with Incident Command and with the Emergency Operations Centers involved. All partner agencies should be familiar with the use of public information principles.

5.10 Recovery

Our strategic goals for recovery include:

1. Rehabilitation for staff and the public
2. Resupply of used resources
3. Getting back to normal as soon as possible
4. Psychological first aid as needed during the event
5. Cost recovery

Actions to help the area of our region affected by the disaster recover, and return to its pre-disaster status (if feasible), are critical. Each involved jurisdiction should follow its pre-established plan for the recovery process.

If the need for psychological first aid exceeds the availability of local or regional resources, requests for assistance are forwarded to the State via the Emergency Operations Centers. The State will coordinate deployment of Disaster Behavioral Health teams to the area during the event.

5.11 Deactivation

The regional medical surge plan and Alternate Care Sites will be deactivated by the incident command (IMT/MAC, Unified/ Single incident commander) when it is no longer needed. Agencies will follow pre-established plan deactivation procedures.

6.0 Procedures for the Maintenance of This Plan

6.1 The Region 5 Health and Medical partners will review this plan every 2 years to evaluate its effectiveness, completeness and appropriateness. Suggested revisions will be approved by the Health and Medical Co-chairs.

6.2 As revisions are made, they will be dated and changes provided to all involved agencies by the Co-chairs. It is the responsibility of the agencies to keep individual copies current. A master copy will be placed in the RDSTF 5 document file located on HSIN/Florida.

6.3 Each agency is responsible for providing the Region 5 Health and Medical Co-Chairs with any primary contact changes for emergency notification and plan revisions (Region 5 RERA).

6.4 This plan will be exercised at least once a year and each exercise will be

followed by a critique to review the plan's effectiveness (HSEEP compliant). A corrective action plan will be established and implemented as necessary.

Region 5 Partners

Co-Chairs

Hospitals

Health Care Agencies

Health Departments

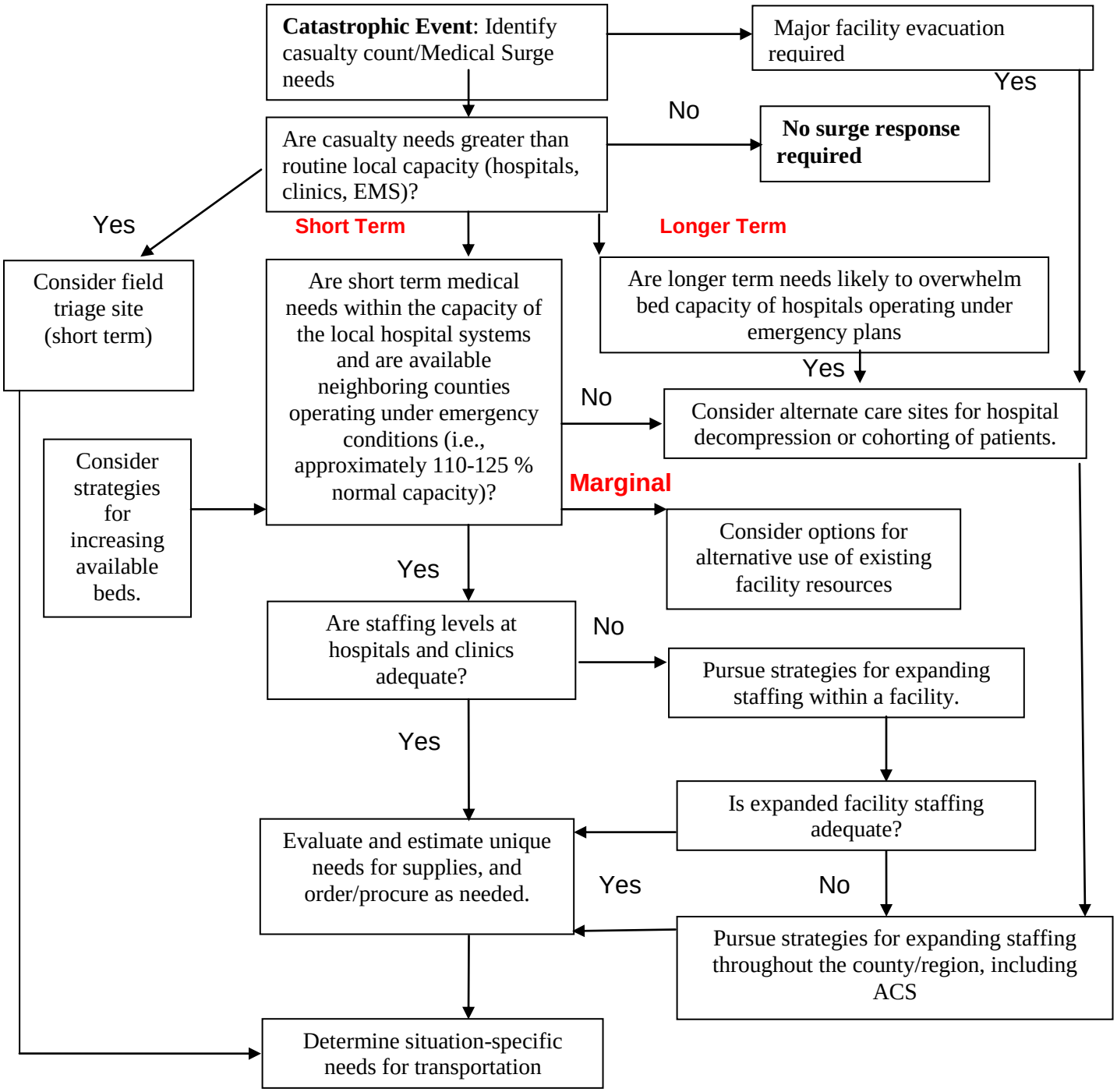
County/City Emergency Managers

County Emergency Services Agencies

Durable Medical Equipment Providers

7.0 Appendices

Appendix 7.1 Diagram: Medical Surge Response Options



Appendix 7.2 Job Action Sheets

7.2.1 Job Action Sheet for Implementing Medical Surge Response
7.2.2 Job Action Sheet for Monitoring Medical Surge Response
7.2.3 Job Action Sheet for Recovery from Medical Surge

Appendix 7.2.1 Job Action Sheet for Implementing Medical Surge Response

This job aid assumes surge response planning for a specific incident is completed and is intended to guide emergency action plan (EAP) development for implementing the specific surge response.

This EAP is to be completed by the appropriate EOC/IMT/MAC staff.

- Ensure that the EOC/IMT/MAC Operations Center is opened and staffed.
- Determine and communicate the concept of operations/concept of care: what level (s) of care will be provided, in what settings, and by whom, to relevant partners and staff.
- Develop an emergency action plan spanning all elements of surge response including:
    - Declaration of a public health emergency
    - Requests for mutual aid
    - Communication with partners
    - Concept of operations for specific use of specific facilities:
        - What kind of patients will be sent to which facilities
        - Identify types of patients based on case definition or triage scoring
    - Address any transportation issues
    - Establish a comprehensive public information strategy
    - Determine if specific just-in-time training will be required (disease specific infection control measures, etc.)
- Determine the need for, and implement, modified treatment protocols, altered clinical care standards, palliative care guidelines, or other care provisions. Convene a Clinical Care Committee as needed to guide standards.
- Implement all appropriate ancillary plans, including general public health and county emergency response plans, Strategic National Stockpile, behavioral health and security plans.
- Centrally coordinate patient transportation issues.
- Request state declaration of emergency (public health and governor's office) as need for suspension of such rules as hospital bed capacity, nurse-patient ratios, commandeering powers, etc.
- Open any ACS to be used (regardless of field triage, decompressions or other purpose):
    - Communicate with facility managers at ACS
    - Establish incident command system at ACS and fill all positions

  - Request update on the ACS's readiness to accept surge patients, or projected time when they will be able to accept surge patients
  - Ensure that the following ACS issues have been addressed:
    - Signage in English, Spanish and Creole as appropriate directing patients to correct location
    - Clear patient ingress and egress (entrances and exits) (Law Enforcement)
    - Security for site and personnel (including identification/badging)
    - Transportation routes determined and communicated
    - Staffing of ACS for first 48 hours, using 12 hour shifts
    - Power, water, and sanitation in working order and with reserve supplies for at least the first 48 hours on hand
    - Rules and policies for ACS operation
- Establish communication and coordination within hospitals, clinics, public health staff and emergency medical services:
  - Convene regular teleconferences during implementation phase
  - Ensure clarity regarding concept of operations for surge response (what kind of patients are going where and how they are getting there).
  - Assist in risk communication to county's/regions population (including tourists and visitors) to decrease "worried well" and to direct patients as needed.
  - Hospital managers have prepared overflow capacity
  - Assist local hospitals in utilizing overflow capacity measures
- Coordinate with Medical Examiner for overflow measures and morgue arrangements at ACS.
- Coordinate with (as indicated by situation) the FBI, CDC, local and state agencies as dictated by policy.

Appendix 7.2.2 Job Action Sheet for Monitoring Medical Surge Response

This job aid assumes medical surge response is underway and is intended to guide emergency action plan development for daily monitoring of the specific surge response.

This EAP is to be completed by the appropriated EOC/IMT/MAC staff,

- Request/obtain the following information on a daily or if indicated operational period basis.
    - Bed capacity at all facilities (including ACS)
    - Casualty counts by triage tag color/status (untreated patients)
    - Patients waiting to be seen/treated
    - Number of patients treated and disposition
    - Mortality rate
    - Relevant epidemiological data if a communicable disease incident
- Ensure daily communications between public health, health care partners, and EMS partners.
- Determine if ACS are meeting needs, based on daily casualty counts and census:
    - Determine if any ACS are still required
- Determine the limiting factor (s) pertinent to medical surge operations, both at hospitals and alternate care sites (staffing, beds, or specific supplies).
- Project surge response needs for the next 24 hours
- Monitor declarations of emergency for their continued relevance. Renew or terminated as needed.
- Monitor physical and mental health of yourself and staff.
- Monitor patient transportation for needs, efficacy, and safety
- If modified treatment protocols, altered clinical standards of care, palliative care guidelines, or other care provisions are in effect, review the efficacy and appropriateness of those guidelines. Modify and disseminate as needed. Utilize a clinical care committee as needed.
- Continue liaison with mutual aid sources and revisit mutual aid requests
- Monitor logistics and supply chains
- Monitor scarce supplies and personnel, and re-allocate as needed (pharmaceutical supplies, ventilators, critical care/dialysis nurses, etc.)
- Determine if surge response is still required
- Begin developing exit strategy to close the ACS.

Appendix 7.2.3 Job Action Sheet for Recovery from Medical Surge

This job aid assumes medical surge response planning for a specific incident is completed and is intended to guide emergency action plan development for recover-phase operations.

This EAP is to be completed by the appropriate EOC/IMT/MAC staff.

- Systematically ensure that all elements of the medical surge response are returned to normal.
    - If the surge response gives way to an interim, non-normal health care situation (loss of infrastructure requiring long term recovery), ensure a smooth transition.
- Close any alternate care sites:
    - Discharge or transfer patients
    - Demobilize staff
    - Arrange for decontamination (if required), clean-up and resupply of the ACS.
- Arrange for resupply of all caches, equipment stores, etc.
- Determine the needs for critical incident stress debriefings
- Participate in after action report development.

Appendix 7.3

Medical Surge Alternate Care Site (ACS) Typing Matrix
(AKA-Alternate Medical Treatment Site –AMTS)

The following "typing" matrix has been developed to provide some general guidance on the type of medical surge Alternate Care Site (ACS) that might be needed for a particular incident.

Parameter	Type 1 Medical Surge	Type 2 Medical Surge	Type 3 Medical Surge	Type 4 Medical Surge
Term	Long	Medium	Short	Extension of MCI Response
Duration	> 36 hours	16-36 hours	8-24 hours	< 8 hours
Patients	>1500	>1000 - <1500	> 500	>100 < 500
Example Natures	Pan Flu, Significant Respiratory, Major disaster	Decontamination situation, Radiological, Biological	Bomb, burn, blast, decontamination situation	Transportation accident, building collapse, industrial accident
Logistics	4 or more Medical Surge caches and Regional, State and Federal assets	2-3 Medical Surge caches and Regional and State assets	1-2 Medical Surge caches and Regional assets	Single Medical Surge cache
Teams	Local, Regional, Mutual Aid, State, Federal	Local, Regional, Mutual Aid, State	Local, Regional, Mutual Aid, State	Local, Regional, Mutual Aid

Source: **Region 5 Alternate Medical Treatment Site Strategy**, 2007.

Appendix 7.4 National Catastrophic Planning Factors

Event	Victims Per Population	Duration of Response	Required Transport	EMS Personnel	Resources	Comments
Biological-Communicable (plague, avian flu)	20-30% of population, attack rate may be greater in children/ elderly	Days to months	50% of sick population requires transportation	-2 EMS personnel per transport vehicle -bus transport for less acute: responder to client ratio of ____	-PPE for responders -Transport unit decontamination	Numbers reflect 200-300% increase in average daily activity
Biological-Non-communicable (anthrax-330,000 exposures)	4% of exposed become infected (13, 000 infected)	Days to weeks	25% of infected population requires transportation	-2 EMS personnel per transport vehicle	-Communication template to staff	Majority of patient transports will occur in the first week
Chemical	100% of exposed	Hours to days	25% of exposed population *up to 75% of victims in a major incident will self-transport	-2 EMS personnel per transport vehicle -each vehicle may transport twice -on-scene ratio of 1:4 of personnel to patients	-PPE for responders -ChemPak cache deployment -Transport unit decontamination	Majority of patient transports will occur in the first hours
Explosive (may be multiple IEDs)	100 fatalities and 500 injured per each major IED	Hours	50% of injured	-2 EMS personnel per transport vehicle -Approx. 125 ambulances, each transporting twice -On-scene 135 EMS personnel with a 1:4 ratio of	-Responder safety -Bomb/Burn/Blast plan activated at hospitals -Mass Fatality Plan	Majority of transport will be in the first hours Hospital Bomb/Burn/Blast (B3) Plan: • 10%fatalities • 20% emergent • 30% urgent • 50% walking wounded

Event	Victims Per Population	Duration of Response	Required Transport	EMS Personnel	Resources	Comments
				personnel to patients		
Radiological Dispersion Device	180 fatalities and 270 injuries -Up to 20,000 exposed/potentially exposed	Hours	50% of injured	-2 EMS personnel per transport vehicle -135 ambulances-each ambulance transporting only one patient due to decontamination requirements -On-scene: 135 EMS personnel, with a 1:2 ratio of responder to patients due to safety and logistic concerns	-Responder PPE -Decontamination of vehicles -Medical Countermeasures for exposure -Deployment of radiation safety personnel and equipment -Mass Fatality Plan	Injuries include bomb, burn, blast, radiological exposure, and trauma -Behavioral Health resources
Nuclear (10 kiloton)	Several hundred thousand over thousands of square miles	Hours to days due to logistical issues	Several hundred thousand	Only EMS personnel with specialized training and equipment can enter on-scene. EMS personnel receive decontaminated victims. 10's of thousands of EMS personnel.	-Communications template to staff	Injuries include blast, burn, radiological exposure, and trauma -Behavioral Health resources -Hospice

*adapted from National Preparedness Goal: Triage and Pre-Hospital Treatment

Appendix 7.5 Regional Catastrophic Planning Factors

Central Florida: Region 5	Population	County	EMS Surge	Hospital Surge	Ambulance	Regional Resources
Orange County Convention Center	Capacity:	Orange	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
Amway Arena	Capacity: ***20,000***	Orange	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
UCF Stadium	Capacity: ***48,453***	Orange	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
Daytona Speedway	Capacity: ***167,785***	Brevard	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
Theme Park -small to large	Capacity:	Orange/ Osceola/ Lake	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
International	Capacity:	Orange/	-Mutual Aid	-Hospital		-Regional ACS Cache

Central Florida: Region 5	Population	County	EMS Surge	Hospital Surge	Ambulance	Regional Resources
Airport- Orlando		Osceola GOAA	-MCI Trailer -County Medical Surge Trailer	Medical Surge Trailer -B3 Cache -County ACS Cache		
International Airport- Sanford	Capacity:	Seminole/ Orange/ Volusia Orlando-Sanford Airport Authority	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
Citrus Bowl	Capacity: ***70,000***	Orange	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache
Cruise Ship	Capacity: ***varies 800-4000 passengers and crew***	Brevard	-Mutual Aid -MCI Trailer -County Medical Surge Trailer	-Hospital Medical Surge Trailer -B3 Cache -County ACS Cache		-Regional ACS Cache

Appendix 7.6 Initial Medical Surge Situational Assessment Tool

Rationale:
Addressing the current situation in a disaster helps answer the basic medical surge response question: Is an alternate care site (ACS) really needed? Does the ACS deployment address the needs of the county/region?

Instructions:
The assessment should be performed for both the immediately affect areas and any neighboring mutual aid areas.

1. **Indicate the following reference information:**

County(s): _____ POC: _____

City or Event Location: _____

Date: _____ Time: _____

2. **Determine the number of casualties by triage category:**

Casualty Count

Category	Current Number	Comment
Green		
Yellow		
Red		
Black		

3. **Assess the condition of all hospitals in the operational area and nearby mutual aid regions**.

Assess each hospital. Hospitals may be assessed for their ability to provide essential patient care services based on the following Yes/No elements.

Hospital Site: _____

Assessment	***YES***	***NO***	***Comment***
1. Structure intact?			
2. Partial collapse?			
3. Total collapse?			
4. Evacuating?			
5. Fire?			
6. Intact gas lines?			
7. Intact water lines?			
8. Intact electrical lines?			
9. Intact sewer lines?			
10. Working telephones?			
11. Working radio communications?			
12. Internet communications up?			
13. Adequate staffing for next 24-48 hours:			-MDs -RNs -Ancillary -Administrative -Support -Facilities -Security -Volunteers
14. Adequate Supplies for next 12-24 hours:			

Assessment	***YES***	***NO***	***Comment***
-Oxygen -Consumable medical supplies (IV, ventilator, bandages, saline irrigation, etc.) -Blood products -Dialysis supplies (including water source) -Medications -Food -Potable water			
15. Able to surge internally or with partner facility.			
16. Status of Air Ambulance transport.			
17. Status of Law Enforcement support. 18.			
18. Other concerns:			

4. Assess the transportation infrastructure:

a. What is the extent of damage to the roadways and highways?

_____Limited road damage: few, specific impassable roads requiring easy circumnavigation of hazards and /or damage.

_____Considerable road damage making route-planning necessary for patient evacuation or transportation.

_____Widespread road damage, making even the planning of a safe vehicular route challenging.

_____Unknown.

b. What is the extent of damage to local area airports?

c. What is the extent of damage to local area rail lines?

5. Determine the status of local Alternate Care Site efforts:

Identify all alternate care sites (including field treatment, triage, casualty collection points, or other non-traditional care sites) that are either functioning or in the process of being considered, using the table below.

Alternate Care Site Worksheet

Alternate Care Site Name	**Distance from Incident**	**Care Site Type**	**Treatment Capacity per Day**	**Status: Preparing / Operational**	**Comment:**
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

ACS Type:

T-primary triage point (MCI)
CC-casualty collection point
ACS- (Hospital/CHD based)
SMRT-State Medical Response Team
DMAT-Federal Disaster Medical Response Team
Other:

6. Assess the public & environmental health status and concerns:

Category:	Fully Operational	At Capacity	Urgent Concerns	Comment
Public Health				
Transportation				
Environmental (Chemical/Radiation)				
Public Works (potable water/sanitation)				

The following elements should be addressed:

1. Public water systems are damaged: Y/N
2. Public water systems are contaminated: Y/N
    a. Number of households of people affected_____.
3. Sewage/Solid waste disposal damaged: Y/N
    a. Number of household of people affected_____.
4. Food Contamination: Y/N
        i. If *Yes* describe:
5. Vector/disease control concerns: Y/N
        i. If *Yes* describe:
    b. Quarantine, cordon sanitation, or surveillance underway? Y/N
        i. If *Yes* describe:

6. Hazardous materials or radiological concerns? Y/N
    a. Describe:
7. Mental Health concerns: Describe:
8. Other:

Appendix 7.7 Operational Period Medical Surge Data Collection Tool

Area of Assessment	Count or Metric	Functional Level				Situational Trend			Limiting Factors & Top Problems	Comments
		Non-Functional	Marginal	Adequate	Fully Functional	Worsening	No Change	Improving		
Casualties:										
Green										
Yellow										
Red										
Black										
Hospitals:										
Surge Beds Available										
Critical Care Beds										
ED Beds										
OR Suite										
Pediatric Beds										
Isolation Beds										
Ventilator Beds										
Blood Supply										
Dialysis										
Other:										
ACS Capacity:										
OP Treatment Capacity (Visits/Day)										

Area of Assessment	Count or Metric	Functional Level				Situational Trend			Limiting Factors & Top Problems	Comments
		Non-Functional	Marginal	Adequate	Fully Functional	Worsening	No Change	Improving		
Overnight Patient Stay										
Triage Sites										
Transportation Routes										
Medical Transportation										
Other:										
Public and Environmental Health										
Shelters										
Social Services										
Morgues										
Ambulatory /Urgent Care Clinics										
Pharmacy										
Water										
Food										
Sanitation										
Electrical										

Area of Assessment	Count or Metric	Functional Level				Situational Trend			Limiting Factors & Top Problems	Comments
		Non-Functional	Marginal	Adequate	Fully Functional	Worsening	No Change	Improving		
Fuel										
Transportation										
Other										

Appendix 7.8 Region 5 Hospital(s) Profile (5/2012)

County	City	Hospital	Trauma Level/ Tier	ER Beds	Acute Care Beds	Burn Beds	Neonatal ICU Beds	Medical Rehab Beds	Adult Psych Beds	Peds Psych Beds	Accept Baker Act	Hyper-baric Unit	Morgue Capacity
Brevard	Cocoa Beach	Cape Canaveral Hospital	Tier 2	28	150						No	No	
	Melbourne	Holmes Regional Medical Center	Level II Tier 1	56	504		10				No	No	
	Melbourne	Palm Bay Community Hospital	Tier 2	25	152						No	No	
	Titusville	Parrish Medical Center	Tier 2	20	210	Yes					No	Yes	
	Melbourne	Viera Hospital	Tier	28	84						No	No	
	Melbourne	Wuesthoff Medical Center	Tier 2	33	115						No	No	
	Melbourne	Wuesthoff Medical Center	Tier 2	20	264		10		24		Yes	No	
Indian River	Vero Beach	Indian River Medical Center	Tier 2		289				34	12	Yes	No	
	Sebastian	Sebastian River Medical Center	Tier 3	16	154							Yes	
Lake	Tavares	Florida Hospital Waterman	Tier 2	29	209							No	
	Leesburg	Leesburg Regional Medical Center	Tier 2	24	294							No	
	Clermont	South Lake Hospital	Tier 3	29	122							No	
Martin	Stuart	Martin Memorial Hospital South	Tier 2	20	100							No	
	Stuart	Martin Memorial Hospital Center	Tier 2	29	239		10					No	
Orange	Orlando	Arnold Palmer	Tier 1	33	331	Yes	L 2-60				No	Yes	

County	City	Hospital	Trauma Level/ Tier	ER Beds	Acute Care Beds	Burn Beds	Neonatal ICU Beds	Medical Rehab Beds	Adult Psych Beds	Peds Psych Beds	Accept Baker Act	Hyper-baric Unit	Morgue Capacity
		Medical Center (for Women and Children)	Level 1 Peds		(Women /Peds)		L 3-52						
	Orlando	Dr. P. Phillips Hospital	Tier 2	42	237	Yes					No	No	
	Orlando	Florida Hospital Orlando	Tier 2	45	917	Yes	L2-28 L3-53	10	59		Yes	Yes	
	Apopka	Florida Hospital Apopka	Tier 4	18	50	Yes					No	Yes	
	Orlando	Florida Hospital East Orlando	Tier 2	48	225	Yes					No	Yes	
	Ocoee	Health Central	Tier 3	31	171						No	Yes	
	Orlando	Orlando Regional Medical Center	Tier 1 Level 1	56	751	Yes		53			No	Yes	
	Winter Park	Winter Park Memorial Hospital	Tier 2	26	275	Yes	12	20			No	Yes	
Osceola	Celebration	Florida Hospital Celebration Health	Tier 2	41	174	Yes					No	Yes	
	Kissimmee	Florida Hospital Kissimmee	Tier 3	15	83	Yes					No	Yes	
	Kissimmee	Osceola Regional Medical Center	Tier 2	35	274	No	10				No	No	
	Saint Cloud	St Cloud Regional Medical Center	Tier 2	11	84	No					No	No	
Seminole	Sanford	Central Florida Regional Hospital	Tier 3	15	208	Yes		18			No	Yes	
	Altamonte Springs	Florida Hospital Altamonte	Tier 2	37	340	Yes					No	Yes	
	Longwood	South Seminole Hospital	Tier 2	28	126	Yes			46 10-Medical	24	Yes	No	
St. Lucie	Fort Pierce	Lawnwood Regional Medical	Tier 1	30	297	No	10	34	24		Yes	No	

County	City	Hospital	Trauma Level/ Tier	ER Beds	Acute Care Beds	Burn Beds	Neonatal ICU Beds	Medical Rehab Beds	Adult Psych Beds	Peds Psych Beds	Accept Baker Act	Hyper-baric Unit	Morgue Capacity
		Center & Heart Institute	Level II										
	Port Saint Lucie	Saint Lucie Medical Center	Tier 3	25	207				22		No	No	
Volusia	New Smyrna Beach	Bert Fish Medical Center	Tier 4	19	112						No	No	
	Deland	Florida Hospital Deland	Tier 3	23	146				6 4-Medical		No	No	
	Orange City	Florida Hospital Fish Memorial	Tier 3	28	175						No	No	
	Ormond Beach	Florida Hospital Memorial Medical Center	Tier 2	36	227						No	No	
	Ormond Beach	Florida Hospital Oceanside	Tier 4	16	79			40			No	No	
	Daytona Beach	Halifax Health Medical Center	Tier 1 Level II	20	553		9		92		Yes	No	
	Port Orange	Halifax Health Medical Center	Tier 2	20	80						No	No	
		Totals		1095	8295	13 Sites	269	175	321	36	6 Sites	13 Sites	

Hospital Tiers: Tier 1-Level I and Level II Trauma Centers. Care for most seriously injured victims.
Tier 2-Community referral hospital capable of providing definitive care to most of injured patients
Tier 3-Community hospital capable of stabilization and limited operative care for isolated injuries (Majority of multiple trauma cases transferred to a trauma center)
Tier 4-Small hospital capable of stabilization and referral of trauma cases to a definitive care facility

*Tier 2-4 Hospitals-self-designated by hospital based on ability to care for injuries
*Tier 3-4 & Alternate Care Sites-accept minor injuries

Appendix 7.9 Region 5 Hospital and Cache Surge Capacity

County	Hospital (Acute Beds)	Hospital ED Beds	Hospital Bomb/ Burn/ Blast & Retro-fit	MCI Large Cache	MCI Small Cache	Medical Surge Hospital Trailer	Medical Surge EMS Trailer	Special Needs Shelter Beds	County ACS Site	Regional Cache (SMRT-5) *State Activation	Comments
Triage Category	All	All	All	All	All	Green/ Yellow	Green/ Yellow	Green/ Yellow	Green/ Yellow	All	
Brevard	7 (1479)	210		-	100	200	100				
Indian River	2 (443)	16+		-	-	0	0				
Lake	3 (625)	82		-	100	0	100				
Martin	2 (339)	49		-	-	0	0				
Orange	8 (2957)	299		250	-	400	100			500 patient	
Osceola	4 (588)	102		-	100	100	100				
Seminole	3 (674)	80		-	100	0	100				
St Lucie	2 (504)	55		-	100	0	0				
Volusia	7 (1422)	202		-	100	100	100				
											Surge Beds Needed: 1500
Totals:	8295 Acute Beds	1095		250	600	800	500			500	Total Surge Beds:

(Update: 7/2012)

***Patient through-put for treatment estimated at 75-125 (green triage) patients per hour or 900-1500 patients in a 12 hour period.**

****Patient through-put goal of 500 patients per million population: Current Urban Area Population-3 million+**

Appendix 8.0 Medical Cache Contents

8.1 Medical Surge County/Hospital Trailer Cache Contents
8.2 Mass Casualty Incident (MCI) Cache Contents
8.3 State Medical Response Team Cache Contents

Appendix 8.1 Medical Surge County EM/Hospital Cache (2011)

Concept: To provide medical surge triage and treatment for minor (green/yellow) casualties to increase capacity and throughput of injured in a mass casualty incident. Resources are stored and maintained by a county agency or hospital under a MOU.

Resources:

Storage/Delivery:

- Towable Trailer (26 ft.) with dehumidifier & air conditioner

Shelter/Workspace:

- Zumro Quad Shelter (440 sq. feet)
- Zumro 860 Shelter (860 sq. feet)

Power/Logistics Support:

- Generator, 17, 000kw with electrical distribution panel and trickle charger (1)
- Extension cords, heavy duty (25 ft., 50 ft., 100 ft.)(2 ea.)
- Portable Air Conditioner, 12, 500 BTU (4)
- Sirocco Lights with stands & tilting device (2)
- Tent lights
- Easy Up 10" x 15" tent (2)
- Waste can, 60 gallon (industrial) (2)
- Delineator post (20 ea.)
- Security/perimeter tape (2 rolls)
- Tarp (20 x 40 ft. and 20 x 30 ft.)

Clinical/ Work Area:

- Temp Beds, EBS TB 100 (1 cart/5 beds) (1)
- Westcot patient beds with IV pole & dust cover (1 cart/8 beds) (2)
- Tables (9 tables)
- Table cart (1)
- Chairs, folding (20 light weight)
- Magliner convertible hand truck (2 with chairs)
- Wire Storage Cart, rolling with1 shelf (2)

Totes, flip top

- Burn Sheets (36 ea.)
- Body bag (5 ea.)
- Storage shelf (plastic, 3 shelf unit)
- Jump Bag (Blue-BLS) (1) *no supplies
- Jump Bag (Red-ACLS) (1) *no supplies

Locations:

Emergency Management: Orange, Brevard, Lake, Osceola, Seminole, Volusia

Hospitals:

Orange County: Orlando Health, Inc., Orlando

	Dr. Phillips Hospital, Orlando
	Florida Hospital, Orlando
	Florida Hospital, East Orlando
Osceola County:	Florida Hospital, Celebration
Brevard County:	Holmes Regional Medical Center, Melbourne
	Cape Canaveral Hospital, Cocoa Beach
Volusia County:	Halifax Hospital, Daytona Beach

8.2 Mass Casualty Incident (MCI) Cache List

Appendix 8.3 State Medical Response Team Cache List (FDOH Florida State Medical Response System. Standard Operating Guidelines, Version 1.1, December 2011)

Appendix 9.0 References

1. State of Florida, **All Hazards Medical Disaster-Catastrophe Pre-Hospital Emergency Medical Services Standard**, March 29, 2007.

2. Florida Division of Emergency Management, **Florida Incident Field Operations Guide**

3. Region 5 **Regional Catastrophic Incident Response Plan**, Version 7.3

4. Region 5 **Multi-Agency Coordination Group Operations Guide**, January 2008

5. Region 5 **Incident Management Team Operations Guide**,

6. Florida Department of Health, State Medical Response System, **Standard Operating Guidelines**, Version 1.1, December 2011

7. Florida Department of Health, Office of Public Health Preparedness**, Triage Report: A Brief Assessment of Florida's Pre-hospital Triage Strategy**, September 1, 2008.

8. Florida Department of Health, Office of Preparedness and Response, **Florida Ambulance Deployment Standard Operating Procedure**, Version 1.2 (Draft), January 13, 2012.

10.0 Acronyms and Emergency Support Function (ESF) Identification

ALS Advanced Life Support
AMTS Alternative Medical Treatment Site
B3 Bomb, Burn, Blast
BIO Biological
BLS Basic Life Support
CCP Casualty Collection Point
DCHAT Disaster Community Health Assessment Team
CDC Centers for Disease Control and prevention
CERT Community Emergency Response Team
CHIRP Comprehensive Health Incident Response Plan
DECON Decontamination
DEM Division of Emergency Management
DMAT Disaster Medical Assistance Team
DMORT Disaster Mortuary Response Team
DSOC Domestic Security Oversight Council
EDICS Emergency Disaster Incident Communications System
EMS Emergency Medical Services
EMAC Emergency Management Assistance Compact
EMTALA Emergency Medical Treatment and Labor Act
EOC Emergency Operations Center
ESAR-VHP Emergency System for Advance Registration of Healthcare Professionals
ESF Emergency Support Function
FDLE Florida Department of Law Enforcement
FEHVR Florida Emergency Health Volunteer Registry
FEMORS Florida Emergency Mortuary Operations Response System
FOG Florida Incident Field Operations Guide
HEPA High Efficiency Particulate Air
HIPAA Health Insurance Portability and
HRSA Health Resources and Services Administration
HVAC Heating, Ventilating and Air Conditioning
IMT Incident Management Team
JIC Joint Information Center
LEOC Local Emergency Operations Center
MAC Multi-Agency Coordination Group
MCI Mass Casualty Incident
MMRS Metropolitan Medical Response System
MOU Memorandum of Understanding
NIMS National Incident Management System
NRP National Response Plan
PPE Personal Protective Equipment
RDSTF Regional Domestic Security Task Force
RERA Regional Emergency Response Advisor
SEOC State Emergency Operations Center
SMRT State Medical Response Team
START Simple Triage and Rapid Treatment
SWG State Working Group
SWP State Warning Point

Emergency Support Functions
• ESF 1 – Transportation
• ESF 2 – Communications
• ESF 3 – Public Works and Engineering
• ESF 4 – Fire Fighting
• ESF 5 - Information and Planning
• ESF 6 – Mass Care
• ESF 7 – Resource Support
• ESF 8 – Health and Medical
• ESF 9 – Search and Rescue
• ESF 10 – Hazard Materials/Environmental Protection
• ESF 11 – Food and Water
• ESF 12 – Energy/Utilities
• ESF 13 – Military Support
• ESF 14 – Public Information
• ESF 15 – Volunteers and Donations
• ESF 16 – Law Enforcement
• ESF 17 – Animal Protection