



# **Resources Best Practices – Session # 50**

## **Burn Disaster Bed Management**

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# Presentation goals



- Describe ***Burn MCI*** triage & transport criteria
- Discuss management of limited resources
- Understand role of interfacility coordination & multi-jurisdictional operations

# Challenges of burn MCI care

- Best practices
  - Only Burn Center for state
  - BC closures
  - <1850 burn beds
- Resource utilization
  - 1 day per 1% TBSA
  - Referrals “after the incident”
- Adherence to Standard-of-care



# Challenges of burn MCI care

*Continued*



**Local: *The Burn Center  
at Saint Barnabas***

**State: *New Jersey  
Department Health  
& Senior Services***

**National: *American  
Burn  
Association***



**Federal: *Department of  
Health and Human Services***

# The Burn Center at Saint Barnabas



- 30 bed Adult & Pediatric unit
  - 12 ICU; 18 Step-down
  - 400+ inpatients; 8-900+ outpatients
- American Burn Association member
  - Verification
  - Partnerships
  - ABA Disaster Initiatives
    - Bed Acuity Resource Tracking System (BARTS)
    - Disaster Special Interest Group
    - ABA MCI Triage & Transport

# ABA MCI T&T

- Primary Triage
  - ABA MCI Triage grid
- Primary Transport
  - Surge facilities
  - Tier Facilities
  - Initial stabilization q24H



- Secondary Triage
  - Burn Tier Matrix
- Secondary Transport
  - Redirect to NJ Tier Facilities
  - Transfer to ERBDC
  - Medical management q72H



# ABA MCI Triage Decision Table



Burn Size (%TBSA)

Age/ years	0 – 10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91+%
0-1.99	High	High	Medium	Medium	Medium	Medium	Low	Low	Low	Expectant
2-4.99	Outpatient	High	High	Medium	Medium	Medium	Medium	Low	Low	Low
5-19.9	Outpatient	High	High	High	Medium	Medium	Medium	Medium	Medium	Low
20-29.9	Outpatient	High	High	High	Medium	Medium	Medium	Medium	Low	Low
30-39.9	Outpatient	High	High	Medium	Medium	Medium	Medium	Medium	Low	Low
40-49.9	Outpatient	High	High	Medium	Medium	Medium	Medium	Low	Low	Low
50-59.9	Outpatient	High	High	Medium	Medium	Medium	Low	Low	Expectant	Expectant
60-69.9	High	High	Medium	Medium	Medium	Low	Low	Low	Expectant	Expectant
70+	High	Medium	Medium	Low	Low	Expectant	Expectant	Expectant	Expectant	Expectant

# Emergency Preparedness in NJ

- Department of Health & Senior Services;  
Office of Emergency Management
  - ESF-8 Plan
  - Medical Coordination Centers (MCCs)
  - Hippocrates web-based reporting system
  - “State of Burn Care” report (2005)
    - SWOG analysis of NJ Burn Center
    - Tier Facilities resources



# Tier Facility Designation



- (78) New Jersey Hospitals
  - Tier I, II, III, IV
  - Trauma Center, number of beds, ancillary services & burn Tx experience
  - Patient acuity per ABA MCI Triage grid
  - 10 Pts/ 96 hours
- Eastern Regional Burn Disaster Consortium (ERBDC)

# Eastern Regional Burn Disaster Consortium

- 28 Burn Centers Maine through Maryland
- 4 common goals
  - Communication
  - Transportation
  - Education
  - Resource-sharing
- Monthly Burn Bed Census
- Exercises & drills
- Quarterly meetings



# **Coordination of a Burn MCI**



# Medical Coordination of MCI

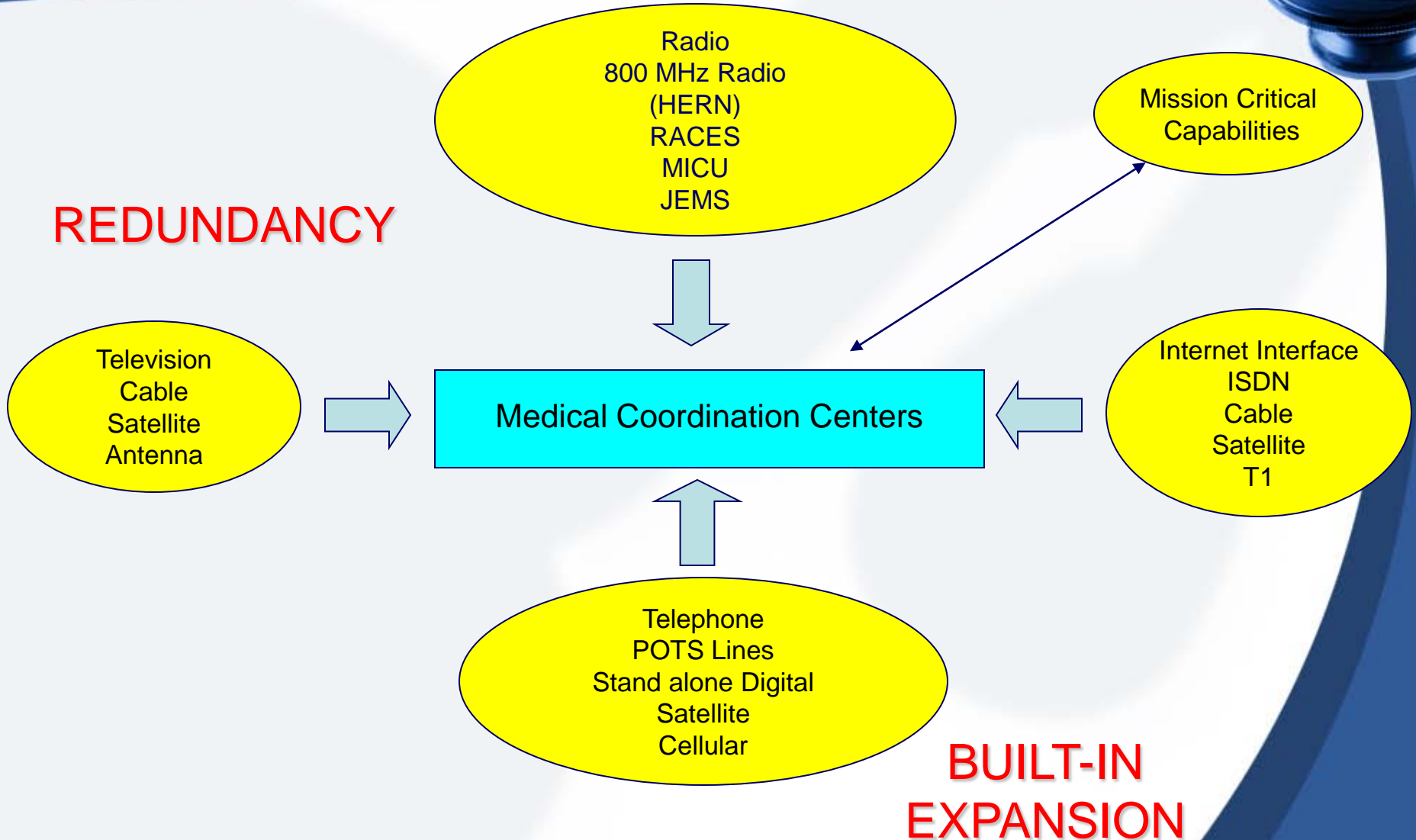


- Regional Operations Intelligence Center
- 9 MCCs state-wide
  - Gathers information
  - Facilitates communications
  - Coordinates transfer of care
- MCCs do not institute policy
- Certain MCCs have specific duties
  - Burn MCC manages burn events
  - UMDNJ deploys NJ EMS Task Force

# Medical Coordination Centers



**REDUNDANCY**



**BUILT-IN  
EXPANSION**

# Burn MCC Capabilities

- **Communications Systems**
  - UHF, VHF & 800 MHz Radio Base Stations
  - 1000 Channel Digital Scanner
  - 20 PBX Phones
  - 6 POTS Lines



# Burn MCC Capabilities

*Continued*

- Audio Visual systems
  - 12' x 5' Video Display Wall
  - 3 Direct TV Satellites
  - C/KU Satellite
  - UHF/ VHF  
“Off air” TV
  - AM/ FM Terrestrial  
Radio
  - XM Satellite Radio
  - VCR/ DVD/ TIVO  
with DVD Burner



# Burn MCC Communications

- Tier Facilities
  - Directly
  - MCCs
  - ERBDC
- NJDOHSS-OEM
  - Hippocrates
- ABA
  - BARTS
- DHHS
  - NDMS



# Burn Incident



**Burn  
Surge  
Capacity**

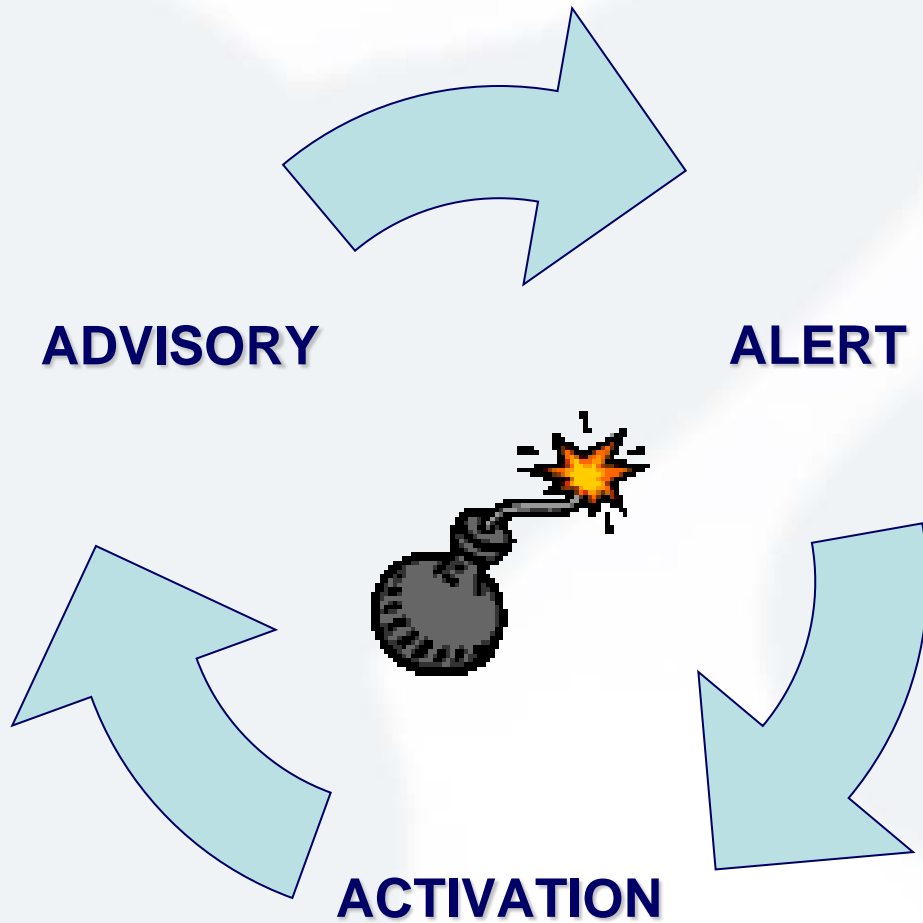


**Transport to Burn Center  
Follow established  
Local ED/ Trauma protocols**



**Activation (NJ) Burn Surge  
Disaster Burn Plan**

# Communication Notification



# Activation Status



- **Burn Bed census conducted**
  - MCCs for NJ Tier Facilities
  - BMCC for ERBDC membership
  - Patient Triage by Burn Physician(s)
- **Initial 24 hours**
  - Transfer of patients to Burn Surge Hospitals
  - Transfer of patients outside of region
- **Second 72 hours**
  - Transfer of patients to TF &/ or ERBDC
- **Coordinate with DHHS**
  - NDMS Support

# 2009 Presidential Inauguration



- December of 2008 SBHCS OEM contacted by DHHS and requested to “stand-up” to assist with a medical support mission for 2009 Presidential Inauguration
- First “real world” activation of Burn MCC



- **BMCC Goals and Priorities**
  - Provide census of available burn beds within a several hundred mile radius of the Capital
  - Coordinate with the ERBDC, ABA and NJDHSS
  - Coordinate with Southern Region
  - Contact mid-Western BCs
  - Report to DHHS

# Procedure



- A total of 43 Burn Centers in 14 States & District of Columbia were polled
  - Daily; January 16<sup>th</sup> through January 19<sup>th</sup>
  - Twice on January 20<sup>th</sup>; 0800 & 1400
- All reports electronically forwarded to DHS, DHHS, NJDHSS & ABA

# Procedure

*Continued*

- Burn MCC
  - ERBDC: 28 Centers
  - Mid-west: 08 Centers
    - Geographic location
    - Pediatric beds
- Southern Region:
  - 07 Centers
- Daily Burn Bed census
  - Current open beds
  - ICU; non-ICU, Pediatrics
- Data compilation
  - 12 noon





# Presidential Inauguration

*Continued*



- Issues Identified:
  - Bed count
  - Report dissemination
  - Bureaucracy

# Preparing For President Obama's Inauguration



- **Vulnerability**

- Large Numbers of People
- Freezing Temperatures
- **High Profile Event**

“There isn't enough money or political will to fund all the requirements for mitigation and preparedness that would ensure full preparedness” Lucien Canton

# Preparing For President Obama's Inauguration



- **THREAT**

- Possible Terrorist Nexus
  - Bombs, Burns & Blast
  - Bio-Event
  - Chemical
- Environmental
  - Cold Exposure
- Stampede
  - Crush Injuries

# Preparing For President Obama's Inauguration

- Management of **RISK**



# Preparing For President Obama's Inauguration



# Preparing For President Obama's Inauguration



## Contingency Planning

Health and Medical contingency planning must be part of an enterprise solution



# Preparing For President Obama's Inauguration



- Contingency Planning –
  - NDMS Activation
    - Activation of Federal Coordinating Centers
    - Activation of Mobile Aero medical Staging Facility
    - Discussion of potential Aerial Points Of Evacuation
  - Burn Bed Capacity
    - Capacity in DC area
    - Capacity in Eastern US



# The Next Challenge in Healthcare Preparedness: Catastrophic Health Events

Preparedness Report | January  
2010



- **68 References to Coalitions**
- Many hospitals and other healthcare organizations do not yet participate in fully functional healthcare coalitions, which are necessary to CHE response.
- Most existing coalitions do not yet have the ability to share information, resources, and decision making with neighboring coalitions during a CHE.
- **In a CHE, healthcare coalitions will have to take a lead role in coordinating the allocation of scarce resources and implementing crisis standards of care in a fair, uniform, and ethical manner based on situational awareness and resource assessment.**



# HHS/ASPR Updates



- Transition of NDMS Specialty Teams
  - Migration of Burn Team Members to DMATS
- Bed Acuity Resource Tracking System (BARTS) **Rejuvenated**
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# BARTS – *“The Way Ahead”*



- Migration to HAvBed II Software
- Changed the Questions 12 → 6
  - Coordinated w/ABA
- May be ready late July



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**Questions?**