

# Dark Days and Defining Moments

Knox East TN Healthcare Coalition

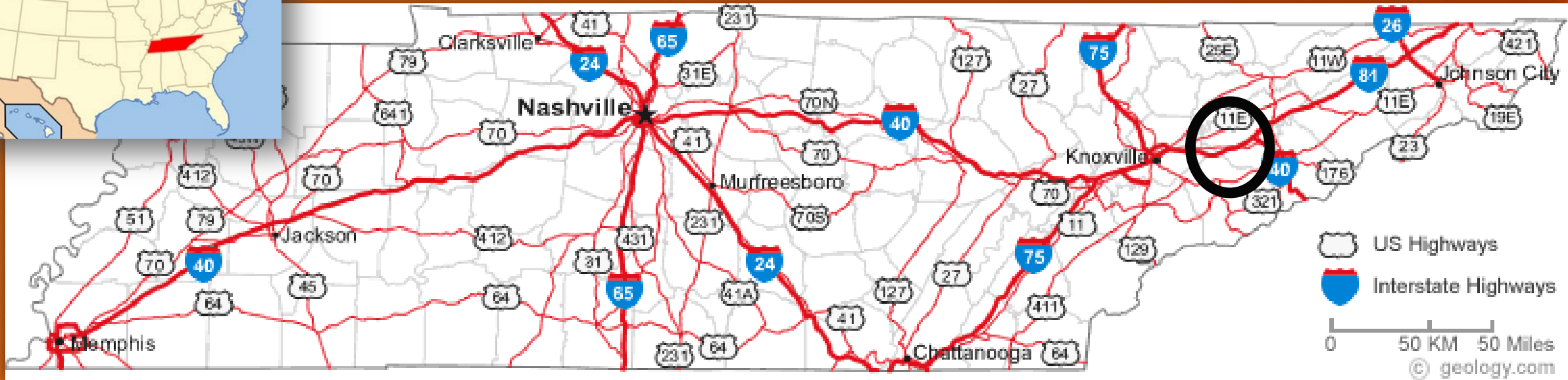
**KETHC**

Plan Train Coordinate



How Coalition Partners Worked Together to Mitigate Challenges  
Following a Mass Casualty/Fatality Incident

# Getting Your Bearings



# Knox/East TN Healthcare Coalition

- Long-standing coalition
- Serves just over 1 million residents in a 16 county region
- Mix of urban, suburban, and rural communities
- Participating Organizations
  - 20 Acute Care Hospitals and their partners
  - EMS
  - Regional Medical Communications Center
  - Public Health (State and Local)
  - Regional Forensic Center
  - Emergency Management Agencies (State and Local)
  - Regional Blood Bank
  - Mental Health Hospitals
  - Homeland Security



# EMA Organization

- In Tennessee, each county has an Emergency Management Agency office
- EMA Directors generally report directly to a City or County Mayor
- Staffing levels vary
- EMA staff may serve multiple roles
  - In Jefferson County, the EMA Director also serves as the EMS Director



# EMS Consultant and RHC Role

- EMS Consultant
  - Employed by Tennessee Department of Health and serves entire EMS Region
  - During MCI, assists in coordinating EMS resources responding to the scene
  - Direct line to SEOC if additional support is needed outside of the region
  - Usually responds to the scene in events
- Regional Hospital Coordinator (RHC)
  - Employed by Tennessee Department of Health OR Local Health Department
  - HPP funded positions - Provides Coalition Guidance
  - Split into metro and regional responsibilities, working closely together
  - Coordinates hospital response and resources during MCI
  - Responds to RMCC during most events

# Setting the Stage

# Jefferson County, TN

Beautiful, rural county at the foothills of the Smoky Mountains

- Population: 51,000
- 1 hospital
- 40 minutes east of Knoxville





# Jefferson County EMA/EMS

- Normal staffing during the day is 7 ALS ambulances
- Initial response of 1 ambulance, quickly upgraded to 3 ambulances after initial report total of 5 JCEMS units responded
- EMA/EMS Admin - total of 3 EMA personnel
- All county agencies are well-trained in NIMS and ICS with EMS involvement in all exercises



# Knoxville, TN



- Mid-size city
- Population just over 400,000
- 7 hospitals
- Region's only Level 1 Trauma Center



# Hospital Capabilities

- 21 Total hospitals with 2906 beds in Region, including a Level 1 Trauma Center and a Comprehensive Regional Pediatric Center
- Jefferson County:
  - Jefferson Memorial Hospital
  - 54 Beds
- Knox County: 7 Hospitals
  - Level 1 Trauma Center = University of Tennessee Medical Center
  - 609 Beds



# The Accident

- October 2, 2013
- 1400 hours
- Church Bus of Senior Adults Traveling Home to North Carolina from Gatlinburg, TN
- Tire Blew, Lost Control, Crossed Median, Collided with SUV and Tractor Trailer



# Accident Specifics

- 1400 hours initial reports to 911 of wreck on I-40 east bound, past the I-81 split
  - Bus overturned and tractor trailer on fire
  - Heavily traveled interstate with over 64,000 vehicles per day\*
  - Early calls reported fatalities
- 1405 First unit on scene (Volunteer Fire Department)
- 1409 First notification through RMCC to adjacent jurisdiction to request additional EMS resources
- 1412 First two EMS Units on scene established treatment and triage area
  - Total of 5 Jefferson County EMS Units
  - EMS/EMA Director requested Regional Assets prior to arriving on scene
  - Mutual Aid provided ALL transports from the scene
- 1414 Initial notification to Level 1 Trauma Center and adjacent hospitals







# Accident Specifics

- 1419 Confirmed immediate availability of 15 ambulances. On scene responders requested 12 to respond from neighboring counties
- 1420 EMS Consultants and Regional Hospital Coordinators officially notified
- 1422 First Helicopter on ground
- 1429 First critical patient leaves scene
- 1430 All live victims in treatment area with Jefferson County EMS providing life saving interventions and supportive care
- 1500 Last victim departs scene



# Victim Information By the Numbers

4	Patients by air to University of Tennessee Medical Center (UTMC), the Level 1 Trauma Center
7	Patients by ground to UTMC
1	Patient transported to Jefferson Memorial Hospital, then quickly transferred to UTMC
2	Additional walking-wounded who refused transport. POV to UTMC later that evening
8	Fatalities on scene

**ALL PATIENTS THAT WERE TRANSPORTED SURVIVED**



# More Numbers

- 100 - approximate number of local responders.
- 75 - approximate number of local mutual aid responders.
- 100 - approximate number of state responders.
- Over 800 radio transmissions into the Jefferson County 911 Center alone (does not include any other radio traffic).
- 8 - deceased identified, autopsied, and ready to be released by 1800 hours the next day.



# Response Partners (Not All-Inclusive)

## Coalition Related

- Local and Mutual Aid ground and air EMS
- Local and regional hospitals
- Regional Medical Communications Center
- Local and state public health
  - EMS Consultant
  - Regional Hospital Coordinators
- Regional Forensic Center
- American Red Cross

## Non-Coalition Related

- Local and Mutual Aid Fire
- Local, County, and State Law Enforcement
- Local County Medical Examiner
- State Department of Transportation

# Coalition Response Systems Utilized

- RMCC  
Regional Medical Communications Center
- HRTS  
Healthcare Resource Tracking System
- TNHAN  
Tennessee Health Alert Network

11/17/2015 TN Hospital Resource Tracking System | HRTS - Event



## HRTS | Hospital Resource Tracking System

Tennessee Department of Health



HRTS System Status: **Normal**

You are logged in as: **Charity Menefee**

Tue, Nov 17, 2015 15:35 EST

**Quick Links**

[Create New Event](#)

[View Events](#)

- [Home](#)
- [RMCC Contact Information](#)
- [Help](#)
- [User Links](#)
- [Message Board](#)
- [TNMedMap](#)
- [HRTS DashBoards](#)

[log out](#)

  
[send to printer](#)

**Event**

**Event:** **Bus Accident I-40 422 MM**

**Event Type:** Mass Casualty Incident

**Event Status:** Concluded

**Location:** Jefferson

**Start Date:** Wed, Oct 2, 2013 13:33 EST

**End Date:** Wed, Oct 2, 2013 16:21 EST

**Activated By:** Duty Coordinator - UTMCK

**Description:** BUS Accident Multiple patient

[View Counties](#)

**Comments**

26 Comments

Comment	By	DateTime	Emailed
Event concluded.	Duty Coordinator - UTMCK, RMCC: RMCC - UT Medical Center	Wed, Oct 2, 2013 16:21 EST	No
UTMC is back to normal operations.	Duty Coordinator - UTMCK, RMCC: RMCC - UT Medical Center	Wed, Oct 2, 2013 16:20 EST	Yes
Per EMS 18 12 patients have been transported, 11 to UTMCK, 1 to Jefferson Memorial. Jefferson Memorial is transferring this patient to UTMCK at present.	Duty Coordinator - UTMCK, RMCC: RMCC - UT Medical Center	Wed, Oct 2, 2013 15:19 EST	Yes
Family reception area being established in Wood Auditorium at UTMCK. Red Cross will be providing support.	Charity Menefee, RHC: Knox-Metro	Wed, Oct 2, 2013 15:03 EST	No
	Duty Coordinator -	Wed, Oct	

[Click here to view active events](#)

[Click here to view concluded events](#)

# What is the RMCC?

- The Regional Medical Communications Center is available to hospitals, ambulance services, dispatch centers, and local EOCs within the 16 county East Tennessee Region, as well as the State Emergency Operations Center
- Purpose: Provide information and assistance, when called upon, with allocation and/or coordination of medical resources (ambulance/EMS support and patient distribution) by creating a network of ambulance services and hospitals that respond in real time to MCIs



# Tennessee Health Alert Network (THAN) and Hospital Resource Tracking System (HRTS)

- THAN

- State-wide web-based notification system
  - 21 Hospitals activated for this event plus all Level 1 Trauma Centers in TN
  - 37 EMS Agencies from Region 2
  - Public Health (EMS Consultants, RHCs, ERCs, Central Office ESF 8 leads)
- Messaging via phone, text, email

- HRTS

- State-wide web-based hospital resource reporting system
  - Beds
  - Service Capabilities
- Daily updates or can be “activated” to request more frequent updates during emergencies
- Bed and service capability information provided to EMS Transportation Officers on scene
- Also provides message board to share key response information with “activated” hospitals

# Overall Strengths

- Rapid on-scene Triage, Treatment, and Transport
- Early notification to the RMCC and quick activation of EMS Mutual Aid
- Establishment of Unified Command
- RELATIONSHIPS, RELATIONSHIPS, RELATIONSHIPS!
- Hospital response to surge of Level 1 Traumas (12 patients)
- Dignity to deceased
- Victim identification
- Family reunification
- Recovery/follow-up



# Overall Challenges/Opportunities

- Complex scene - difficult to access and response agencies came from various directions
- Happened during the workweek with peak staffing
- Assuring regional partners were aware of region-wide assets





# Fatality Management

# Tennessee Logistics

## County Medical Examiner

- Local MD or DO appointed by mayor (Jefferson County is a Primary Care Provider)
- Determine cause and manner of death
- Often refers more complicated cases to the Regional Forensic Centers

## Knox Regional Forensic Center

- Serves 27 counties in East TN
- Board Certified Forensic Pathologists
- Performs death investigations and can support other counties if requested
- Performs forensic autopsies

\*\*\*At the time of the incident, Regional Forensic Center was housed at UTMC.

# Dignity to Deceased

- Decedents were covered within 15 mins on scene
- No media pictures of deceased
- Use of tent for Medical Examiner on scene
- Aeromedical transport request for media helicopters to clear scene was initially followed





# Fatality Coordination

- Local ME quickly established communication and requested support from Regional Forensic Center (RFC)
- Numbering system was provided by RFC to local ME so that all remains were adequately tracked and ultimately identified while assuring proper chain of custody
- Local EMS developed a detailed diagram of the scene identifying the location of the deceased which greatly assisted the Forensic Pathologists in their final autopsies

# Regional Forensic Center Efficiency

- Early notification = key to allowing preparation time
- Decedents transported via unmarked trailer (made available by local EMA) to Regional Forensic Center ~2100 hours
  - Delay due to wait for NTSB
  - Avoided media attention
- All decedents identified, autopsied and ready for release to families by 1800 hours the following day
- Victim identification expedited via use of Coalition Relationships
  - Family Assistance Center Hotline
  - Manifest provided to American Red Cross by church
  - Assistance from families at Family Assistance Center

# Family Assistance and Recovery



# Unique Situation/Leveraging Coalition Relationships

- All victims (living and deceased) and families ultimately arrived at same location
  - University of Tennessee Medical Center
  - Regional Forensic Center
  - Family Assistance Center
- *ONLY ONE VICTIM ARRIVED WITH IDENTIFICATION*
- Previous relationships and TRUST paved the way new relationships and protocols



# Family Reunification

- Established INSIDE UTMC by American Red Cross
  - NOT in original local plans, so previous established trust validated new decisions
  - Roles quickly defined between UTMC and ARC Volunteers
  - Daily briefings assured efficient communications and redefined roles and responsibilities as needed
- Established hotline provided by UTMC by manned by ARC staff that was provided to national media
- ARC also had presence with church home in Statesville, NC enabling expedited information sharing (bus manifest, family notification, etc.)



# Added Benefits

## UT Medical Center Pastoral Care Staff

- Remained “on the floors” assisting victims and families as needed
- Ran interference with supporters and well-wishers

## American Red Cross Volunteers

- Provided initial mental health support to arriving families
- Provided an area outlet for victim families – place to meet and grieve
- Assisted with securing hotel rooms and other personal needs



# Recovery Thoughts

- Follow up with responding personnel at the hospital and on-scene
- ARC and UTMC coordinated efforts to assure all victims (living and deceased) were returned home to NC
  - UTMC assured on-going healthcare needs would be met (rehab, etc.)
  - ARC coordinated transportation
- ARC advised the church on long-term recovery planning and resources
- ARC linked church leaders in NC with a local church who had a tragedy of their own to provide mentorship and support
- UTMC hosted an event 6 months after the accident where victims returned to say “thank you” - which provided a sense of closure for not only victims but UTMC staff as well

# Takeaways From This Event

- Cannot underestimate the value of trusted relationships between coalition partners!
- Early notifications are key
- Utilize expertise
  - Rural county ME reached out to Regional Forensic Center for guidance and support quickly
  - UTMC now champions having an ARC volunteer on site during disasters at all area hospitals - even when Family Assistance Centers are not internally located
- On-scene prioritization of dignity for decedents
- Plan and PRACTICE TOGETHER

# Additional Fatality Management Planning Ideas

- Local ME have establish a notification/reporting “hotline” during Mass Fatality Events
- Consider having an internal fatality management team that are trained in documentation and preparation
- Look to local resources that can support operations such as Funeral Homes, Crematories, Cemeteries, etc.
- Ensure plans are in place to expedite death certificates
- Know your community in advance - special funeral customs?
- Research federal support timing, needs, and expectations
- Consider state-wide response teams

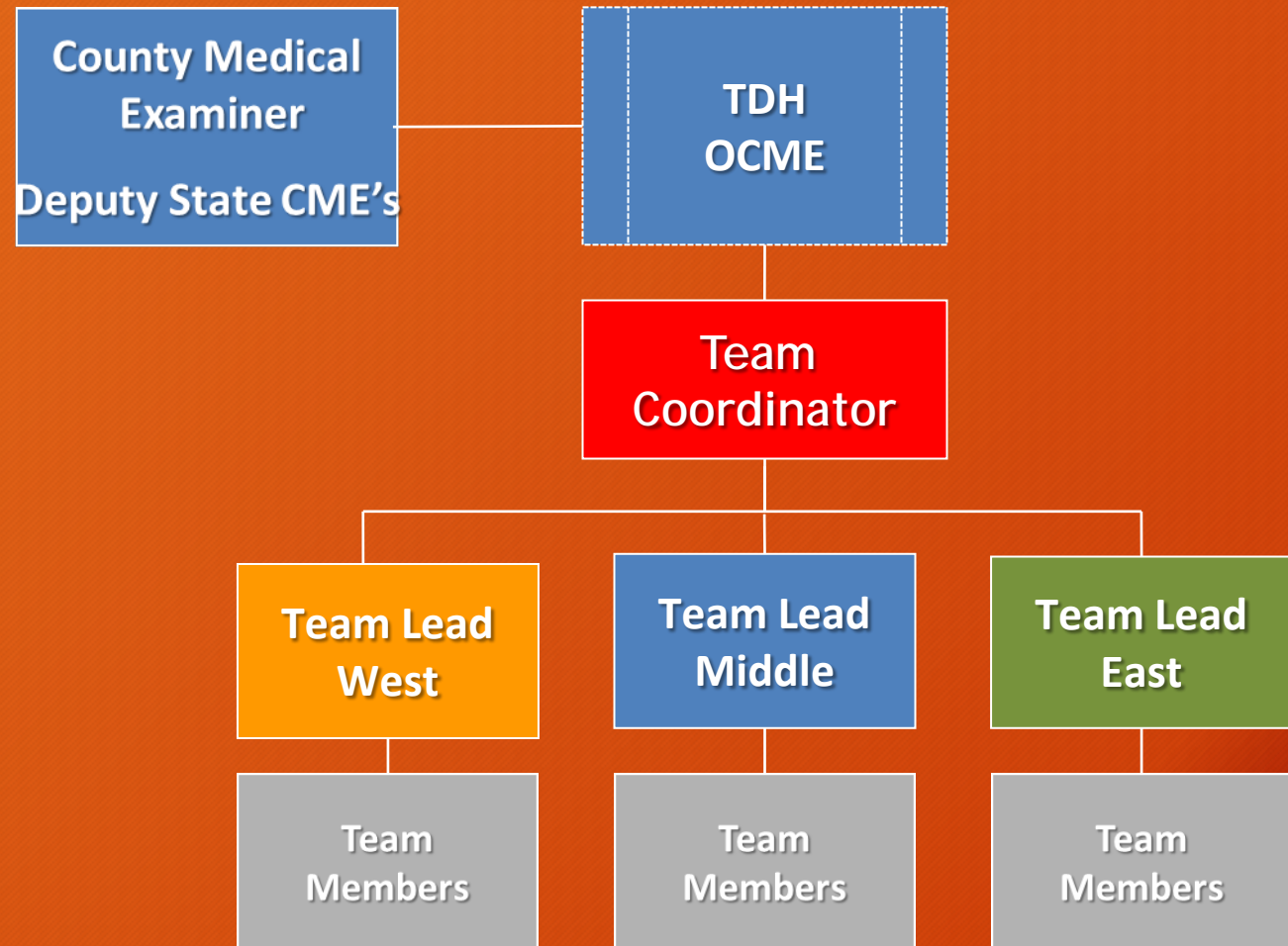


# TN MDI Strike Team

- **TN Medicolegal Death Investigator Strike Team**
- Purpose: Assist county medical examiners and medicolegal death investigators across the state in the handling and investigation of deceased during critical situations involving multiple deaths from events that do not reach the threshold of a disaster declaration (roughly 10 or less simultaneous fatalities)

# MDI Strike Team Direction and Coordination

- Local County Medical Examiner
- Tennessee Department of Health - Office of the Chief Medical Examiner
- MDI Strike Team Coordinator
- MDI Strike Team Leaders
  - West
  - Middle
  - East





## Charity Menefee, Regional Hospital Coordinator

Knox County Health Department

[Charity.Menefee@knoxcounty.org](mailto:Charity.Menefee@knoxcounty.org)