





# State Health Department Medical Partnerships

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Tennessee Department of Health



# ESF-8

**Assessment of public health/medical needs**

**Health surveillance**

**Medical care personnel**

**Health/medical/veterinary supplies**

**Patient evacuation**

**Patient care**

**Drugs, biologics, and medical devices**

**Blood and blood products**

**Food safety and security**

**Agriculture safety and security**

**All-hazard public health support**

**Behavioral health care**

**Public health and medical information**

**Vector control**

**Potable water/waste disposal**

**Mass fatality management**

**Veterinary medical support**

# Preparedness, Response, and Recovery

- **Responsibility:**
  - **Biological and Chemical Terrorism**
    - White powder
  - **Infectious Disease Outbreaks**
    - H1N1, fungal meningitis
  - **Natural disasters**
    - Hurricane Katrina, flooding, coal ash
  - **Mass gatherings**
    - Bonnaroo
  - **Other...**



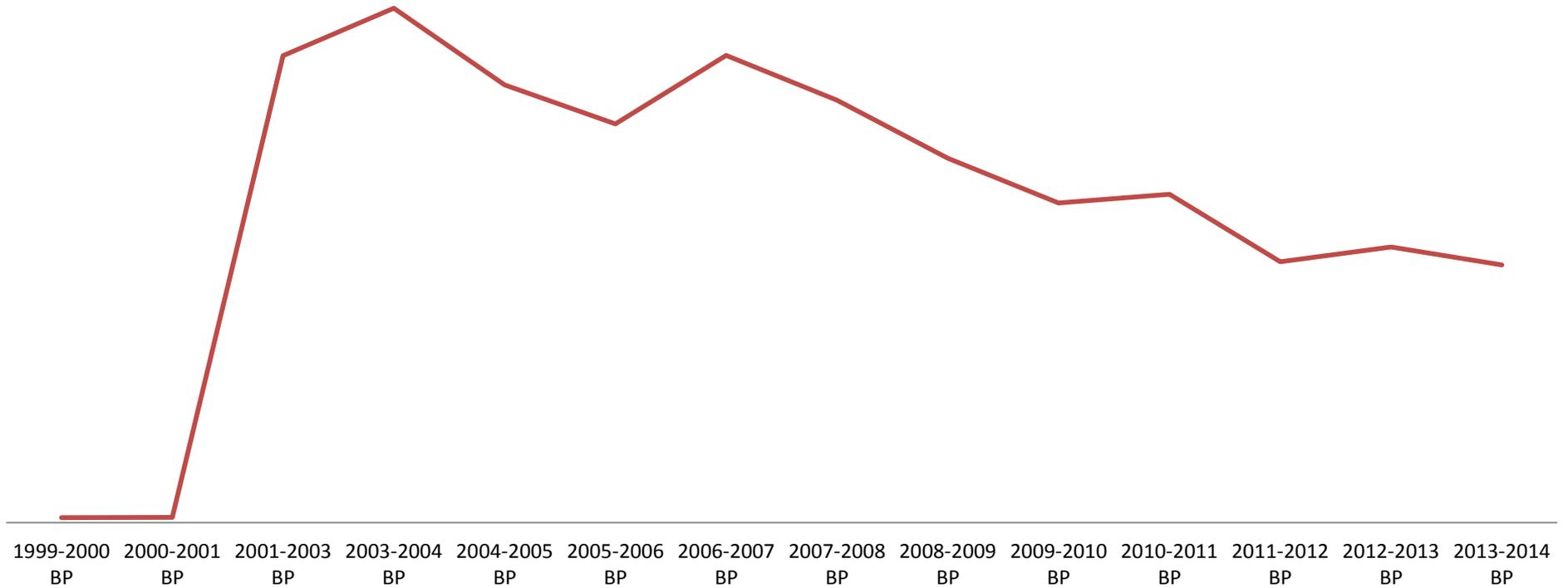


# Funding

- **Public Health Emergency Preparedness Program (PHEPP)**
  - CDC
- **Hospital Preparedness Program**
  - ASPR



# Tennessee's PHEP Base Funding FY 2000 to Present





# Communications

- Hospital Resource Tracking System
- Health Alert Network
- WebMD/Medscape
- Volunteer Mobilizer
- Countermeasure Response Network
- Joint Information Center
- Professional societies



Healthcare Resource Tracking System (HRTS) manages healthcare facility bed, service and asset availability. HRTS provides for event activation and management locally, regionally or state-wide.



Inventory Management

Tennessee Countermeasure Response Network (TNCRN) INVENTORY MANAGEMENT module is used to monitor and distribute medical countermeasure resources. This module is used to monitor resource availability, determine locations, and track disposition.



Patient Management

Tennessee Countermeasure Response Network (TNCRN) PATIENT MANAGEMENT module is integrated into the national system for patient tracking. This system is used to provide situational awareness, family reunification, and repatriation for emergency evacuees. Quickly register, record assessments, triage, and document patient treatment. The system is scalable and can be deployed for mass casualties, health care facility evacuations, and medical assistance shelter operation.



Registration site for Regional Medical Reserve Corp (MRC) volunteers – both non-medical volunteer registration, as well as registration and credentialing of medical volunteers.



The TDH-managed system used by state and federal agencies for alerting emergency responders at the local, state and federal levels.



# Medical Reserve Corps

- **>20,000 volunteers registered**
  - ~200 physicians
  - ~900 RNs
  - ~100 APNs



# Exercises

Type of Exercise	Topic	Agency	Location	Date	Status
Tabletop	TNCAT12	Statewide	Wilson Co	4/18/2012	Completed
Full Scale	CRI	District 4	Cookeville	4/21/2012	Completed
FSE	TNCAT12	Statewide	TN	6/21/2012	Completed
Workshop - Type B	Mass Fatality	District 2	Knoxville	10/21/2012	Completed
Workshop - Type B	Sovereign Citizen	District 2	East	11/21/2012	Completed
Workshop - Type B	Active Shooter	District 9 & 10	West	11/23/2012	Completed
Workshop - Type B	Avian Influenza	Statewide	Nashville	1/13/2013	Completed
Workshop - Type B	Mass Fatality	District 9 & 10	West	1/17/2013	Completed
Workshop - Type B	Communications	District 8	Columbia	1/18/2013	Completed
Workshop - Type B	TNCAT13	East	Clinton	2/19/2013	Completed
Workshop - Type B	Sovereign Citizen	District 4,5,6,7,8	Middle Region	2/21/2013	Completed
Workshop - Type B	TNCAT13	East	Cleveland	3/12/2013	Completed
Full Scale	POD	Nashville	Nashville	3/15/2013	Completed
Tabletop	Chempack - MF	Chattanooga	Chattanooga	3/18/2013	Completed
Full Scale	Hospital Evacuation	West	Union City	3/21/2013	Completed
Seminar - Type B	Mass Fatality	District 4,5,6,7,8	Middle Region	3/26/2013	Completed
Full Scale	POD	East Region	East Region	3/27/2013	Completed
Full Scale	POD	Sullivan	Bristol	4/2/2013	Completed
Tabletop	Medical Asst Shelter	UCR	Cookeville	4/2/2013	Completed
Full Scale	USPS - BDS Exercise	Davidson	Nashville	4/3/2013	Completed
Full Scale	KY-TN Casper	KY	KY	4/9-11/2013	Completed
Full Scale	NDMS	Middle	Nashville	4/10/2013	Completed
Full Scale	POD	Southeast	Chattanooga	4/12/2013	Completed
Full Scale	Dispensing	Shelby Co	Memphis	4/23/2013	Completed
Full Scale	Communications	TEMA	Statewide	5/1-4/2013	Completed
Tabletop	TNCAT13	TEMA	East	5/7/2013	Completed
Full Scale	USPS - BDS Exercise	Knoxville	East	5/8/2013	Completed
Tabletop	Chemical	District 3	Chattanooga	5/10/2013	Scheduled
Workshop - Type B	Vulnerable Populations	South Central	Columbia	5/14/2013	Completed
Seminar - Type B	Mass Fatality	District 1	Johnson City	5/21/2013	Completed
Full Scale	USPS - BDS Exercise	Hamilton	Chattanooga	5/22/2013	Completed
Workshop - Type B	Sovereign Citizen	District 11	Memphis	5/28/2013	Completed
Workshop - Type B	Sovereign Citizen	Middle	Livingston	5/30/2013	Completed
Workshop - Type B	Medical Response	District 9 & 10	Jackson	6/3/2013	Completed
Seminar - Type B	First Responder	District 11	Memphis	6/4/2013	Completed
Seminar - Type B	First Responder	Middle	Nashville	6/5/2013	Completed
Seminar - Type B	Mass Fatality	District 11	Memphis	6/13/2013	Completed
Seminar - Type B	Mass Fatality	District 3	Chattanooga	6/21/2013	Completed
Seminar - Type B	SASS	Middle	Murfreesboro	6/25/2013	Completed
Seminar - Type B	Children in Disasters	Middle	Nashville	6/26/2013	Completed
Seminar - Type B	Local Fatality Mgmt	Middle	Columbia	6/27/2013	Completed
Seminar - Type B	Children in Disasters	Middle	Cookeville	6/28/2013	Completed
Seminar - Type B	LEPC	West	Paris	8/6-8-2013	Completed
Tabletop	Closed POD	MCR	Murfreesboro	8/14/2013	Completed
Full Scale	Active Shooter	SCR	Columbia	8/29/2013	Completed
Tabletop	EMAT	Statewide	Jackson	9/11/2013	Completed
Full Scale	Music City Star MCI	Middle	Lebanon	9/12/2013	Completed
Full Scale	East TN Hospital MCI	East	East	11/6/2013	Scheduled
Workshop - Type C	TEPS Summit	Statewide	Jackson	11/13-14/2013	Scheduled
Workshop - Type B	Moore OK Tornado	Middle	Columbia	1/15/2013	Scheduled



TENNESSEE  
DEPARTMENT OF  
HEALTH



## National Center for Emergency Preparedness

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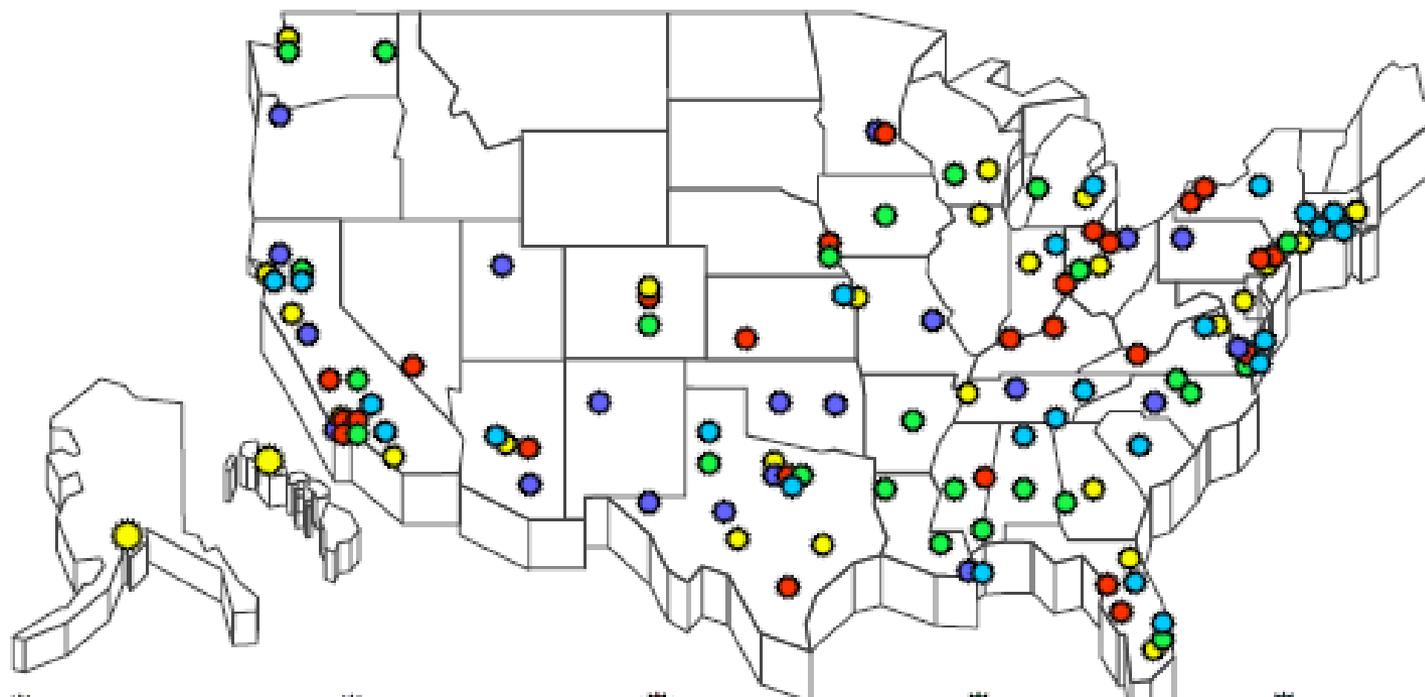
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## *Metropolitan Medical Response Systems*





# Metropolitan Medical Response System (MMRS)

- **Homeland Security program**
- **Supports local planning efforts**
- **Supports integrated all-hazard planning**
- **Local pharmaceutical and equipment caches**
- **Tennessee MMRS cities:**
  - **Chattanooga, Knoxville, Memphis, Nashville**

## MMRS Coordinates With HHS Program Goals

### HRSA - (Regional) Hospital

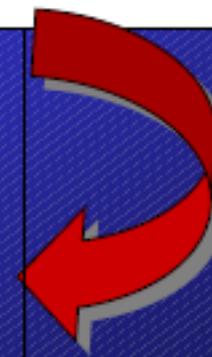
- Medication Availability
- Surge, triage, treatment and transport
- Communication Systems
- Decontamination and Quarantine
- Hospital Staff Training
- Hospital System Coordination

### CDC – (State)Health

- Detection
- Surveillance
- Epidemiological Services
- Mass immunization / prophylaxis
- Laboratory capacity

### MMRS –(Local) Health & Medical

- Pharmaceutical cache & distribution plans
- Early warning plans and notification system
- Incident response management/coordination
- Mass/surge patient care/fatality management
- Development of communications systems
- Planning and preparedness training
- Victim transportation





# Medical Partners

- **Physicians**
- **Other providers**
- **Mental health**
- **Special needs**
- **Pharmacists**
- **Laboratories**
- **First responders**
- **Toxicologists...**



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# Disaster and Emergency Medical Assistance Shelter Planning Guidance

## ESF8 Functional Annex 1.0



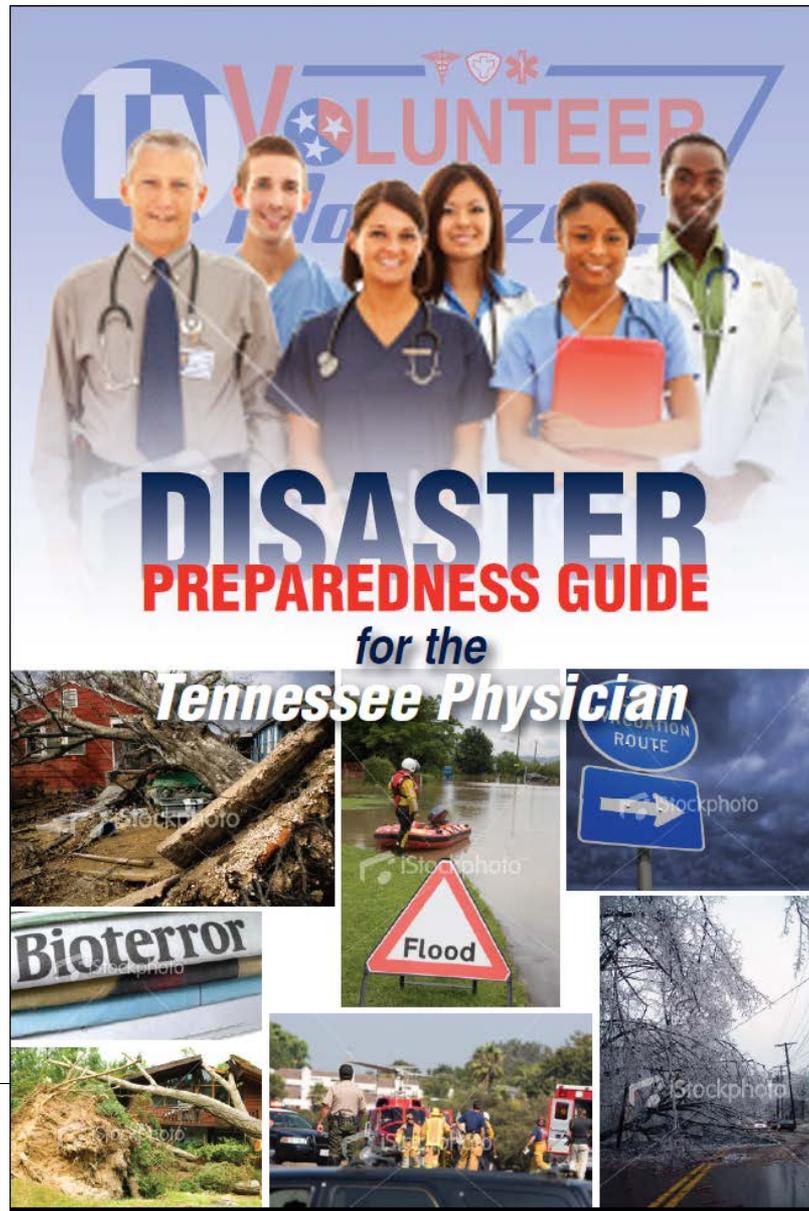
**State of Tennessee Department of Health**  
Public Health Emergency Preparedness and Planning Program

# Special Needs Shelters



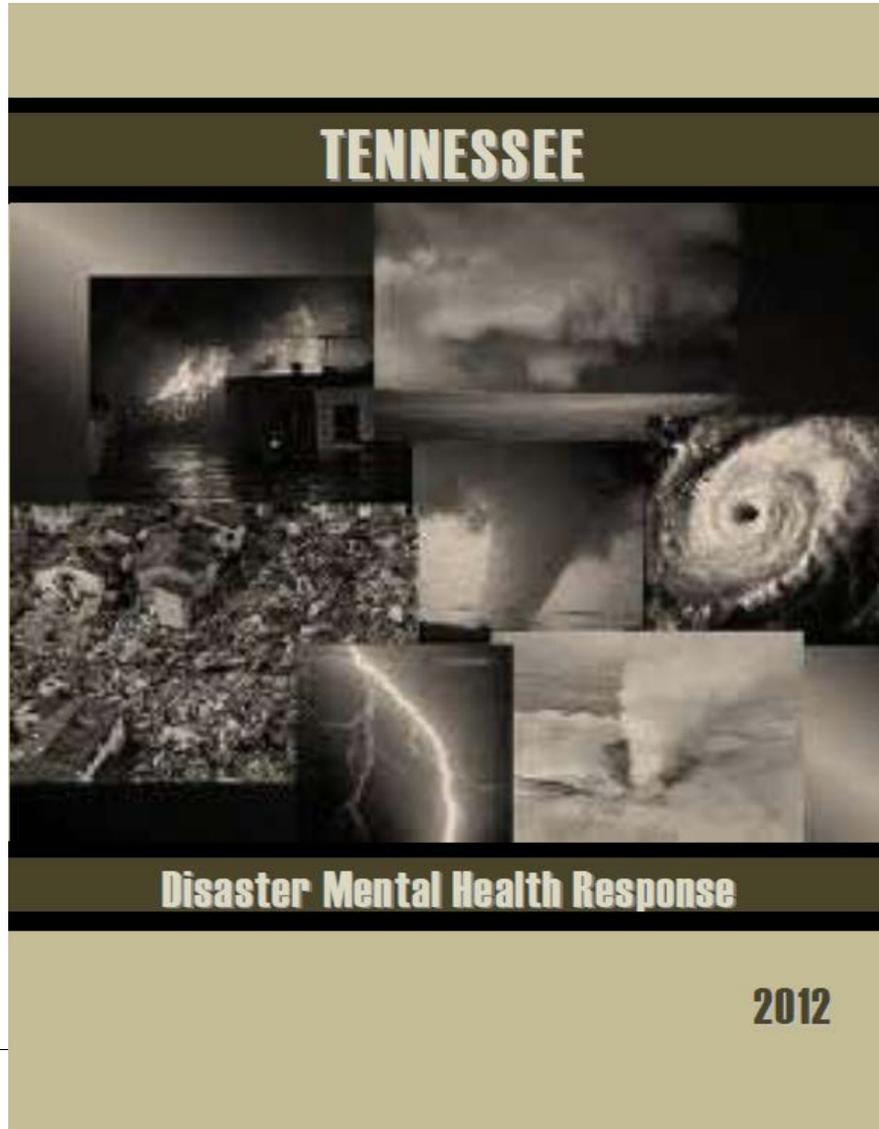
# Medical Needs





**DISASTER  
PREPAREDNESS GUIDE**  
*for the  
Tennessee Physician*

The cover features a group of diverse healthcare professionals (doctors, nurses, and a pharmacist) standing in front of a large graphic that says "VOLUNTEER" with a caduceus symbol. Below the title, a collage of images illustrates various disaster scenarios: a large tree trunk lying on a road, a person in a red raft on a flooded road, a blue evacuation route sign with an arrow, a sign that says "Bioterror", a "Flood" warning sign, a house with a tree branch on its roof, emergency responders at a scene, and a road covered in ice.





*Bioterrorism and Other Public Health Emergencies*

**Altered Standards of Care in Mass Casualty Events**

Prepared for:  
Agency for Healthcare Research and Quality  
U.S. Department of Health and Human Services  
540 Gaither Road  
Rockville, MD 20850  
[www.ahrq.gov](http://www.ahrq.gov)

Contract No. 290-04-0010

Prepared by:  
Health Systems Research, Inc.

AHRQ Publication No. 05-0043  
April 2005



# Utah Pandemic Influenza Hospital and ICU Triage Guidelines

Prepared by UTAH HOSPITALS AND HEALTH SYSTEMS ASSOCIATION  
for the Utah Department of Health

Version 2, August 11, 2009

**Purpose:**

These guidelines were developed by the Utah Hospitals and Health Systems Association (UHA) Triage Guidelines Workgroup. The purpose is to guide the allocation of patient care resources during an influenza pandemic or other public health emergency, when demand for services dramatically exceeds supply. Application of these guidelines will require physician judgment at the point of patient care.

**Basic premises:**

- Graded guidelines should be used to control resources more tightly as the severity of a pandemic increases.
- Priority should be given to patients for whom treatment would most likely be lifesaving and whose functional outcome would most likely improve with treatment. Such patients should be given priority over those who would likely die even with treatment and those who would likely survive without treatment.

**Scope:**

- These triage guidelines apply to all healthcare professionals, clinics, and facilities in the state of Utah.
- The guidelines apply to all patients ages 2 and over. Until guidelines are developed for infants, physician judgment determines treatment of pediatric patients.

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# Mass Fatality Plan

## EOP Functional Annex 7



State of Tennessee Department of Health

2013

# Laboratory Response Network





# Medication Resources

- **CDC medical supplies**
- **CHEMPACK nerve agent antidotes**
- **Healthcare Caches**
- **Potassium Iodide Cache**
- **Pandemic Medical Countermeasure Stockpile**





# Points of Dispensing (PODs)

- **117 POD clinics throughout Tennessee**
- **Population goes to the POD to receive treatment or prophylaxis**
- **Enables population to receive treatment close to home**

# Strategic National Stockpile

- Tailored package containing items within the SNS formulary
- Delivered anywhere within the United States in 12 hours or less
- Located in 12 different locations around the United States
- Designed for rapid movement by ground or air







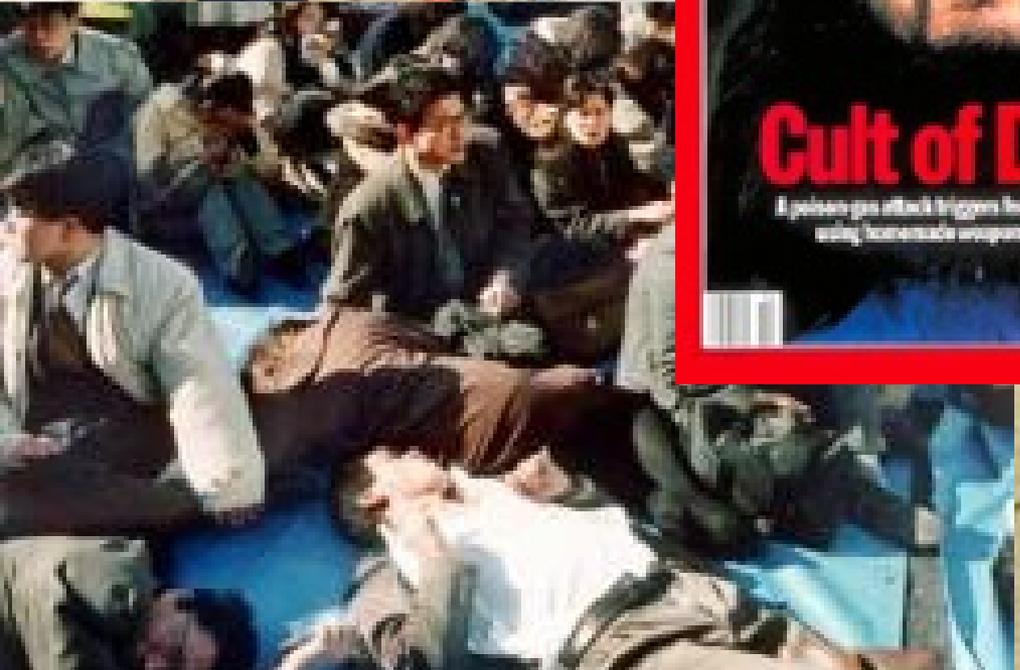
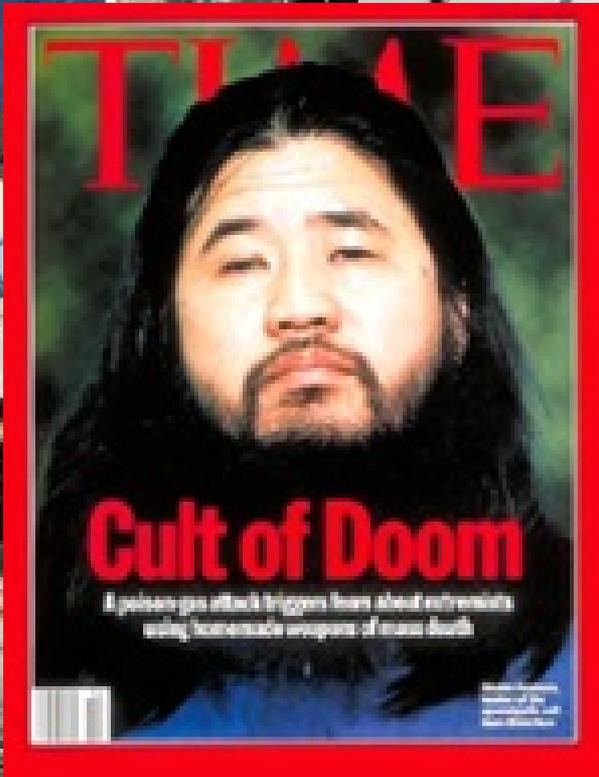
**POISON**  
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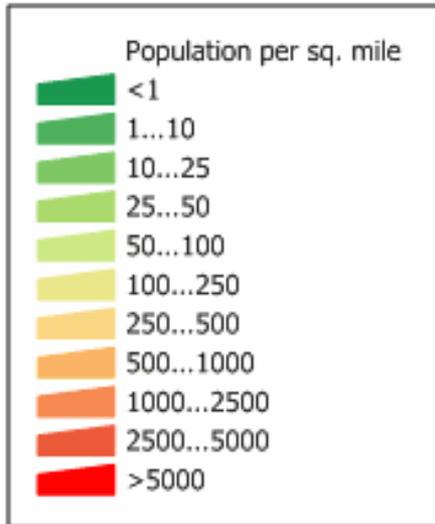
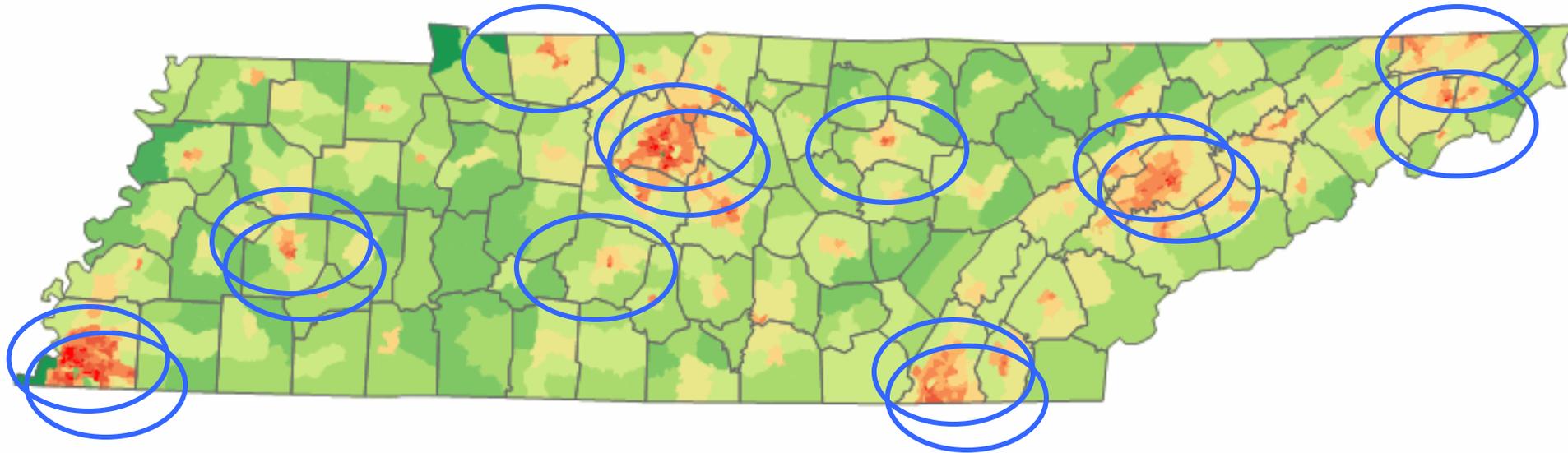
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# CHEMPACK Locations



Source: U. S. Census Bureau  
Census 2000 Summary File 1  
population by census tract.

• 15 Locations across the state

• 38 total containers

• 14 Hospital

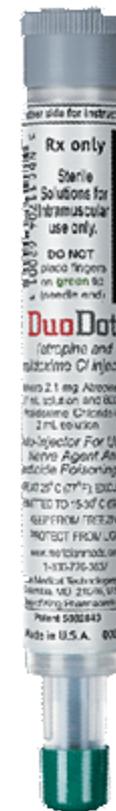
• 24 EMS

• CHEMPACK treatment capacity

• 24,896

# Deployment

- **CHEMPACK Caches**
  - 15 sites statewide
- **Regional Response Plans**
  - Partnerships: Hospital, EMS, Fire, Law Enforcement
- **Planned Event pre-positioning**
  - Example: Bristol Nascar races
- **EMS Response Caches**
  - DuoDote™ auto-injectors on participating service vehicles



# Potassium Iodide

- **2 nuclear power reactors in east Tennessee**
  - Watts Barr and Sequoyah
- **KI for the 7 surrounding counties**
- **Two KI caches**
  - General population (83,200 treatment courses)
  - Emergency workers (2,401 treatment courses)



**AMBULANCE RECEIPT**

TRANSPORTATION RECEIPT Tag Number  
E10004869 4869

Destination Via Time  
1 2 3

**TRIAGE TAG** E10004869

Age First Last Address City St Zip Phone Religious Pref

**Contaminated**

**EMT** Personal Property Receipt

**START** triage system

**RE-TRIAGED** 1 2 3

**MORGUE** 0

**IMMEDIATE** 1

**DELAYED** 2

**MINOR** 3

**EVIDENCE CONTAMINATED**

**AMBULANCE RECEIPT**

TRANSPORTATION RECEIPT For Use by Transportation Recorder Only

Age First Last

Tourniquet Applied Airway Management  
Time ORA NPA

GCS Tx In: E: M: V: Time: GCS Tx Out: E: M: V: Time:

Known Allergies

Treatment Administered/Comments

D	Time	Drug Solution	Dose

S L U D G E M  
Subcutaneous Intramuscular Intravenous Dextrose 50% Glucose 50% Mannitol

INJECTOR TYPE INJECTOR TYPE

Primary Decan Secondary Decan

**START** triage system

**MINOR** Move the Walking Wounded

RESPIRATIONS PERUSION MENTAL STATUS  
R Yes P - 2 Sec M Can Do  
R No P - 2 Sec M Can't Do

**IMMEDIATE** Respirations - Over 30  
**IMMEDIATE** Perfusion - Cap. Refl Over 2 sec or Radial Pulse Absent  
**IMMEDIATE** Mental Status - Unable to Follow Simple Commands  
**DELAYED** All Others  
**MORGUE** No Respirations After Head Tilt

**MORGUE** Pulseless/ Non-Breathing

**IMMEDIATE** Life Threatening Injury

**DELAYED** Serious Non Life Threatening

**MINOR** Walking Wounded

**EVIDENCE CONTAMINATED**

## Historical View of Program Funds

