Overview of South Carolina’s Comprehensive WMD Terrorism Crisis/Consequence Management Program

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OSLDPS
Emergency Management Advisor
## Report Documentation Page

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Purpose of Program

3 Insure that South Carolina is able to effectively respond to a terrorist incident involving the use of a WMD in a coordinated, effective manner, maximizing all available resources within the State, other States and Federal Agencies.
Scope of Project

- Development of a comprehensive program to enhance the State’s ability to effectively manage a WMD incident.
- The project was divided into four areas.
Specific Project Elements

- Target Inventory and Risk Assessment
- Public Health System WMD/NBC Patient Management Capability Assessment
- WMD/NBC Response Resource Inventory and Shortfalls
- Public Safety Agency Field Guide for WMD/NBC Incidents
Coordinated With

- Federal Response Plan
- FEMA Region IV Regional Response Plan
- Presidential Decision Directive # 39
- South Carolina Emergency Operations Plan
- FEMA all Hazard planning guidance SLG-101
Coordination continued:

- Federal Senior Interagency Coordinating Group guidance and objectives
- U.S. Army Soldiers Biological, Chemical Command guidance and objectives (SBCCOM)
- OSHA Hazardous Waste Operations and Emergency Response (29 CFR 1910.120)
Coordination continued:

- Professional Competence of Responders to Hazardous Materials Incidents (NFPA Standard 472)
- Competence for EMS Personnel Responding to Hazardous Materials Incidents (NFPA Standard 473)
Target Inventory & Risk Assessment
Target Inventory & Risk Assessment

- Conducted a Target Inventory and Risk Assessment of the Targets (Information in one data base).
- Based on sound and proven methodology.
- Evaluated the potential for a terrorist WMD incident in South Carolina.
- Prioritized potential targets within the State.
Target Inventory & Risk Assessment (continued)

- Analyzed probability of an incident.
- Recommend action plans for high probability targets.
- Developed a “need to know” target inventory for planning and reference.
Risk Assessment Considered

- All critical facilities
- Critical State and Fed facilities/buildings
- Critical communications systems
- Critical life lines
- Deep draft shipping ports
- Critical Airports
- Critical Hospitals
- State Nuclear power generating and processing facilities
- Recommendations by local authorities
Target Inventory & Risk Assessment

- All facilities were identified in coordination with SCEPD, Federal agencies, and existing State and National databases.
WMD Response Resource Inventory and Shortfalls
WMD Response Resource Inventory and Shortfalls

③ Developed a Response Survey Instrument that was sent to all agencies that have specialized response requirements.

③ Results of the survey were compiled into a common database.
WMD Response Resource
Inventory and Shortfalls

Data Base Reports are designed for use in planning and for response operations conducted from the State Emergency Operations Center.

Results of the survey were summarized in a comprehensive report, which identified shortfalls and recommended corrective action.
Public Health System
WMD/NBC Patient Management
Capability Assessment
Public Health System
WMD/NBC Patient Management Capability Assessment

Assisted by George Washington University School of Medicine-Department of Emergency Medicine-Disaster Section, conducted an overall assessment of South Carolina’s health and medical system in regard to the capability to manage the public health and emergency medical demands from a WMD/NBC incident.
We assessed:

- the capabilities of major hospitals that provide emergency care in metropolitan areas

- emergency medical services prehospital care resources and protocols

- The State Department of Health and Environmental Control’s Division of Laboratories capabilities to support NBC related response operations (in coordination with federal public health and environmental agencies).
Public Health System
WMD/NBC Patient Management Capability Assessment

The assessment included:

- Recommendations from local authorities
- Conclusions and recommendations for future emergency management initiatives
- Prioritization of effort and funding
- Recommended training
Public Safety Agency Field Guide for WMD/NBC Incidents
Public Safety Agency Field Guide for WMD/NBC Incidents

- The South Carolina specific guide was developed in a manner that would allow its use as a “quick reference” document by any first responder who is responding to a WMD incident.

- The guide is a pocket-sized manual designed to be carried in a “ready kit”. 
WHAT IS IT?
FOG Is an Individual Field Procedure Checklist

Sections
1. Command and Control
2. Field Medical Operations
3. Hazardous Materials Ops
4. Hospital Operations
5. Medical Information
6. Law Enforcement
7. Logistics
Public Safety Agency Field Guide for WMD/NBC Incidents

- The guide addresses:
  - responder safety
  - operational considerations
  - terrorist/WMD scene characteristics
  - requirements for and procedures to don protective clothing and equipment
  - procedures for notification and obtaining aid
  - recommendations from local authorities
State of South Carolina
Comprehensive Terrorism
Crisis / Consequence
Management Program

WMD Response Resource Inventory
Findings
The Objective: Enhance the State’s Ability to Respond to a Weapons of Mass Destruction (WMD) Incident by:

1. Developing a common response resource survey to collect resource information from all local jurisdictions.
   - Fire services
   - EMS
   - HAZMAT
   - Emergency management
   - Law enforcement
   - Medical examiner
   - Public health

2. Developing a WMD response resource inventory database to collect and display WMD equipment inventory.

3. Preparing a final WMD response resource inventory database and shortfall report.

4. Recommending corrective action in shortfall areas.
WMD Response Resource Inventory Development

- Development of the WMD response resource inventory database and shortfall reports involved three major work phases:

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<th>Phase II</th>
<th>Phase III</th>
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<td>Research and Design</td>
<td>Data Collection and Compilation</td>
<td>Final Inventory Database and Shortfall Development</td>
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<td>“Pilot Study” Phase</td>
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**Key Points**
- Review Federal WMD Capabilities
- Develop WMD Equipment Baseline
- Design Response Resource Survey
- Begin Database Development
- Conduct “Pilot Study”

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<tr>
<td>Conduct Regional Response Resource Survey Briefings</td>
<td>Collect and Compile Data</td>
<td>Develop Final WMD Response Resource Inventory Database</td>
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<tr>
<td>Collect Draft Shortfall Report</td>
<td>Develop Draft WMD Inventory Database</td>
<td>Finalize Shortfall Report</td>
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<td>Develop Corrective Actions Report</td>
<td>Finalize Lat/Long Function</td>
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### Phase I
Understanding WMD Response Resource Capability

WMD response resource survey development

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### WMD/HAZMAT Equipment Baseline Pamphlet

State of South Carolina  
WMD  
Response Resource Survey

Prepared by:  
Region:  
County:  
City:  
Name:  
Title:  
Date:  

Structure  
I Introduction  
II Purpose  
III General  
- Organization Structure  
- Responsibility  
- Training Level  
Part A Fire and Rescue  
Part B EMS  
Part C Law Enforcement  
Part D Medical  
Part E EOD  
Part F Other  
IV Summary
Identify WMD Response Resource Inventory Database Design

WMD Response Resource Inventory Database

Purpose:
To provide essential information on availability of WMD / HAZMAT equipment by type, location, quantity, and unit to facilitate resource identification and allocation during a WMD incident.
WMD Response Resource Inventory Development - Phase II

Phase I
Research and Design “Pilot Study” Phase

- Review Federal WMD Capabilities
- Develop WMD Equipment Baseline
- Design Response Resource Survey
- Begin Database Development
- Conduct “Pilot Study”

Phase II
Data Collection andCompilation

- Conduct Regional Response Resource Survey Briefings
- Collect and Compile Data
- Develop Draft Shortfall Report
- Develop Draft WMD Inventory Database

Phase III
Final Inventory Database and Shortfall Development

- Develop Final WMD Response Resource Inventory Database
- Finalize Shortfall Report
- Finalize Lat/Long Function
- Develop Corrective Actions Report
Phase II
Develop WMD Response Resource Data

Objective: Create a WMD Response Resource Inventory Database based on research and survey input.

How: Conduct Statewide Survey with State agencies and all County EPD Directors.

What Did We Receive?

Input
- Survey Sent to 46 County EPD Directors & State Agencies
- List all response resources

Output
- Create the Database Format
- Database Report produced for given County or type Organization
- Fire/Rescue
- Law Enforce.
- EMS
- Coroner/ME
- Fed/State/Co
- National Guard
Information Received

- 46 counties were sent surveys.
- 41 counties returned data requested.
- 2 state agencies sent written replies.
- All other state agencies responded to a telephone survey.
- Data was received on over 500 individual units.
- Database has over 589 records.
Phase II
Develop WMD Response Resource Shortfall Report

Objective: Create a WMD Response Resource Inventory Database Shortfall Report based on the weighted criteria in the Target Inventory and Risk Assessment Report.

Solution: Link WMD Response Resource Database to the Target Inventory Database.

Shortfall Report Production Process
WMD Response Resource Inventory Development - Phase III

**Phase I**
Research and Design
“Pilot Study” Phase

- Review Federal WMD Capabilities
- Develop WMD Equipment Baseline
- Design Response Resource Survey
- Begin Database Development
- Conduct “Pilot Study”

**Key Points**

**Phase II**
Data Collection and Compilation

- Conduct Regional Response Resource Survey Briefings
- Collect and Compile Data
- Develop Draft Shortfall Report
- Develop Draft WMD Inventory Database

**Key Points**

**Phase III**
Final Inventory Database and Shortfall Development

- Develop Final WMD Response Resource Inventory Database
- Finalize Shortfall Report
- Finalize Lat/Long Function
- Develop Corrective Actions Report

**Key Points**
What Did it Tell us?

*No big Surprises.*

1. The bulk of the HAZMAT/WMD Response Equipment is consolidated in the Fire and Rescue Service of the high population areas of the State.

2. These units are well trained and equipped for the industrial types of HAZMAT events that occur in the State. They are not equipped for a High Level WMD event.

3. The higher risk Urban Counties have the most equipment and best trained personnel.

4. The more rural counties with a low percentage of high risk targets/population have less equipment and personnel.
No big Surprises (continued)

Most EMS units in the State are well trained and equipped for the day to day operation. None reported an ability to operate in a contaminated environment.

Law Enforcement organizations are also well trained for their day to day operations but lack basic Personal Protective or Detection Equipment and training that would prevent them from becoming casualties after arriving on the site of a major WMD terrorist incident.
No big Surprises (continued)

- Low Country coastal counties appear to have a higher degree of general emergency preparedness because of the Hurricane and earthquake threat.

- Coroner and Medical Examiners have a shortage of Personal Protection Equipment needed for operating in and around a major contaminated area. They are also short of staff and facilities required to handle hundreds (much less thousands) of casualties.
What Did We Find From All This?

- South Carolina has well equipped and trained First Responders across the State that are prepared for the day to day operations of protecting it’s citizens.
- South Carolina is not prepared to handle a Major, High end Terrorist Act directed at the general population which could produce hundreds, if not thousands of casualties within a short period of time.
Shortages

Fire and Rescue/Hazmat
- PPE (level A and C/D)
- Chem/Bio Detection Equipment
- Decontamination Equipment
- Monitoring Equipment
- Detection and Decontamination in small departments

Law Enforcement and Bomb Disposal
- Level C/D PPE
- Detection/Monitoring Equipment
- Organic Bomb Disposal Personnel
- Properly Trained Bomb Disposal Personnel
- Organic K-9 unit support
Shortages

Emergency Medical Services

- Level C/D PPE
- Level C/D S/C Breathers
- Lack of authority to administer some required pharmaceuticals to NBC victims
- Lack of capability to conduct Mass Casualty operations (medical triage for victims of NBC attack)

Coroner/Medical Examiner Office

- Level C/D PPE
- Limited capability to operate an “on scene” Mass Casualty morgue operation prior to arrival of Federal DMORT assets
Recommendations and Planned Actions

1. Develop a specific State Wide Plan that has three Regional Response Teams that can act quickly within their assigned regions and assist the other regions as required.

2. Develop a state level multi-agency response team.

3. Organize, fund, and train these Regional and State Teams along the same lines (modified for South Carolina’s specific needs) as the Metro Medical Response System.

4. Increase Personal Protection Equipment (PPE) available to the First Responder community.