

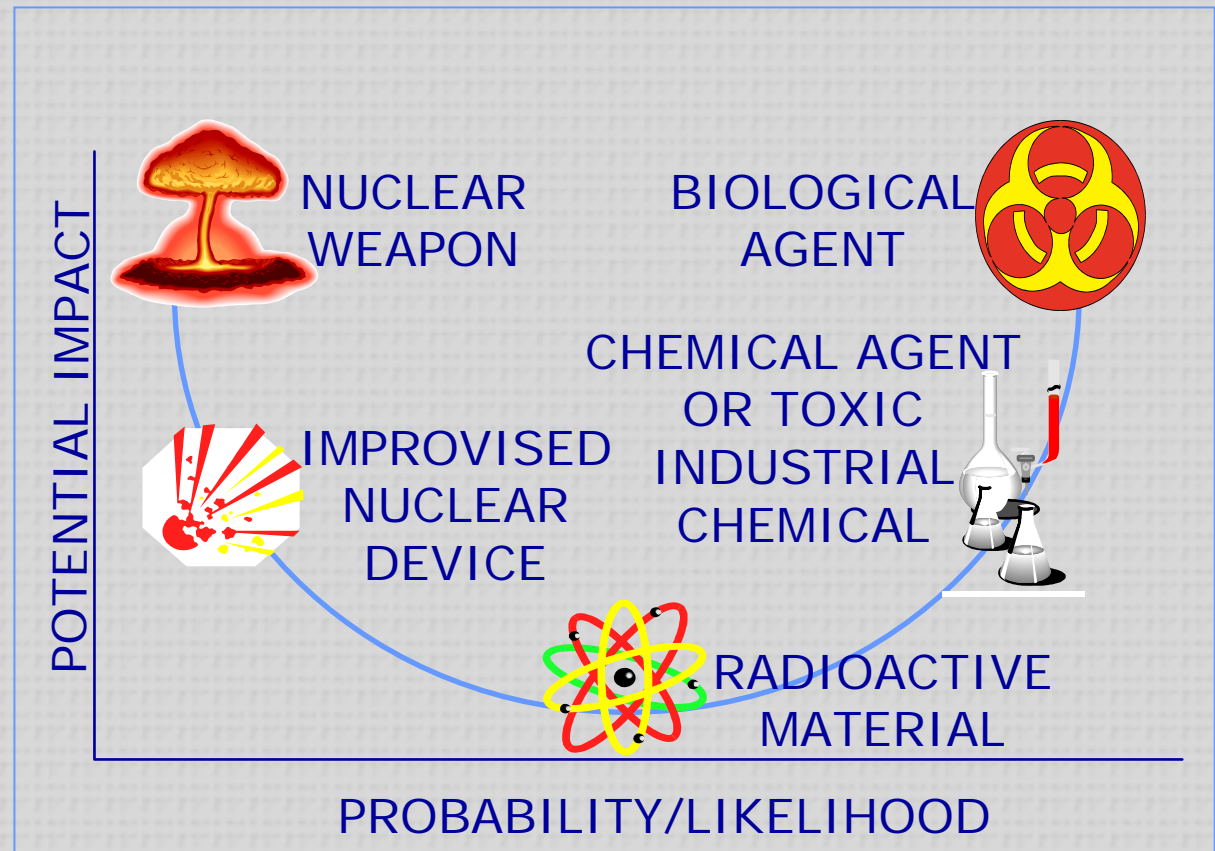


Module Ten:  
Weapons of  
Mass Destruction,  
Bioterrorism and EMS

Wisconsin EMS Medical Director's Course

# Special Considerations

- Threats
    - o Chemical
    - o Biological
    - o Nuclear
    - o Radiological
    - o Explosive
- Potential Probability vs. Impact



# Groups That Threaten

- Lone individual
- Identified local or non-aligned terrorist groups
- Internationally sponsored
- Doomsday cults
- Insurgents

# State History/Incidents

- 08/70 - Sterling Hall/Madison – ANFO Bomb
- 10/95 - Eau Claire/Botulism – Hoax
- 12/96 - Berlin/Chlordane – Feed Contaminated
- 04/97 - Janesville/Ricin – Manufactured
- 12/98 - Milwaukee HIV/Meat – Hoax
- 02/99 - Milw. Clinic /Anthrax – Hoax
- 01/00 - S.E. Wi/Anthrax Letters – Hoax
- 2001 - Janesville & Milw. Letters – Hoax

# “Hospital Bioterrorism Preparedness Plan”

- A statewide cooperative disaster plan for hospitals – prepared by DHFS
- Coordinates resources on a region-by-region level
- Stratifies events into local, regional, state and national scope
- Identifies interfaces between hospitals and prehospital resources, including:
  - o Local Emergency Operations Center (EOC)
  - o Incident Command System (ICS) of local responders

# “Hospital Bioterrorism Preparedness Plan”

- Prehospital triage and treatment
- Bed capacity
- Isolation
- Off-site facilities
- Security
- Special needs patients
- Decontamination & Disposal of Waste
- Personal Protective Equipment
- Surveillance
- Risk Communications
- Responder Workforce
- Termination
- Post-incident evaluation
- Education

# Special Considerations

- Issues for EMS Providers
  - o Scene Safety
  - o Personal Protective Equipment
  - o Education and Training
  - o Interventions
  - o Personal Identification
  - o Crime Scene Preservation
  - o Decontamination



# Special Considerations

- Scene Safety and Personal Protective Equipment
  - CBNRE agents threaten EMS personnel
    - Direct Involvement
    - Secondary Contamination
  - Secondary Devices
  - Personal Protection
    - Same as hazmat incidents
    - Mark I auto-injectors
  - Incident Command System
    - Safety Officer





# Special Considerations

- Education and Training for Prehospital Providers
  - NT 100 – Terrorism and Hazardous Materials Awareness Course
    - 4 hours
    - Mandated training for all prehospital providers in 2003-2004
    - There will be ongoing refresher training for bioterrorism in the future

# Special Considerations

- Bioterrorism events are crime scenes!
  - o Law enforcement officials will establish perimeters
  - o EMS personnel need appropriate identification to enter
  - o EMS personnel must understand the importance of crime scene preservation

# Special Considerations

- Decontamination
  - Hazmat events:
    - Disrobing removes 70-80% of contaminants
    - Soap and water
    - Rinsates pose some risk of harm to environment
  - Biological Agents:
    - Disrobing first may cause re-aerosolization
    - Consider dilute bleach solutions
    - Rinsates: significant risk to environment



# Special Considerations

- Issues for Emergency Departments
  - Interface with local public health officials
  - Availability of antidotes, antitoxins and antibiotics
  - Strategic National Stockpile
  - Staff education and training
  - Decontamination



# Special Considerations

- Issues for  
Emergency  
Departments
  - Handling Clinical  
Specimens
  - Hospital disaster plans
  - Information Resources
  - Communications
  - Participation in regional  
bioterrorism planning



# Special Considerations

- Information resources on the Web
  - o CDC
    - <http://www.bt.cdc.gov/>
  - o E-Medicine
    - <http://www.emedicine.com/emerg/index.shtml>
  - o The Monterrey Institute
    - <http://cns.miis.edu/research/cbw/>

# Special Considerations

- Local Public Health Department (LPHD)
  - o Report all suspicious illnesses to your LPHD
  - o They are your link to State and Federal Resources
  - o Plans are being made for statewide syndromic surveillance systems
  - o Linkages with State and Federal resources
  - o LPHD provides linkage to strategic national stockpile
  - o Linkages with Metropolitan Medical Response Systems (MMRS)
    - Milwaukee
    - Madison

# Special Considerations

- Clinical Specimens
  - What specimens should you collect?
  - Where do you send them?
  - When will the results become available?
  - Will they help you to guide therapy?
- Wisconsin's Level B Laboratory Response Network for Bioterrorism
  - Marshfield Clinic Laboratories
  - City of Milwaukee Bureau of Public Health Laboratories
  - Clement J. Zablocki VA Medical Center, Milwaukee
  - Wisconsin State Laboratory of Hygiene, Madison