The Louisiana Poison Center and Emergency Preparedness

“Who ya’ gonna call?”

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DISCLOSURE

- I have no financial interests or other relationship with manufacturers of commercial products, suppliers of commercial services, or commercial supporters. My presentation will not include any discussion of the unlabeled use of a product or a product under investigational use.
Disaster Man

SERIOUS POISON PROBLEM HERE!

THIS ONE’S MORE THAN WE CAN HANDLE!

THUD

THE POISON CENTER’S YOUR SECRET WEAPON!

“Call 1-800-222-1222!”

art by: Bob Renzas

animalwackerproduktions.com
Outline

- Recent incidents – Who ya’ gonna call?
- Threat etiology – technological disasters including terrorism
- DHS National Planning Scenarios involving hazmats
- Hazmats in Louisiana
  - Bogalusa
- Requirements for hazmat medical management:
  - Situational Awareness
  - Medical guidance/direction
- LPC - Preparedness Roles
  - Education
  - Planning
- LPC -Response Roles
- Summary – Who ya’ gonna call?
“Toxic substances in our community”

- **Chemicals**
  - Refineries, chemical manufacturers, hardware and “big box” stores, transport vehicles (rail and highway), meth labs, etc.

- **Nuclear/Radiologic sources**
  - Reactors, universities, hospitals, industry, food processors
Hazmat Threats – Needs for Preparedness

- **Accidental incidents**
  - Residential
  - Occupational
    - Graniteville, SC., 2005
    - Bogalusa, La., 1995

- **Terrorist threats**
  - Domestic
    - Oregon
  - International
    - Al Qaeda – poisoning
4/15 - Boston, MA; 4/17 - West, TX

http://www.bt.cdc.gov/masscasualties/bombings_injurycare.asp

Bombings: Injury Patterns & Care

Version 2.0
Emergency Preparedness and Response

Specific Hazards

Bioterrorism
Chemical
Gulf Oil Spill 2010
Radiation

Mass Casualties
Preparing for a Bombing
After a Bombing
After a Bombing: Health and Safety Information for Emergency Care Providers

Coping With a Traumatic Event
Coping With a Traumatic Event for Health Professionals

Injuries
Injuries and Mass Casualty Events for Health Professionals

Injury Fact Sheets

Brain Injuries
Brain Injuries and Mass Trauma Events:

Burns
Public Health Professionals & Clinicians

Specific Hazards > Mass Casualties > Blast Injury Fact Sheets

Facebook Recommend 14 Tweet Share

Bombings: Injury Patterns and Care

Bombings: Injury Patterns and Care is a new course designed to provide the latest clinical information regarding blast-related injuries from terrorism. The course is available in multiple formats with a CD-ROM/Web-based interactive course planned for release later in 2007.

Download the Course

- Blast Curriculum: One-Hour Module (also available in Spanish )
- Bombings Curriculum: One-Hour Module (also available in Spanish )
- Blast Curriculum: Three-Hour Seminar (also available in Spanish )
- Bombings Curriculum: Three-Hour Seminar (also available in Spanish )

Course Content

- Background on Terrorism and Explosive Devices
- Bombing Events
- Blast Injuries
- Crush Injuries and Compartment Syndrome
- Military Experience
- Special Considerations
- Psychological Issues

The CD-ROM for Web-based interactive training will be distributed free of charge to first responders. To place an order for a free CD-ROM, visit the American College of Emergency Physicians.
Potential Chemical Casualties?

- Home
- Workers
- By-standers
- First Responders
DHS National Planning Scenarios - chemical and/or radiological hazmats.

- Chemical attack – chlorine tank explosion
- 10 KT improvised nuclear device
- Chemical attack – blister agent
- Chemical attack – toxic industrial chemicals
- Chemical attack – nerve agent
- Radiological dispersal device
Cyanide locations

Locations of Known Cyanide Users, Processors, Manufacturers, Distributors and Cyanide Waste Receivers &/or Generators

Legend
△ Location of Cyanide Facility

Dataset comprised of CERCLIS (Superfund) facilities, Cyanide Manufacturers, Non Ferrous Metal Mines, Biannual Reporting System (BRS) Generators and Waste Receivers, and Toxic Release Inventory (TRI) Producers and Releases.
Recent hazmat incidents – potential poisonings

- 12/4/2011, Pa, CBS Philly.com; “200 Seek Treatment After Hazmat Situation At Father Judge High”
- 12/5/2011, Wa., GOSKAIT.com; “Island Hospital staff, patients temporarily evacuated”
- 12/10/2011, Ok, Norman Transcript; “Hospital contains chemo spill”
- 2/13/2012, Ca, KTVU.com; “Hazmat spill at Monterey hotel sends 17 to hospital”
Recent hazmat incidents – potential poisonings

- 3/30/2012, Ca, KGET; “HAZMAT response after school bus gets sprayed with pesticide”
- 3/31/2012, Ca, AP; “Carbon dioxide leak sends more than 90 workers at N. Calif food processing plant to hospital”
- 4/1/2012, Fl, Palm Beach Post; “Suicide attempt by poison sickens rescuers, shuts down Margate hospital”
- 4/10/2012, Ma, Boston Globe; “Police officers, ambulance crew taken to hospital after toxic suicide in South End”
- 4/30/2012, Tx, KLTV; “Official: Quitman ER exposed to ‘Temik’”
- 5/2/2012, Or, KGW.com; “Police: St. Helens neighbor feud leads to chemical attack”
Local hazmat incidents – potential poisonings

- 3/7/2011, Denham Springs, WBRZ; “Glue spill stops traffic near Denham Springs”
- 5/18/2011, Baton Rouge, WBRZ; “LSU gives all-clear after Hazmat spill”
- 6/15/2011, New Iberia, WBRZ; “Fire continues to burn at New Iberia chemical plant”
- 2/15/2012, Gulf Port, Miss, WBRZ; “Miss. hazmat spill could take days to clean”
- 3/28/2012, Donaldsonville, NBC33News; “Hazmat situation in Donaldsonville sends at least one to hospital”
- 5/22/2012, Port Allen, WBRZ; “Evacuation, road closure in WBR continues”
- 6/1/2012, Donaldsonville, The Advocate; “Chemical complex loses power”

- Time: October 25, 1995; 4:45pm
- Transportation mode: Rail
- Accident type: tank car failure w release of poisonous and corrosive gas
- Material released: Nitrogen Tetroxide (poisonous oxidizer)
- Injured: 4710 treated at area hospitals, 81 admitted
- Evacuated: 3,000
A few hazmats around the state
Lafayette area
Methanol

Date: August 11, 2010

Time of ID: 1205

Parish: Lafayette

City: Lafayette

Event Type: Hazardous Materials

Description: 18 wheeliner overturned on I-49, 2 miles north of I-10 heading north bound. Appears liquid methanol leaking. I-49 north bound lane and service road closed.

Latitude: 30.285631, Longitude: -92.024587

LSP Reference #: 10-04564

Directions: To here - From here
Gas well blowout
Radiation hazmat

Date: January 19, 2011
Time of IDL: 1429
Parish: Iberia
City: Jeanerette
Event Type: Hazardous Materials

Description: A substitute teacher at Jeanerette Senior High School discovered 2 metal pipes that contain radiation. One of the pipes is in the teacher's car. The other one is at a residence. Requesting assistance from State Police Hazmat.

Update 1438: There is a possibility that it may be a drill pipe, not any type of explosive device.

Update 1634: Situation all clear. It was a drill pipe that was brought to a salvage yard to sell. The salvage company found it to have traces of radiation.

Latitude: 29.931689, Longitude: -91.684005
LSP Reference #: 11-00333

Directions: To here - From here
Hazmats on I-20 – a 24 hr study
(DOTD 2006)
Disaster incident characteristics

- Timing (24/7/365)
- Can be multifocal
- Impact many people
- Immediate and/or delayed effects
- Forensics
Hazmat medical management includes:

- Response and consumer needs include
  - Situational awareness for leadership
    - Local responders
    - Community leadership
    - State leadership
    - Federal and national
  - Communications
  - Expert medical guidance/direction
  - Follow-up
The Louisiana Poison Center

• A Public Safety Access Point (PSAP)
  • Primary Hazmat / Poisoning management resource
    • Directions & Guidance
      • Public
      • Providers
      • Leadership
  • Accessible
    • 1-800-222-1222
    • 24/7/365
  • Resourced
    • (SPI) – “Specialist of Poison Information”
    • Medical toxicologists
    • Standard of care
Louisiana Poison Center – Emergency Preparedness Roles

- Preparedness
  - Education
  - Planning
- Response
  - Individual & small-scale incidents
  - Large-scale incidents
  - Follow-up
Louisiana Poison Center - Roles

- Preparedness /Education
  - Regional Medical Trainings (RMTs)
  - The “NEXUS” series
  - Advanced Hazmat Life Support (AHLS)
  - Site-specific preparedness education
Raising Medical Awareness of Nuclear, Biological & Chemical (NBC) Agents
Education – “NEXUS”

- **Topics**
  - **Antidotes**
  - **Hydrocarbons**
  - **Hydrofluoric Acid**
  - **Toxic Alcohols - Methanol, Ethanol, Ethylene Glycol, Diethylene Glycol**
  - **Defoliants**
  - **Fumigants: Sulfuryl Fluoride and Methyl Bromide**
  - **INH, Hydrazine and Monomethylhydrazine**
  - **Chlorinated and Halogenated Hydrocarbons**
Education – “NEXUS”

• Topics
  • Toxic substances encountered on a natural gas drilling site
  • Epidemiology of Poisoning utilizing poison center data
  • What is the National Poison Data System (NPDS)
  • Rodenticides & Pesticides Part I - Anticoagulants, Calciferols, Bromethalin
  • Rodenticides & Pesticides Part 2 - Metal Phosphides, Strychnine,
  • Pyrethrins and Pyrethroids
  • Things that go boom at a meth lab
Education –

Advanced Hazmat Life Support

- AHLS Provider Course (2 days)
  - An advanced, comprehensive 16-hour, two-day course that gives health professionals a timely and effective response strategy in the medical management of hazmat incidents.

  - Learn how to:
    - Rapidly assess hazmat patients
    - Recognize toxic syndromes (toxidromes)
    - Apply the poisoning treatment paradigm
    - Identify and administer specific antidotes
Education –
Advanced Hazmat Life Support

**Syllabus:**
- Hazardous Materials Epidemiology
- Toxic Inhalations
- Pesticide Poisoning
- Interactive Case Studies
- Toxic Terrorism
- Corrosives, Hydrocarbons, & Halogenated Hydrocarbons
- Miscellaneous Toxicants
- Antidotes
- Provider Exam
Louisiana Poison Center - Roles

- Preparedness / Planning
  - CHEMPACK
  - CDC/ATSDR
  - Surveillance
  - HHS/ASPR/HPP Grant Advisory Board
  - Pandemic surge planning
  - Shreveport MMRS
  - Hurricane Shelter Pharmacy Planning
Response - B.P. Gulf Horizon Oil

April 20, 2010

Est. 92,340,117 gallons leaked (U.S.)
Response - Potential Incident-related Chemical Exposures

- From oil and cleaning chemicals:
  - Volatile Organic Compounds (VOC)
  - Poly Aromatic Hydrocarbons (PAH)
  - Hydrogen sulfide ($\text{H}_2\text{S}$)

- From combustion sources:
  - Volatile Organic Compounds (VOC)
  - Poly Aromatic Hydrocarbons (PAH)
  - Aldehydes
  - Carbon monoxide (CO)
  - Particulates
Response - B.P. Gulf Horizon Incident & Louisiana Poison Center

- Coordination with
  - National Unified Command
    - British Petroleum
    - HHS/CDC
    - American Association of Poison Control Centers
  - State
    - Louisiana DHH
    - Governor’s Office
  - Local medical infrastructure
LPC = Situational awareness and exposure medical management.

- Event public health impact?
- Impact to medical infrastructure?
- Exposure Surveillance
  - Workers
  - Non-workers
  - Ages
  - Major complaints
  - Locations
Summary – *Who ya gonna call?*

- Threat incidents
- Hazmats in Louisiana
- Requirements for hazmat medical management:
  - The Louisiana Poison Center
- LPC - Preparedness Roles
  - Education
  - Planning
- LPC - Response Roles
  - BP Gulf Horizon
- Who ya’ gonna call? - 1-800-222-1222
Thank you,
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