FBI Weapons of Mass Destruction (WMD) Program

Overview

Special Agent Santos DeLeon
WMD Coordinator
FBI San Juan
Overview

• FBI Organization and WMD Assets
  • Structure, WMD Coordinators, Lab/HERT

• WMD Statutes and Authorities
  • PPD-25, 18 USC 175

• FBI Response Process
  • Threat Credibility Evaluation (TCE)
  • Overt vs. Covert

• Case Studies
FBI Responsibilities

• Identify, detect, deter and disrupt terrorist operations before they occur

• Lead law enforcement operations in a terrorist incident

• Primary jurisdiction to investigate, apprehend and prosecute those responsible for acts of terrorism

  WMD nexus: responsibility of WMD Directorate
What Are WMD?

• Weapons of Mass Destruction defined in US law (18 USC § 2332a):
  ▪ “Any explosive device as defined in section 921 of this title (i.e. explosive device);
  ▪ Any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors;
  ▪ Any weapon involving a biological agent, toxin, or vector (as those terms are defined in section 178 of this title);
  ▪ Any weapon that is designed to release radiation or radioactivity at a level dangerous to human life.”

• WMD is often referred to by the collection of weapons modalities: chemical, biological, radiological, nuclear, and explosive (CBRNE).
FBI Response Capabilities

- 365, 24-7 Local, Regional, National, International response capability
- WMD Coordinators
- HAZMAT/Operational Response Teams
- Evidence Response Teams
- Laboratory Assets
  - Scientists and SMEs
FBI HQ: Laboratory (Quantico, VA)

- 500+ scientific experts
  - Provide forensic exams, technical support, expert witness testimony, advanced training, etc.
- Does not analyze hazardous material (BSL-2 max)
  - Must be rendered safe before transported to FBI Lab
  - Forensic analysis done at National BioForensic Analysis Center (NBFAC)
WMD Coordinators

- Present in all 56 Field Offices (at least one per office)
- Responsible for Liaison with Federal regional counterparts, state, county and local agencies
- A conduit to FBIHQ and partner agencies for operational planning, technical information and advice
- Focused on pre-event planning and prevention
- Responsible for the Threat Credibility Evaluation and assisting with WMD investigations
WMD Statutes and Authorities
Weapons of Mass Destruction Definitions

- **(Explosives)** - Any explosive or incendiary device as defined in Title 18 USC, Section 921: bomb, grenade, rocket, etc.

- **(Chemicals)** - Any weapon designed or intended to cause death or serious injury through the release or impact of toxic or poisonous chemicals, or their precursors.

- **(Biologicals)** - Any weapon involving a disease organism

- **(Nuc/Rad)** - Any weapon that is designed to release radioactivity at a level dangerous to human life
WMD Statutes

• Statutes
  – 18 USC §2332a (general WMD statute)
  – 18 USC §175 (biological weapons)
    • Crime to develop, transfer, possess, etc. any bio agent if not for peaceful purposes
    • Crime to posses or transfer select agent if not registered
  – 18 USC §876 (mailing threatening communications)
  – 18 USC §1038 (hoaxes and false statements)
FBI WMD Response Process

Potential WMD or terrorist threat/incident:
- CBRN-E
- Suspicious People/Packages/Vehicles
- Active Shooter
- Threats

911 Call…

State/Local First Responders

Notification to FBI JTTF / WMDC
FBI Interagency Partners

CBRN Team
Directorate of Strategic Operational Planning
Infrastructure and Transportation Group

Strategy and Evaluation

CBRN Terrorism, Proliferation and Arms Control (OPS 2B Group)

CTD, CIRG, Lab, DI, CD

Office of Crisis Response and Incident Mgmt., WMD, and Resilience
International Partnerships

- FBI WMD Special Agents in Singapore, Dubai, and Tbilisi
- INTERPOL CBRNe Program
- UN Components such as OPCW, WHO, IAEA, etc
- EU Explosive Experts
“If people of authority engaged in jihad determine that the evil of the infidels can be repelled only by their means, they [WMD] may be used. The weapons of mass destruction will kill any of the infidels on whom they fall, regardless of whether they are fighters, women, or children. They will destroy and burn their land. The arguments for the permissibility of this are many.”

“The arguments of scholars also prove the permissibility of so-called biological weapons. Some of them explicitly permit bombarding the infidels with snakes and scorpions and poisoning their water.”

- WMD Fatwa from a Saudi Cleric in May 2003
“... experts in the fields of chemistry, physics, administration, electronics and media and all the specifications, especially the atomists and explosives engineering experts, ... we are in dire need of you. The field of jihad can satisfy your scientific ambitions, and the large American bases in Iraq are good places to test your unconventional weapons, whether biological or dirty ...”

-Abu Hamza al-Muhajer’s, al-Qa’ida in Iraq
in September 2006
Accomplish the Mission

- Educating Federal, State, Local first responders (training)
- Testing Federal, State and Local first responders (exercises)
- Generating intelligence (outreach/tripwires)
FBI WMD Response

• Chemical
  – Plants
  – Interstates
  – Universities
• Biological
  – Universities
  – Research Labs
  – SynBio/DiyBio
• Nuclear/Rad
  – Plants
  – Construction
  – Hospitals
• Explosive
  – Homemade
  – Construction
  – Commercial
Chemical Weapons are deemed less of a threat than Toxic Industrial Chemicals (TICs).
Indicators

Sanity Claws
001 North Poll Rode
Somewhere Cold

SPECIAL
ARD-MAIL

ATTENTION
OPEN!

PERSONAL

To:
DANA GRAVES

CONFIDENTIAL

[Redacted]

[Redacted]

EYES-ONLY

[Redacted]
Toxic Industrial Chemicals (TICs)

- Chemicals found in manufacturing facilities, maintenance areas, and storage areas that have an LC50 value of less than 100,000 mg-min/m³ in any mammalian species and are produced in quantities greater than 30 tons/year.
- Class 2 – Gases
- Class 3 – Liquids
- Class 4 – Flammable Solids
- Class 5 – Oxidizers/Organic Peroxides
- Class 6 – Poisons
- Class 8 – Corrosives
- Class 9 - Miscellaneous
Chlorine Attacks in Iraq

- Numerous attacks utilizing explosives and chlorine containers (2006 – 2007)

- 150-pound and one-ton chlorine containers available in Iraq

- No 90-ton chlorine railcars in Iraq
Chlorine in the U.S.

- 11 million tons produced in U.S. (2008)
- 2nd most abundantly rail transported TIC
- Nearly 34,000 rail shipments in U.S. (2007)
- More toxic than most abundantly shipped TIC (anhydrous ammonia)

90-Ton Chlorine Railcar
Precursor Chemicals

- Wide availability for commercial purchase.
  - hydrogen peroxide, acetone, strong acids, cyanides, oxidizers etc.

- Legitimate use of products in various industries make them difficult to regulate
  - hydrogen peroxide used widely in numerous industries (hair care, cleaning, health)
Pool Chemicals as Precursors

- Hydrogen Peroxide
- Hydrochloric/Muriatic Acid
- Potassium Permanganate
- Calcium Hypochlorite

+ Acetone = TATP
Chemicals as Explosives

- Household, industrial, and agricultural chemicals have been used in conventional explosive attacks

Joel Henry Hinrichs

10/1/05
Chemicals as Explosives
Chemicals as Explosives

• Household, industrial, and agricultural chemicals have been used in conventional explosive attacks
  • Oklahoma City bombing
  • WTC 1993 bombing

• Chemicals
  • Fertilizers
    Ammonium nitrate, urea
  • Oxidizers
    Hydrogen peroxide (in TATP)
  • Solvents
    Acetone, Methyl Ethyl Ketone
  • Acids
    Sulfuric, Nitric
  • Fuels
    Diesel, nitromethane
Times Square Bomb

• Vehicle-Borne Improvised Incendiary Device (VBIIED) May 1, 2010

• The Times Square device consisted of an attempted fertilizer main charge, 3 propane tanks, 2 gas containers, several hundred M-88 pyrotechnic devices, and a dual fuzing system consisting of both electric and non-electric systems
Orientation of devices from attempted Times Square bombing.
Umar Farouk Abdulmutallab

Al Qaeda takes credit for plot to down plane

Saved by a bad detonator

Underwear bomber uncovers opportunities

Stripped of reason Scanning all, seeing nothing
The Attempted Bombing of Northwest Airlines Flight 253
Probable Explosive Train

Syringe Initiator

- Tape
- Ethylene Glycol Residues
- Space
- Plastic
- Tip

K Mn O

TATP
(Residues found on Main Charge Container and Syringe)

PETN
Main Explosive Charge
(Contained in bag covered with clear tape)

Ethylene Glycol mixed with possible KMnO₄ creates a fire that causes TATP to detonate thus detonating PETN.

LEGEND
- Chemical Confirmed By Analysis
- K, Mn, O elements found in solid residues on Syringe. Possibly indicative of Potassium Permanganate (KMnO₄) Oxidizer
Staying A Step Ahead....

Countermeasures employed by Najibullah Zazi:

• Placed multiple items on counter to disguise true intention (hair rollers, shower cap)
• Only placed one peroxide bottle on counter

• **Bottom Line: Outreach, Education, Partnerships, TRIPWIRES**
Suspicious Behavior

Common Indicators of Suspicious Behavior

- Surveillance of trucks, buildings, work sites
- Nervous or evasive customer attitude
- Unusual questions about security procedures
- Approach from unknown customers or vendors
- Questions about security procedures
TCE Video

Video (10 mins)
FBI Threat Credibility Evaluation (TCE)
http://vimeo.com/85657144
Questions?

Special Agent Santos DeLeón
WMD Coordinator, FBI San Juan
srdeleon@fbi.gov – 787-994-0346