Terrorism Awareness: Weapons Of Mass Destruction: Part V, Protective and Response Actions

P Smith

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Abstract

This article written in 5 parts. It covers the fields of terrorism awareness and some of the weapons used by terrorists: chemical, biological, radiological and explosive weapons.

PROTECTIVE AND RESPONSE ACTIONS

As with all types of terrorist or possible WMD incidents, like hazardous materials incidents, call for trained help. This could be a combination of your own and off site responders, or from existing mutual aide agreements or outside resources, like Police, Fire and EMS.

Every Emergency Response Person (ERP) and facility needs to understand if you have a WMD or terrorist event at your facility, only local and pre-existing mutual aide responders and agencies will be available to help. State and Federal resources usually take 12 to 24 hours to be deployed. This is why it is so important that every potential target, which is every industrial facility, be prepared to respond to an incident.

Every facility should have a preplan for the facility and the different production, storage and usage areas. These preplans help you develop strategies and tactics prior to an actual emergency in this area or the facility. The same idea can apply to preparing for a terrorist or WMD incident. Preplan for this as you would for a fire, confined space / high angle rescue or hazardous materials incident.

If you are not in the process of or have a company policy in place to handle threats or incidents, then you are behind in the game. This is going to be the determining factor on how the incident goes.

A preplan is a good place to start, but every facility should already be operating under a good Incident Management System (IMS) or Incident Command System. These systems will allow you to start controlling the incident, organizing the resources and prioritizing your goals and objectives.

OSHA, CFR 1910.120 mandates every response organization responding to a hazardous materials incident operate with some type of IMS or ICS. Each allows you to plug in the different resources required as needed. Your company or communities disaster plan or Local Community Emergency Action Plan should be reviewed and a copy available to the ERP at all times. They give you the latest resources available, organizations available to respond, goals and objectives you will need to know and accomplish during an incident.

As a ERP, security officer or facility manager, you are considered an Awareness or Operations Level Responder. In CFR 1910.120, the Awareness Responder usually discovers the incident, calls for help or is called to help secure the area. The Operations Responder is called to perform defensive actions. As with a Hazardous Materials Incident, a WMD Incident can receive some of the same basic types of actions. All levels of responders can perform the I.E.D. of this type of incident.

I - Isolate the area, product, agent, release or device.
E - Evacuate the area.
D - Deny entry to everyone, including would be rescuers.
C - Call for trained help, or for additional trained help.

Remember all WMD or terrorist events are considered Super Hazardous Materials Incidents and crime scenes.

Under OSHA CFR 1910.120, there are several levels of responders. Awareness, Operations and Technician Level Responders. These levels can be applied to a terrorist or

WMD incident in the following manners.

The Awareness Level Responders should be capable of identifying that the incident could possibly be a terrorist or WMD incident. This level responder should be able to initiate the I.E.D.C. rule for responding to a hazardous materials incident, while remembering the most important key, “Performing these functions from a safe distance.”

The Operations Level Responder should be capable of identifying that the incident could possibly be a terrorist or WMD incident. Be able to initiate the I.E.D.C. rule for responding to a hazardous materials incident. Understand, structural fire gear with SCBA will offer only LIMITED protection for non-extended rescue operations. Remember that the operations level is primarily a defensive function. Be able to provide for emergency self decon and set up for a Mass Casualty Decon. Refer to appendix three, MFRD CBR Incident Guide.

The Technician Level Responder: NOTE: This course is part of the Department of Justice's Domestic Preparedness Program. It is taught at the Center for Domestic Preparedness at Fort McClellan, Anniston, Alabama. Specialized training and equipment are required to enter any hot zone or incident involving a COBRA (Chemical, Ordinance, Biological, or Radiological Agent). Standard Level A and B equipment may not be effective in protecting responders in an incident involving a nerve, biological or radiological agent. Technicians should be capable of identifying that the incident could possibly be a terrorist or WMD incident. Be able to initiate the I.E.D.C. rule for responding to a hazardous materials incident. Understand, structural fire gear with SCBA will offer only LIMITED protection for non-extended rescue operations. Be able to provide for emergency self decon and set up for a Mass Casualty Decon. Refer to appendix three, MFRD CBR Incident Guide.

Concerning decon, the Alabama Departments of Environmental Management (ADEM) agrees with the Department of Justice, the Environmental Protection Agency (EPA) and other agencies. If you have to decon only a few patients, attempt to contain the run-off. If it is a true mass causality incident and decon, then life comes first. Run-off doesn't need to be recovered or contained, unless it is Radiological. The amount of water it will take to decon the mass of patients should dilute the agents. If you have any concerns, pool chlorine can be flushed through the area, once the patients have been taken care of.

Radiological incidents, no matter the size or number of victims, should have all run-off contained or recovered. Chemical and Biological agents start to breakdown quickly when exposed to sunlight, but the Radioactive agents do not.

THE BUILDING BLOCKS

The training we have received in the past will be building blocks for any present and future threats. Industry has always pushed to be prepared to protect their employees and the surrounding community. Safety has and will always be a key point in every facility's emergency action plan.

Our fire brigades, haz-mat teams, rescue teams and EMS crews have been providing a safe environment for many years. The training they have received in traditional hazardous materials response will be a big key to handling these types of events.

We discussed earlier the guidelines to be used for responding to a radiological emergency. These are the building blocks we will use to protect our responders, employees and the community in the event of a WMD or terrorist attack.

TIME, DISTANCE AND SHIELDING (TDS)

As discussed earlier, you have the general understanding of how time, distance and shielding work with a radiological incident. Now we are going to talk about how TDS can work to help protect you, your responders, employees and the community.

CHEMICAL AGENTS (INDUSTRIAL CHEMICALS OR MILITARY AGENTS)

Time - Limit the contact or exposure time. These types of agents can cause serious injury and / or death in a short time period, minutes to hours. As the length of time from the release increase the product may slowly start to break down.

Distance - All of these agents have different isolation and protection distances, depending on the amount released. Over 55 gallons or under 55 gallons, the distances range from 200 feet to 7 plus miles. The attached appendix has a detailed listings for each agent in the Mobile Fire-Rescue Department's Chemical, Biological and Radiological (MFRD CBR) Incident Response Guide. Always stay up hill, up wind and away from contaminated areas unless properly protected. Treat all victims as being possibly contaminated and decon them as stated previously.

Shielding – Proper / Compatible PPE should be utilized. At a

minimum, respiratory and vapor (approved Level A) protection should be used. Fire gear with SCBA will offer only limited protection for Non-Extended Rescue Operations.

BIOLOGICAL AGENTS (ETIOLOGICAL AGENTS)

Time - Limit the contact or exposure time. Most agents only take a small amount (micrograms) to infect. Most incubation periods are anywhere from 4 hours too as high as 21 days.

Distance - The NAERG recommends isolation distances be approximately 30 to 80 feet in all directions. Possibly even further down wind or stream if needed. You should keep anyone potentially contaminated isolated until they can be properly decontaminated.

Shielding – Proper / Compatible PPE should be utilized. At a minimum, respiratory and splash protection should be used. Fire gear with SCBA will offer only limited protection for Non-Extended Rescue Operations.

RADIOLOGICAL AGENTS

Time – Limiting the length of exposure, which directly relates to the dose received.

Distance - The further away from the source the less dose received.

Shielding – Proper / Compatible PPE or objects between you and the source. Fire gear with SCBA will offer only limited protection for Non-Extended Rescue Operations.

EXPLOSIVE ORDINANCE (BOMBS AND INCENDIARY DEVICES)

Time - The shortest amount you have to spend in the proximity of a device or potential device the better. They can detonate in hundredths of a second. When in doubt, stop, look, listen and wait, from a great distance.

Distance - The NAERG recommends at least 3,000 feet in all direction from the device or potential device for employees and the general public. At least 1,000 feet in all directions for ERP.

Shielding - Avoid line of sight with a device or potential device. The old saying goes, “if you can see the bomb (device) then the bomb (device) can see you.” Place the largest apparatus or a fixed structure between you and the device or potential device. Beware of possible structural collapse and shrapnel if the device detonates. Beware and look for possible secondary devices, Isolate, Evacuate, Deny entry and Call for trained help (Bomb Squad or Explosive Ordnance Disposal Team, EOD). Use your company's policy on bomb threats to determine how involved your personnel will become in searching for a device. Remember, if the device detonates and your team was looking for it, they could now be part of the problem.

PUTTING IT ALL TOGETHER

To a certain extent, you must think like a terrorist. They want the most bang for the buck. The more destruction, fear, economic disruption, and loss of time or panic they can cause, the more satisfied they will be.

Its not always going to be the big terrorist or WMD attack that causes the most problems. It could be bomb threat, someone placing a foreign object on the railroad tracks or it could be as simple as someone turning a valve on a tank or transportation vehicle and walking away. The actions of a terrorist can be devastating, but the threat or fear of an attack is just as devastating, if not worse. You can have all the training, equipment, and personnel in the world to respond to an incident or protect your facility and community. That still is not enough to protect the human mind from being afraid.

Safety is everyone's number one priority. The lives of our responders, employees and the community as a whole. As responders we should view safety in three lights.

- Personal Safety.
- Partner or Team Safety.
- Patient(s) or Victim(s) Safety.

After assuring the first two are as safe as possible, then we will take care of the third. If we become contaminated, exposed, injured or killed, we are now part of the problem. Who is left to handle the problem?

Start planning for the present and future now. Don't be caught unprepared for what could be your, the company's and the community's worst nightmare.

RESOURCES

United States Department of Justice
Center for Domestic Preparedness
Office of Justice Programs Manuals

United States Department of Transportation (DOT)

United States Environmental Protection Agency (EPA)

State of Alabama
Emergency Management Agency
Anti-Terrorism
Personal Security Planning Guide
(Alabama Dept of Public Safety)
(Alabama National Guard)
(Georgia Emergency Management)
(The Federal Bureau of Investigations)
(The Federal Emergency Management Agency)

Alabama Department of Environmental Management (ADEM)

The National Fire Academy
Emergency Response to Terrorism

The Mobile Alabama Fire-Rescue Department
Chemical, Biological and Radiological
Incident Response Guide

The History Channel Special Reports and Documentaries

Journal of American Medical Association August 1997

Southern Poverty Law Center (SPLC)

APPENDIX 1
ANTHRAX ADVISORY

From: WMD Operations Unit of the Federal Bureau of Investigation (FBI)

December 1998

Recently, there have been numerous anthrax scares caused by hoax letters advising the reader (victim) that anthrax was contained within the envelope. Some of these letters were found to contain a form of inert power (such as baby powder, detergent, or other common household materials) with an accompanying note advising the recipient that her or she had been exposed to anthrax. Other notes have merely contained the written statement advising the reader of the presence of anthrax, although no foreign substance was contained within the envelope. The reaction to these events by WMD first responders has resulted in quarantine, evacuation, decontamination, and chemoprophylaxis efforts. All cases thus far have been hoaxes.

First responders and potential victims should note that Anthrax spores are harmful only if inhaled, ingested, or introduced into an open wound or the eyes. Persons exposed to anthrax are not contagious and quarantine is thus not appropriate.

All first responders should follow local protocols for hazardous materials incidents involving biological hazards. Upon receipt of a threat, a thorough hazard risk assessment should be conducted. Upon notification, the FBI will coordinate a risk assessment in conjunction with the health department and other authorities on biological agents to ensure timely dissemination of appropriate technical advice.

Any contaminated evidence gathered at the scene should e triple-bagged. Individuals should be advised to wait for laboratory test result, which will be available within 48 hours. These individuals do NOT need to be placed on chemoprophylaxis while awaiting laboratory test results to determine whether an infectious agent was present.

The individual needs to be instructed that if they become ill before laboratory results are available, they should immediately contact their local health department and proceed immediately to a pre-determined emergency department, where they should inform the attending staff of their potential exposure.

Responders can be protected from anthrax spores by donning splash protection, gloves, and a full-face respirator with High Efficiency Particulate Air Filters (HEPA) (Level C) or self-contained breathing apparatus (SCBA) (Level-B). Victims who may be in the immediate area and are potentially contaminated should be decontaminated with sop and water; no bleach solutions are required. A 1:10 dilution of household bleach (i.e., Clorox-5.25% hypochlorite) should only be used if there is confirmation of the agent and an inability to remove the materials through soap and water decontamination. Additionally, the use of bleach decontamination is only recommended after soap and water decontamination, and should be rinsed off after 10 to 15 minutes.

Technical assistance can be immediately provided by contacting the National Response Center at (800) 424-8802.

IMPORTANT:

If the envelope or package remains sealed (not opened), then first responders should not take an action other than notifying the FBI and packaging the evidence. Quarantine, evacuation, decontamination, and chemoprophylaxis efforts are NOT indicated if the envelope or package remains sealed.

Also, anthrax will likely be visible as a powder or powder residue. The absence of visible powder is a strong indicator

that anthrax is not present.

The use or threatened us of a weapon of mass destruction (including anthrax) s a violation of federal law. See Title 18 United States Code, Section 175 and Section 2332a. It should be reported to the FBI immediately.

This information is provided by the WMD Operations Unit of the Federal Bureau of Investigation and the National domestic Preparedness Office (NDPO), in coordination with the Centers for Disease Control, the Department of Health and Human Services/Office of Emergency Preparedness, and the U. S. Army Medical Research Institute of Infectious Diseases (USAMRIID). The NDPO was established to coordinate the Federal Government's efforts to prepare the nation's response community for threats involving Weapons of Mass Destruction. Contact you local FBI office if confronted by a WMD threat.

APPENDIX 2

Phone Report for Bomb Threats

Date and Time:

What did the caller say?

Location of the device (bomb):

Description of the package or device (bomb):

When will it explode?

What will cause it to explode?

Can it be deactivated? Yes / No
If so How?

Why was it placed there?

Did you place it there? Yes / No
Why?

APPENDIX 3

BOMB THREAT CALLER IDENTIFICATION WORKSHEET

Did the caller identify him or herself or group? Yes No
Name:

Sex of caller: Male - Female

Age (approximately how old): Adult - Child

Origin of Call: Local - Long Distance - Internal

Callers Voice:

Figure 1

_____ Loud	_____ Soft	_____ Fast	_____ Slow
_____ Deep	_____ Squeaky	_____ Distant	_____ Distorted
_____ Sincere	_____ Raspy	_____ Stressed	_____ Stutter
_____ Nasal	_____ Drunken	_____ Slurred	_____ Lisp
_____ Disguised	_____ Crying	_____ Broken	_____ Calm
_____ Irrational	_____ Rational	_____ Angry	_____ Incoherent
_____ Excited	_____ Laughing	_____ Righteous	_____ Accent
_____ Scared	_____ Hesitant	_____ Unsure	_____ Confident
_____ Other: _____ _____			

Background Noises:

Figure 2

_____ Voices	_____ Trains	_____ Airplanes	_____ Street Traffic
_____ Animals	_____ Party	_____ Quiet	_____ Factory Machines
_____ Music	_____ Horns	_____ Bells	_____ Office Machines
_____ Other: _____ _____			

Familiarity:

Did the caller sound familiar? Yes No
If so how?

Did the caller appear to be familiar with the facility or location the device or bomb was supposed to have been placed? Yes No If so how?

Name and title of person receiving the call:

Telephone number the call was received on:

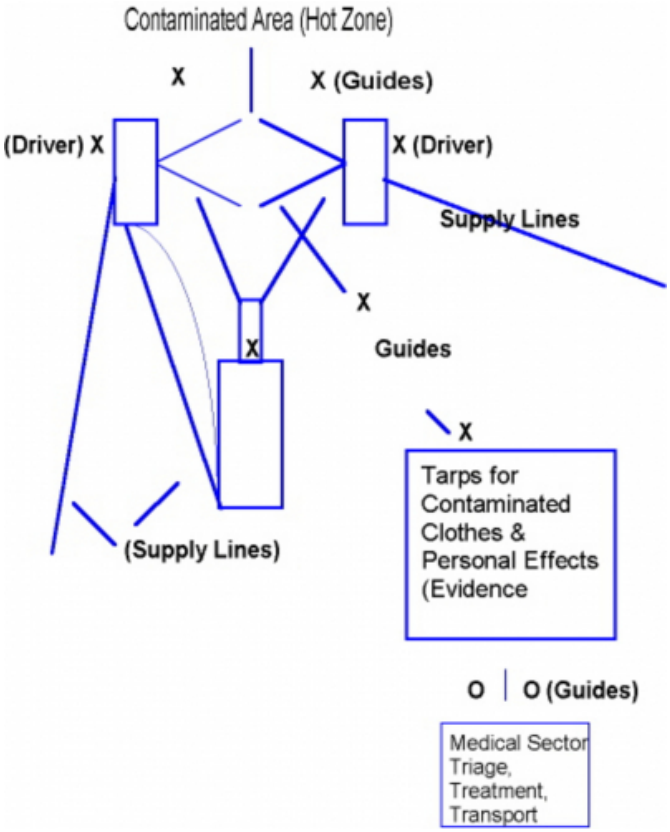
Extension:

Immediately after the call, report the threat to Security, The Senior Facility Manager, Local Police and Fire (if applicable)

APPENDIX 4

Mobile Fire-Rescue Department: Chemical, Biological, And Radiological Incident Response Guide

Figure 3



References

Author Information

Paul R Smith, REMTP
Fire Service Captain, Rural/Metro Emergency Response Training, Florida 1 DMAT, Mobile Fire Rescue Department