

Module 2: Incidents and Indicators

Terminal Objective: At the completion of this module you will be able to describe factors that indicate a terrorism incident, the types of incidents, and associated responder activities.

Enabling Objectives

After completing this module, you will be able to:

- recognize the chief indicators of a crime scene;
- identify appropriate responder activities and considerations at a crime scene;
- differentiate between the purposes of threat assessment and risk assessment; and
- identify outward warning signs and indicators of the five generic agents.

ASSURING A SAFE RESPONSE TO A POTENTIAL CRIME SCENE

There are many similarities between terrorism scene responses and the more common crime scenes to which public safety agencies respond. While law enforcement officers are well versed in crime scene investigations, the majority of fire, emergency medical services (EMS), military, and emergency management personnel are not. It is critical that you understand the special demands placed upon you and your activities when responding to crime scenes. To begin with, always maintain situational awareness--not just on calls that may be suspicious--but on any calls. Your situational awareness may be based on information from communicators, personnel already on scene, from your initial or later observations, or other sources.

Any response to an incident other than a natural disaster may be a response to a

crime scene. Most often, your response will be to an incident that will be categorized as something other than terrorism. There are many reasons for this. Here are two examples: 1) Terrorists rarely "prewarn" or announce in advance that they are planning to carry out a terrorism incident at a particular time and location, or of a particular type. 2) Although the specific methodology of a terrorism incident may be quite broad, in actuality terrorists most probably will use one of the CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosive) agents discussed in Module 1. Each of these could be masked as a **nonterrorism** incident: a chemical spill as an industrial accident or a disease outbreak as a natural occurrence, for example. Firefighters may be first responders to arson scenes. EMS personnel may be called upon to administer aid to victims of a violent crime. Hazardous materials teams frequently respond to sites of clandestine dumping or intentional releases of chemicals. Military forces, such as the Marine Corps Chemical Biological Incident Response Force or National Guard Civil Support Teams, may be called upon to respond to chemical or biological incidents.

At a terrorism crime scene, you will need to coordinate closely with other first-responding fire, EMS, and law enforcement personnel to ensure that you and the other responders do not destroy important evidence and that you stay safe.

Depending on the incident you may also have to coordinate closely with public health, military personnel, public works, elected officials, public information

officers, nongovernmental groups (such as the American Red Cross, the Medical Reserve Corps, or the Community Emergency Response Team) the media, and others.

Remember that even when the emergency phase of the incident is over, the incident itself has not ended. The incident ends only when there is successful prosecution of the guilty person(s). It may, in fact, be years before all perpetrators are captured, prosecution occurs, and appeals are completed.

As a first responder, you should be aware of warning signs that indicate criminal activity, because some incidents will involve criminal acts.

Avoid Impeding the Investigation

Be sure to coordinate your actions with law enforcement operations. Basically, there are three ways to help solve a crime: the confession of the perpetrator, statements provided by witnesses or victims, and incriminating information obtained through physical evidence. Of these, only physical evidence provides incontestable, impartial facts. Only physical evidence can overcome the conflicting and confusing statements of witnesses who, observing the same incident at essentially the same time, nonetheless have different perceptions of what took place.

Physical evidence may be crucial to connect the perpetrator to the scene. The recognition, collection, and preservation of physical evidence may be the only means to identify, and successfully prosecute, those responsible. Your job

will not be to collect evidence, but rather to simply recognize it and preserve it. Not touching such an object, while noting its location, serves both those functions. Keep this in mind when arriving at any potential crime scene.

If you are involved with a terrorist incident as a first responder, you essentially become part of the crime scene. As they do with any material witness, law enforcement personnel likely will interview you at some point. You may be required to testify in court as to what you saw, did, and did not do. Thus, writing down your observations as soon as it is safe to do so may serve as important "memory joggers" years later when a case comes to trial. Just bear in mind that such notes may be entered into evidence. Sometimes doing something inappropriate is more detrimental to solving the crime than doing nothing at all. Keep in mind that cases have been lost in court due to the imprudent actions of first responders, whether fire, police, or emergency medical responders.

Scene Considerations

Your response to the scene of a potential terrorist attack could involve entry into a hazardous area. Deadly radioactive, chemical, or biological agents already may have contaminated the atmosphere around the scene. The presence of fires or collapsed building sections may intensify thermal and mechanical risk. You can hope to survive only by entering this area very carefully: by moving cautiously and by wearing the appropriate personal protective equipment (PPE). Life safety--including **your** life--is the highest priority at any scene.

Delaying Entry May Be Wisest

When you suspect hazardous substances or conditions, use only qualified personnel to secure the scene. Hazardous materials teams may have sufficient detection and monitoring equipment to define the hazard. Similarly, bomb squad members may have sufficient detection and monitoring equipment to define an explosives hazard. Otherwise, it may be necessary for you to await the arrival of additional resources before you can attempt entry into the hazardous area. Such "wait time" can be used to reassess your situational awareness observations.

Any appropriate response to the site of a determined mass biological, chemical, or radiological attack may require decontamination of equipment, entry personnel, survivors, and casualties. The emergency decontamination process may be the single most important task that the public safety community can perform during a terrorist incident, but it will certainly tax the abilities of any locality or State. Therefore it makes sense for all communities to preplan for emergency operations, such as mass decontamination.

Thinking About My Situation...

Does your department have standard operating procedures/standard operating guidelines (SOPs/SOGs) for incidents involving mass decontamination? ☐ Yes ☐ No

Does the jurisdiction's emergency operations plan have such SOPs/SOGs?
☐ Yes ☐ No

How would you find out? _____

What actions can you take to develop or improve your area's mass decontamination and emergency operations plans? _____

What level of cross-orientation has your hazmat team done with its counterpart bomb squad? _____

Your response to large-scale explosions and fires requires that you pay just as much attention to hazardous conditions as you would at a potential chemical or biological incident. Be aware of the

possible presence of a secondary device or incident intended to injure or kill you and other first responders. Often, these secondary devices are referred to as "sucker punch" devices. Bombs produce

large-scale trauma due to shock waves, projectiles, and structural collapse. When arriving on the scene of a highly damaged structure, be aware of the structural conditions causing unsafe buildings to collapse, the types of injuries resulting from these incidents, and the specialized precautions you need to take.

Whatever type of threat you respond to, the description that you provide to investigators reconstructing the early minutes of activity at the incident scene can be the key to successful prosecution of the case. At the scene, be aware of persons coming or going on foot or by vehicle. Jot down the license plate numbers, and brief descriptions of those present in order to refresh your memory. Encourage witnesses and bystanders to remain at the scene until investigators have interviewed them and, as needed, they are decontaminated. Note any other unusual circumstances.

Your documentation of the incident will prove invaluable in prosecuting the case. Whenever possible, provide photographs and videotape to show the "big picture" of the scene. Include as many details as possible. Use rough sketches to pinpoint the location of victims and their wounds, as well as the locations of potential evidence. Take notes on what you see and organize them, include your name and contact information, and provide them to investigators as soon as possible after the response. In fact, document by using whatever memory aids are available. Again, bear in mind that any such documentation may be entered into evidence in court.

Leave Things As You Find Them

At a potential crime scene, it is critical that you disturb the scene as little as possible. If you absolutely must move something, make sure you remember where it was originally, its orientation and condition, and anything else notable about its position and natural state. If possible, photograph the object before you move it. Take notes on any holes, breaks, or scratches that you caused, and pass this information on to the crime scene investigators. Law enforcement officers must be able to differentiate between the results of the crime and what responders might have done to those results.

Also, be careful about what you leave behind. Your discarded chewing gum wrapper, for example, has to be ruled out later by an evidence collection team with better things to do with its time.

Following your response, you may have to write an after-action report summarizing your activities and observations during the incident. Be sure to document the report thoroughly using your notes. Remember that your report can be used in court, both in your favor and against you.

Locating the Potential Terrorist--Threat and Risk Target Assessment

In order to determine potential terrorist groups active in your jurisdiction, someone needs to conduct a threat analysis in cooperation with local, regional, State, and Federal law enforcement officials to identify groups that may pose a threat to your

community. This person may be the emergency management coordinator or director, or someone else in the community associated with emergency response.



Terrorist groups may include, but are not limited to, the following:

- ethnic separatist and emigre groups;
- left-wing radical organizations;
- right-wing racist, antiauthority, "militias," survivalist groups;
- small leaderless groups;
- foreign terrorist organizations; and
- issue-oriented groups (including animal rights groups, extremist environmental groups, extremist religious groups, antitax, anti-authority, antiabortionists, etc.).

Thinking About My Situation...

Obtain a copy of your community's emergency response plan and check that section of the plan dealing with hazard or vulnerability assessment. Do you find anything in the plan that identifies potentially threatening groups? [] Yes [] No

If yes, what are some of the groups named?

If none are named, what steps can you take to identify them?

When was the plan updated? If it is more than 1 or 2 years ago your agency needs to conduct such an update.

Has the threat changed because of developments in technology, location of a controversial issue in your area, or another reason?

Once such groups are known (threat assessment) the next step is to identify potential facilities or activities that may become targets of terrorist acts. The U.S. Department of Homeland Security (DHS) has developed a standard

assessment criteria list. These criteria include

- the level of site visibility;
- the criticality of the site;
- accessibility to the site;

- hazards stored on site; and
- number of people at the site.

Just reviewing this list of criteria should produce a number of sites. These facilities may include the following:

- civilian or military government installations;
- industries that are part of the "military-industrial complex," manufacture environmentally sensitive products, operate in politically sensitive countries, or generally represent capitalist endeavors;
- financial institutions that support the above;
- infrastructure components (i.e., transportation, communications,

utilities, or energy systems on which the above depend);

- explosive magazine storage facilities (construction sites, quarries, etc.);
- sports arenas, parks (theme and others);
- schools, hospitals, shopping centers; and
- venues for special events.

Identifying these potential targets is part of risk assessment.

Thinking About My Situation...

Identify six different facilities in your jurisdiction that might be targets of terrorist activities.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

Do you think the occupants of those facilities really think they are at risk? Why or why not?

(Schedule a meeting with the emergency planners for the facility to help them improve their security.)

For each of the facilities you named, use a scale of 1 to 10 to indicate your level of preparedness to respond to a terrorist incident at that facility (1 = low; 10 = high).

Facility 1 ____ Facility 2 ____ Facility 3 ____ Facility 4 ____ Facility 5 ____ Facility 6 ____

Outward Warning Signs and Indicators

At the scene, initial responders need to be on the lookout for the following common warning signs indicating the presence of lethal agents from the five threat categories. Remember, this is a "starter list." There may be other hazards.

Biological Indicators

Biological incidents will present



themselves in two ways. The first could be a community public health emergency, while the second could be a

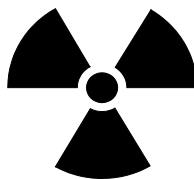
focused response to an incident, such as that involving a toxin.

In the case of a biological incident, the onset of some symptoms may take days to weeks, and typically there will be no characteristic signatures, because biological agents are usually odorless and colorless. Because of the delayed onset of symptoms, the number of victims and the areas affected may be greater due to the migration of infected individuals. This geographical spread and time delay may make it more difficult for public health personnel to determine that the sickened people had a common exposure. On the other hand, some effects may be very rapid (as short as 4 to 6 hours).

Exact indicators of a biological event may include any of the following:

- unusual numbers of sick or dying people or animals;

- dissemination of unscheduled and unusual sprays, especially outdoors and/or at night; and
- abandoned spray devices with no distinct odors.



Any number of symptoms may occur. As a first responder, you should consider calling local hospitals' infection

control personnel to see if they have admitted additional casualties with similar symptoms. Another useful contact is your health department's epidemiologist. Casualties may occur within minutes or hours, or may not occur until many days or weeks after an incident has occurred. The agent used determines the time during which the symptoms appear.

Nuclear Indicators

Short of an actual detonation or obvious accident involving radiological materials, there are a couple of ways to be certain that radiation is present.



One is to observe the Department of Transportation (DOT) placards and labels. The other is to use the

monitoring devices that most fire department hazardous materials teams now carry routinely. If the fire department does not have ready access to these instruments, the local or State office of emergency management should be able to provide them. In some States there are regional hazmat response teams that may have this equipment. Find out **now** who these organizations are, what their response procedures are, and how to access them.

Incendiary Indicators

Multiple fires or multiple points of origin may indicate the use of accelerants such as gasoline, rags, or other incendiary devices. Remains of incendiary device components, odors of accelerants, unusually heavy burning, or fire volume also are key indicators.

Chemical Indicators



Once released, a nerve agent's outward warning signs are easy to spot. Within minutes, the most significant sign will be rapid onset of similar

symptoms in a large group of people. Dermal exposure (clammy skin) and pinpoint pupils (miosis) are the best symptomatic indications of nerve agent use. Because nerve agents are so lethal, mass fatalities without other signs of trauma are common.

Other outward signs of nerve agent release include

- hazardous materials or lab equipment that is not relevant to the occupancy;
- exposed individuals reporting unusual odors or tastes;
- explosions dispersing liquids, mists, or gases;
- explosions seeming only to destroy a package or bomb device;
- unscheduled dissemination of an unusual spray;
- abandoned spray devices;
- numerous dead animals, fish, and birds;
- absence of insect life in a warm climate;
- mass casualties without obvious trauma;
- distinct pattern of casualties and common symptoms; and
- civilian panic in potential target areas, i.e., government buildings, public assemblies, subway systems, etc.

Other chemical agents may have more diffuse warning signs. However, it bears repeating that large numbers of victims that are clustered in one area **without** obvious signs of trauma should be viewed as chemically-contaminated until proven otherwise.

Explosive Indicators

Signs of explosive incidents may be obvious, such as large-scale damage to a building, or may be difficult to detect initially. Blown-out windows and widely scattered debris also serve as indicators.



Victims may exhibit effects of the blast, such as obvious shrapnel-induced trauma, appearance of shock-like symptoms, and/or damage to their eardrums. Also, continue to maintain your situational awareness: there could be a secondary device targeting you and other responders.

Future Directions in Terrorism

Terrorists have shown an amazing capacity for change. Thus, although this module covered many of the terrorists' **current** methodology preferences, you must still prepare for their future

incident methods. Cyberterrorism, an attack on our electronic communications systems in particular, is a very real possibility.

Other changes on the horizon may include the use of chimera biological agents (that is, the use of gene splicing to combine the strengths of two separate bio agents into a new "super bug"), attacks on financial networks, and destruction of infrastructure (such as bridges, water systems, etc.).

At the same time recognize that what has worked for terrorists in the past, particularly the use of firearms and explosives--essentially terrorism's "staples," will probably continue to be used by these groups.

SUMMARY

The responsibility of the first responder trained to the awareness level is

relatively limited when dealing with the incidents being discussed in this course. A basic consideration is always to keep your personal safety and that of other responders in mind, then to help assure the preservation of evidence at the crime scene so as not to impede the investigation or prejudice ensuing litigation. The wisest course of action, although not the easiest, might be to delay entry and await the arrival of more highly trained personnel.

Responders in the habit of making quick responses will need to exercise a great deal of self-control in these situations, especially if human life is at stake. Specific steps that can be taken by the first responder at the awareness level are to isolate the scene, deny entry, notify additional resources, and recognize key indicators of a potential terrorist incident.

What I Will Do As Followup To This Module...

Refer to your jurisdiction's SOPs/SOGs. Do they contain annexes dealing with hazardous materials incidents, specifically B-NICE/CBRNE?
Do you see any serious gaps in the plans? <input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, identify two practical and achievable steps you might take to help correct the deficiencies you noted.
Step One:
Step Two:

When were these plans updated? When plans are updated be sure to include the impact of any changes in threat assessment, straining, equipment, response agencies, personnel, and other similar factors.