Chapter 14: Critical Incidents

A comprehensive guide to managing critical incidents, hazardous materials, and explosive devices in law enforcement operations.

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Unit 1: Critical Incident Response

Lesson 1

Incident Command System and Response

Lesson Goal

> At the end of this lesson, you will understand the structure of the incident command system (ICS) and your role when responding to a critical incident.

Serving your community through law enforcement means that you must be ready to handle many situations. While every day as a law enforcement officer will offer unique challenges, sometimes you will be required to respond to events that are outside the scope of your typical duties.

Understanding Critical Incidents

What Are Critical Incidents?

Often classified as **critical incidents**, these are events that can put lives at risk and cause major damage to property and the environment. They can be natural, or the result of human acts or error.

Natural Critical Incidents:

- Hurricanes
- Tornadoes
- Floods
- Wildfires

Human-Made Critical Incidents

- Active shooter events
- Hazardous material spills
- Bomb threats
- Industrial accidents

The effectiveness of your response can impact the public's confidence in law enforcement and can affect a community's ability to recover from a critical incident.

Your Role in Critical Incidents

Community Support

Your community members will turn to you for support during critical incidents. They look to law enforcement for guidance, protection, and reassurance during times of crisis.

Professional Response

When you display empathy, calmness, and professionalism, you are more likely to be successful in recovery efforts. Your demeanor sets the tone for the entire response.

Public Confidence

The effectiveness of your response directly impacts public confidence in law enforcement and affects the community's ability to recover and rebuild after a critical incident.

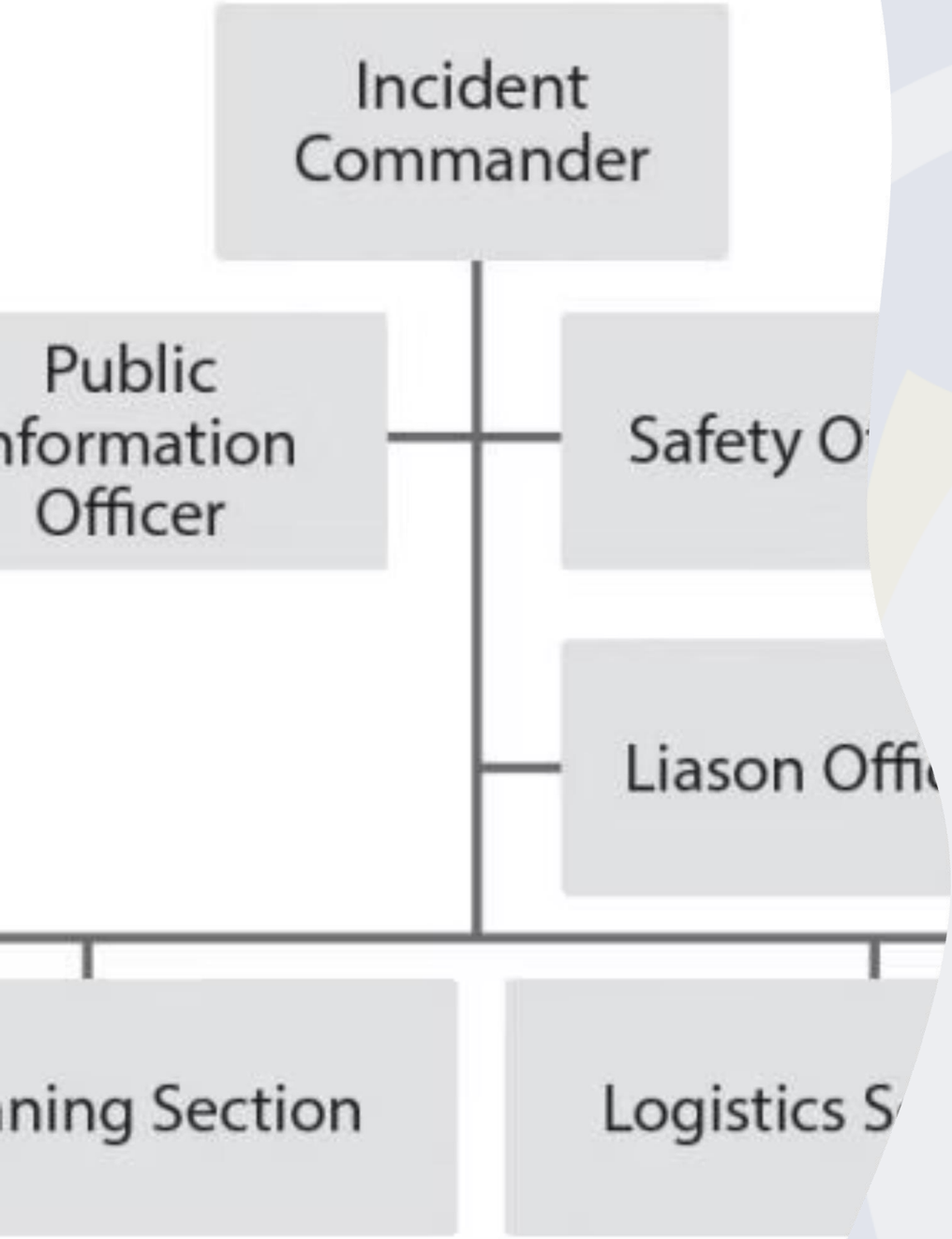
The Incident Command System (ICS)

Public safety organizations often use the incident command system during a critical incident. The **incident command system (ICS)** is a standard, on-scene, all-hazards approach to manage and coordinate the operation of facilities, equipment, personnel, procedures, and communications under a common organizational structure. ICS helps manage resources effectively.

Key Point: Law enforcement and other public safety organizations use ICS to deal with many types of incidents. It has helped officers both locally and nationally manage situations, such as large vehicle crashes, hurricanes, wildfires, large social gatherings, and missing persons.

✅ LE1411.1. Describe the importance of an effective response to a critical incident

✅ LE1411.2. Describe the role and structure of the incident command system



ICS Organizational Structure

Figure 14-1: Incident command system structure showing the hierarchical organization of command, operations, planning, logistics, and finance/administration sections.

Note that ICS for different organizations might not include every aspect of this chart. Regardless, the basic structure of any ICS is similar across agencies and jurisdictions.

Initial Response Actions

When acting as part of the initial response to a critical incident, obtain the necessary information from dispatch and immediately take the following actions:

1 **Identify the type of incident or threat**

Determine what kind of critical incident you are responding to and assess the immediate dangers present at the scene.

2 **Determine if the situation requires personal protective equipment (PPE)**

Assess whether specialized protective gear is necessary before approaching the scene to ensure officer safety.

3 **Establish ICS**

Set up the incident command system structure appropriate to the scale and nature of the incident.

4 **Set up a command post**

Establish a central location for coordinating response efforts and managing resources.

Initial Response Actions (Continued)

5 Determine the resources needed

Assess what additional resources are required, including the assistance of other agencies such as fire, EMS, hazmat teams, or specialized units.

6 Determine whether to shelter-in-place or evacuate

Make critical decisions about whether people should remain indoors or be evacuated, including establishing evacuation routes and collection points.

Shelter-in-place means taking immediate shelter in a readily accessible location or remaining inside a structure to prevent exposure to a dangerous situation that exists outside of the structure.

ICS Flexibility and Command Transfer

Scalable Structure

The ICS scope and structure can expand or contract based on the nature of the incident. This flexibility allows the system to be effective for incidents ranging from small-scale emergencies to major disasters.

Be prepared to transfer ICS command as needed. As more senior officers or specialized personnel arrive, you may need to brief them and transfer command responsibilities.

Ongoing Situations

You will get assignments and attend regular briefings for ongoing situations, such as hurricanes or wildfires, for which an ICS is already established.

Communication and Documentation

Plain Language Communication

Personnel not at the scene or working in a command post depend on the responding officers to provide regular updates as events develop. Communicate in plain language since different agencies may use different radio codes.

Incident Documentation

Most incidents require some type of debriefing or documentation when they are over. These will vary depending on the situation but are essential for after-action review and improvement.

✅LE1411.3. Describe an officer's role within the incident command system

NIMS Training Requirements

> The National Incident Management System (NIMS) provides ICS training on the Federal Emergency Management Agency (FEMA) website.

IS-100.C

Introduction to the Incident Command System, ICS 100

IS-700.B

An Introduction to the National Incident Management System

You must complete the courses and pass the online exams. Print your certificates and give them to your instructor when you are finished.

✅LE1411.4. Complete the two National Incident Management System online modules regarding incident command system (ICS)

Unit 1: Critical Incident Response

Lesson 2

Natural Disasters

Lesson Goal

At the end of this lesson, you will know how to prepare your community and your personal life for a natural disaster and understand your role in the aftermath.

Think About This

Officer Ramos is preparing to help with evacuations for a hurricane that is heading toward Florida, but she is concerned about her own family's evacuation plan. How could Officer Ramos have prepared for this situation so that she would be ready to work her shift during the storm?

Florida's Natural Disaster Risks

Florida is prone to many types of environmental disasters, particularly hurricanes, tornadoes, floods, and wildfires. As an officer, you must be ready to respond when a disaster strikes.

Hurricanes

Powerful tropical storms with high winds, storm surge, and flooding that can devastate coastal communities.

Tornadoes

Violent rotating columns of air that can cause catastrophic damage along their path.

Floods

Overflow of water that submerges normally dry land, often following heavy rainfall or storm surge.

Wildfires

Uncontrolled fires that spread rapidly through vegetation, particularly during dry seasons.

Standard Law Enforcement Duties During Disasters

Although an agency's response to natural disasters may vary with policies, certain law enforcement duties are relatively standard. You can expect to perform the following critical functions:

Evacuations

Assisting residents in safely leaving threatened areas

Traffic Control

Managing traffic flow and providing directions

Security

Providing security for shelters and preventing looting

The Power of Community Relationships

✅LE1412.1. Develop strong community relationships to aid in your response to natural disasters

Knowledge of Community Needs

While your knowledge of your community is always valuable, it will be crucial during disasters. Officers who have established strong relationships with their community will have more knowledge of what the community needs before and after a disaster.

For example, if you know that you have a large elderly population or many people who do not speak English, you can provide information about these needs to other assisting agencies.

Effective Information Delivery

Officers with strong community ties will also be more effective when delivering information about evacuations and safety procedures. Often, you will be responsible for relaying life-saving information, including information on family reunification, food banks, and shelters.

If you have worked to build a bond with community members, there is a greater chance this information will persuade them to take appropriate precautions or be linked to the proper resources.

Community Relationships Save Lives

A strong relationship with the community can potentially save many lives and help speed recovery after the disaster.

Your established trust and rapport with community members becomes a critical asset during emergencies. People are more likely to follow evacuation orders and safety instructions from officers they know and trust.

Personal Disaster Preparedness

✅LE1412.2. Describe the steps you should take in your personal life prior to a natural disaster

Before a disaster strikes, have an emergency plan in place for your family members and pets. You will be expected to work during all phases of the disaster. This will make it difficult for you to assist your family in their preparation or evacuation. Creating a plan for your family ahead of time will ease your anxiety and allow you to focus on your duties.

Family Emergency Plan Components

Family Meeting Location

Designate a safe place where family members can reunite if separated during the disaster.

Out-of-Town Contact

Identify at least one out-of-town contact person who can serve as a communication hub for the family.

Emergency Management Contacts

Maintain a list of emergency management contacts for your county and local area.

Contact Method

Establish a method for your family to contact you once the disaster is over and it's safe to communicate.

Disaster Kit Essentials

Prepare disaster kits for both yourself and your family. The kits should contain the basic supplies needed for a 72-hour period.

Family Disaster Kit

- First aid kit
- Important paperwork
- Non-perishable food
- Water (one gallon per person per day)
- Toys for children
- Pet food and supplies
- Flashlight
- Batteries
- Medications
- Radio

Personal Officer Kit

Your disaster kit should include many of the same items but also have:

- Extra uniform
- Change of clothes
- All family kit essentials

Important: Be sure to check the disaster kits every six months and replace any food, water, or medicines that might have expired.

Post-Disaster Response Duties

✅LE1412.3. Summarize the duties that an officer will perform in the aftermath of a natural disaster

Right after the disaster, your work will shift from evacuation to a new set of critical responsibilities:

1

Search and Rescue

Locating and assisting trapped or injured individuals

2

Supply Delivery

Helping distribute essential supplies to affected areas

3

Security Operations

Providing security to shelters, distribution centers, and hospitals

4

Peacekeeping

Maintaining order and preventing crime in affected areas

Your Role in Community Recovery

> While post-disaster recovery can often feel chaotic, your role will be helping the community return to a sense of normalcy and order. Additionally, you will help provide support to those who may have lost everything.

As an officer, you will be one piece in the larger puzzle of disaster response and recovery. Your entire community, as well as outside emergency management agencies and first responders, will assist in recovery efforts. You will need to work alongside all of these individuals and agencies to ensure that your community recovers.

Unit 1: Critical Incident Response

Lesson 3

Active Shooter

Lesson Goal

At the end of this lesson, you will know motivations of an active shooter and the importance of following agency policies and procedures when responding.

Think About This

You are the first one on the scene of an active shooter incident. What do you do?

Defining Active Shooter

The FBI defines an **active shooter** as an individual actively engaged in killing or attempting to kill people in a populated area. Occasionally, you might hear an active shooter also referred to as an "active threat."

Primary Goal

An active shooter's goal is mass murder, not traditional criminal acts, such as robbery or hostage taking. This distinguishes active shooter events from other types of violent crimes.

National Concern

Hundreds of active shooter attacks have occurred across the United States, and the threat of such violent incidents remains a primary concern for all law enforcement officers.

Agency policies and response protocols for addressing an active shooter event vary.

Common Traits of Active Shooters

Certain traits are common to active shooters. They may experience hate, anger, and the feeling that they have been victimized by others, even if this is untrue. Some active shooters have had previous arrests for violent crimes, but others have had no interaction with law enforcement. This can make it difficult to identify the shooters before they act.

Warning Indicators

There are, however, certain factors common to active shooters. These may include:

Loss of Significant Relationships

Breakups, divorces, or estrangement from family and friends

Financial Changes

Changes in financial status or loss of or termination from a job

Feelings of Victimization

Perceived mistreatment or persecution, whether real or imagined

Major Life Changes

Major adverse changes to life circumstances

Perceived Injustice

Feelings of perceived injustice or unfair treatment

Understanding the Indicators

Important Note: The majority of active shooters are often experiencing many of these indicators. However, these indicators alone do not mean that a person is likely to commit a shooting. It is also important to remember that there is not a single profile for a mass shooter.

Many active shooters show their desire to hurt others before carrying out a mass shooting. They may engage in certain behaviors that prompt those around them to realize they are thinking about carrying out mass violence.

These behaviors may include showing their desire to hurt others through social media or journal writings, and making statements to other people.

✅LE1413.1. Identify some of the characteristics and motivations of an active shooter

Response Tactics and Priorities

Current tactics focus on immediately locating the active shooter and ending the threat before helping the injured.

Immediate Response

If you respond to an active shooter situation, you should always be prepared to respond alone and not wait for backup.

Chaotic Environment

An active shooter incident is often a chaotic situation with large numbers of injured people, fleeing crowds, and the potential secondary hazards, such as improvised explosive devices.

Follow Training

Follow your agency's policies and tactical training if you respond to an active shooter.

✅LE1413.2. Describe your role in an active shooter incident

Unit 2: Chemical and Hazardous Materials

Lesson 1

Hazardous Materials

Lesson Goal

At the end of this lesson, you will know how to respond to a hazardous materials incident while ensuring public and personal safety.

Think About This

You approach a commercial truck that has pulled over to the side of the highway. As you approach the truck, the driver hands you the paperwork explaining what the truck is carrying. Upon reading the driver's paperwork, you see the name of the substance but do not recognize it. What is your next step in this situation?

Hazmat Situations in Law Enforcement

Law enforcement officers are sometimes required to assist in hazmat situations. As explained in Chapter 12, a hazmat accident has the potential to cause enormous harm to a community.

Traffic crashes are not the only incidents where you will potentially encounter hazmat situations. A few examples of other instances where you might encounter hazmat incidents include:

Factory Explosion

Industrial accidents involving chemical releases or explosions at manufacturing facilities

Gas Leak

Natural gas or other hazardous gas leaks in residential neighborhoods requiring evacuation

Petroleum Spill

Oil or petroleum spills in bodies of water causing environmental contamination

Main Objectives of Hazmat Response

✅LE1421.1. List the main objectives of a hazardous materials response

In a hazmat incident the main objectives are to:

1. ## Isolate the area without entering it

   Establish a perimeter around the hazmat incident without putting yourself at risk by entering the contaminated area.

2. ## Keep people away from the scene

   Prevent civilians and unauthorized personnel from approaching or entering the hazardous area.

3. ## Ensure people are upwind and out of low-lying areas

   Position people in safe locations where they won't be exposed to hazardous vapors or gases that may spread.

Standard of Care

Critical Safety Rule: Only a properly equipped and trained officer should approach any potential hazmat situation. Always use extreme caution.

✅**LE1421.2. Explain standard of care when responding to a hazardous materials incident**

Several laws, regulations, and standards list what an officer should do during a hazmat incident. The **standard of care** is the level of competency expected or required when performing this duty.

Although public safety employees have this duty to act, as a responder you should not try to do something beyond your level of training or the capability of your equipment when responding to an incident.

Identifying Hazardous Materials

✅LE1421.3. Describe the primary methods to detect the presence of a hazardous material

To make accurate decisions, it is essential that you identify the type of hazardous material involved. Be careful to never put yourself at risk in the process. Prevent direct contamination by avoiding contact with the product and its gases, vapors, or smoke.

1

Review Documents

Look at documents or shipping papers to identify the material

2

Interview Personnel

Interview the transport driver or facility staff who may know what materials are present

3

Consult Experts

Shipping company employees and vehicle drivers may be able to identify the product

4

Follow Protocols

If you cannot identify the material's specific name, make decisions as an awareness-level responder to minimize potential health hazards

Nine Classes of Hazardous Materials

✅LE1421.4. Identify the nine classes of hazardous materials

The U.S. Department of Transportation (USDOT) defines nine common classes of hazardous materials. This information can help you identify the type of hazardous material involved in a particular incident.

Class 1: Explosives

1

Class 1: Explosives

Explosives are materials or devices designed to release energy very rapidly. Consider all explosives to be extreme hazards when they are involved in or near a fire.

Examples: dynamite, black powder, and small arms ammunition

Class 2: Gases

1

Class 2: Gases

Gases are materials that are neither solid nor liquid at ordinary temperatures; they are contained under pressure. Gases may be flammable, nonflammable, poisonous, or corrosive.

Examples: acetylene, hydrogen, and anhydrous ammonia

Classes 3 and 4: Flammable Materials

Class 3: Flammable Liquids and Combustible Liquids

These materials burn in the presence of an ignition source.

Examples: gasoline, diesel fuel, and acetone

Class 4: Flammable Solid, Spontaneously Combustible, and Dangerous When Wet

These materials are neither liquid nor gas. They may burn in the presence of an ignition source, in the presence of heat or friction, ignite spontaneously, or when in contact with water.

Examples: magnesium, sulfur, and calcium carbide

Classes 5 and 6: Oxidizers and Toxic Materials

Class 5: Oxidizers and Organic Peroxides

These materials may cause spontaneous combustion or increase the intensity of a fire.

Examples: bromine or calcium hypochlorite (bleach)

Class 6: Toxic Materials and Infectious Substances

These materials include medical waste and biological hazards that can cause illness or death.

Examples: medical waste, biological specimens, infectious agents

Classes 7, 8, and 9: Specialized Hazards

Class 7: Radioactive Substances

Examples: nuclear waste, radioactive medical materials, and X-ray equipment

Class 8: Corrosive Substances

These materials include acids, solvents, or other materials that may cause irreversible damage to human tissues.

Class 9: Miscellaneous Dangerous Goods

Not belonging to Classes 1–8, these materials are subject to USDOT regulations on transportation.

Examples: lithium ion batteries, dry ice, magnetized metals, auto-inflating devices such as airbags, asbestos, molten sulfur, PCBs (polychlorinated biphenyls), hazardous waste

Identifying Hazardous Materials: Methods

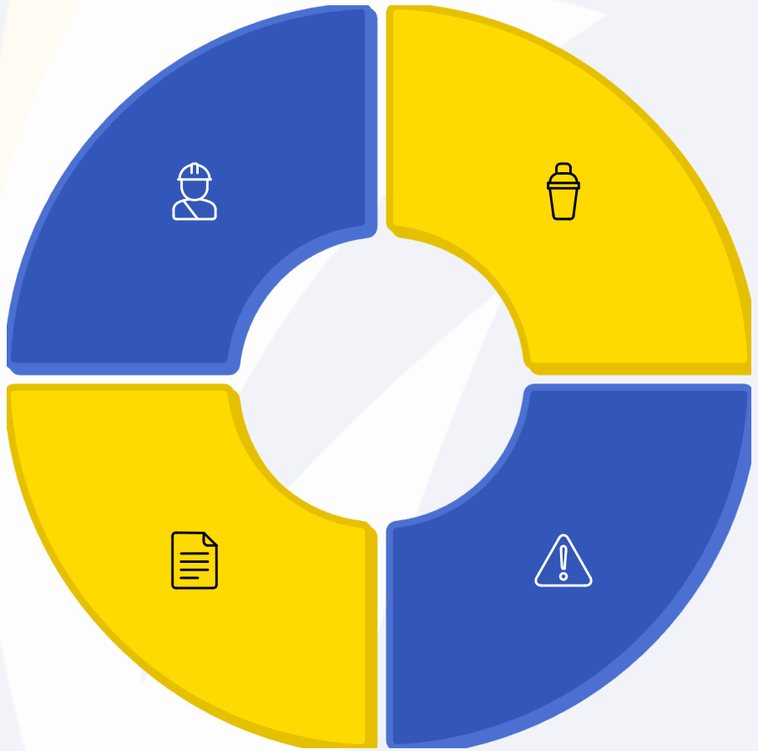
✅LE1421.5. Describe how to identify hazardous materials

Occupancy and Location

Knowing the type of building and area helps anticipate what hazardous materials may be present

Shipping Papers

Documents that list the contents of shipments and associated hazards



Container Shape and Size

The shape and size of containers provide useful information about the type and quantity of hazard

Placards and Labels

Required markings on vehicles and facilities that describe the class of hazardous materials

Occupancy and Location

Occupancy

Occupancy refers to a structure and its use. Some examples are manufacturing facilities, storage facilities, retail establishments, and residences.

Knowing the type of building you are entering will help you anticipate what hazardous materials may be there. If you do not know the type of building, just assume that hazardous materials are inside.

Location

Location refers to an area and its use. Some examples are industrial parks, business districts, agricultural areas, and residential neighborhoods.

Details such as traffic patterns, time of day, inhabitants, and type of location may affect how you respond to a potential hazard.

Container Shape and Size

The shape of the container involved in the hazmat incident can provide useful information about the type of hazard. The main types of containers include portable, fixed, and transportation containers.

- **Important Relationship:** There is usually a direct relationship between the size of the container and the size of the affected geographical area. Therefore, the bigger the container, the bigger the area covered.

Containers that store contents under pressure, such as propane or oxygen tanks, can have additional problems, like explosions and vapor releases.

Placards and Labels

Regulations govern the use of placards or labels on vehicles and facilities that store or transport hazardous materials. The USDOT requires most vehicles transporting hazardous materials to display placards that describe the class of hazardous materials on board.

Vehicle Placards

Posted on all four sides of a vehicle, railcar, or other large container, and on the individual packages of the material

"DANGEROUS" Placard

Anything that holds two or more classes of hazardous materials should display a "DANGEROUS" placard and may use this placard instead of the specific placard for each class of material

Facility Symbols

Commercial facilities must show other symbols that describe the hazardous materials on site per local ordinances

Remember: Even if you do not see a placard, label, or other warning, hazardous materials may still be present.

Shipping Papers and Facility Documents

Shipping Papers

Commercial vehicle operators are required to carry documents that list the contents of their shipment. These documents are called shipping papers or shipping manifests.

They can help you identify the materials and associated hazards and take appropriate actions if exposure occurs.

Facility Documents

Many places require facilities to keep documents that outline the type of hazardous materials stored or manufactured on site.

Safety Data Sheet (SDS): Must be displayed in facilities where a hazardous substance is stored, manufactured, or used

Emergency Response Plan (ERP): A written plan that describes what an organization will do during various major events

Emergency Response Plan (ERP)

An **emergency response plan (ERP)** is a written plan that describes what an organization will do during various major events. An agency ERP sets safe and uniform guidelines for response to incidents involving weapons of mass destruction or hazardous materials.

Colors, Markings, and NFPA 704 Diamonds

Colors and Markings

Colors of placards and labels also help identify a material's hazard classification. Company names and other unique markings may indicate the presence of hazardous materials.

Familiarity with the users and suppliers of hazardous materials in the community can be helpful in a hazmat situation.

NFPA 704 Diamonds

The National Fire Protection Association (NFPA) has developed a standard facility and vehicle marking system called the 704 system. Placed on the outside of structures, storage facilities, or vehicles, this large symbol indicates that hazardous products are stored there.

NFPA 704 Diamond Segments

The diamond-shaped symbol is divided into four segments that indicate the following risks:

Blue - Health Hazards

Indicates the health risks associated with the material

Red - Flammability Hazards

Shows the fire risk and flammability of the material

Yellow - Reactivity

Indicates the chemical stability and reactivity of the material

White - Other

Provides information on any special hazards of the material

In each area, a number from zero to four indicates the material's relative hazard with zero indicating no hazard and four indicating the highest hazard.

Using Your Senses to Identify Hazmat

LE1421.6. Distinguish between high-risk and low-risk senses

Identifying a hazardous material through the five senses may place you at an unacceptable risk for exposure.

Lower-Risk Senses

Sight and hearing are considered lower-risk senses when identifying hazardous materials. Use these senses from a safe distance and look for the following:

- Pressure release
- Smoke or fire
- Liquids, gas leaks, or vapor cloud
- Condensation on pipelines or containers
- Chemical reactions
- Mass casualties

Higher-Risk Senses

Critical Safety Rule: Smell, touch, and taste are considered higher-risk senses when identifying hazardous materials. Never use them to identify a hazardous material.

Using the Emergency Response Guidebook (ERG)

✅LE1421.7. Explain how to find hazmat information in the ERG

As discussed in Chapter 12, the Emergency Response Guidebook (ERG) can help you identify hazardous materials. When responding to hazmat situations, the orange color-coded pages are the most important part of the ERG.

This section has three main topics for each substance identified:

1. **Potential Hazards**
   Consult this topic first
2. **Public Safety**
   Notification, protective clothing, and evacuation
3. **Emergency Response**
   Fire, spill or leak, and first aid

ERG Topic 1: Potential Hazards

> Consult this topic first. It describes potential hazards that the material may display in terms of fire or explosion and health effects upon exposure.

ERG Topic 2: Public Safety

The Public Safety topic has three subsections:

01

Notification

The notification subsection lets you know the first thing to do when called to a scene. Some examples are activating an agency's ERP and making sure help is coming. Call the emergency contact number on the shipping papers or the emergency response telephone numbers listed inside the ERG's back cover for more information. Advise other responders of incident conditions, type and amount of materials, safe approach information, the ERG page to use, needed resources, and any actions taken.

02

Protective Clothing

The protective clothing subsection tells you about protective clothing you may need. Protective clothing requires proper training to use. Most agencies do not furnish protective clothing to patrol officers.

Public Safety: Evacuation

✅LE1421.8. Explain how to secure a hazmat scene

After isolating the immediate danger area, the next step is to evacuate or protect people in the downwind hazard area or within the radius of the incident. This distance can be very large, depending on the type of material and whether the material was spilled or involved in a fire, which may make the radius of the incident much wider than it would have been otherwise.

> The evacuation subsection also gives information about how far people should stay from a spill, known as the **protective action distance**. Consult the Table of Initial Isolation and Protective Action Distances (green section) if the type of hazardous material is highlighted in the ERG.

Evacuate the area if the incident is going to last for an extended period or could potentially cause a fire or explosion. Because the evacuation process may be difficult (for example, due to dense population or the presence of a school or hospital) or expose people to greater hazards than remaining in the area would, rely on agency policies for guidance.

Evacuation Considerations

Fire creates the potential for an explosion. This includes vapor explosion from expanding boiling liquid. The ERG gives in-depth information about protective action distances. Recommendations depend on the spill's size, weather conditions, and time of day. Geographical conditions can also affect the distribution of hazardous materials.

ERG Topic 3: Emergency Response

The Emergency Response topic has three subsections: fire, spill or leak, and first aid.

1

Fire

The fire subsection provides guidelines to all levels of responders. Awareness-level responders must not attempt to extinguish a fire that involves hazardous materials. Normal fire extinguisher training is not sufficient to fight a fire that directly involves hazardous materials. You should attempt to fight such a fire only if you have proper training and protection. Operational-level personnel with the necessary protection and training can accomplish a defensive fire attack. Technician-level personnel must conduct an offensive fire attack.

2

Spill or Leak

Personnel engaged in controlling spills and leaks must have proper protection and training. You do not have training in spill or leak control. Operational-level personnel can perform spill control if they avoid direct contact with the material and have proper protection. Operational-level responders can also activate remote shut-off. Technician-level responders can perform leak control.

Emergency Response: First Aid

The first aid subsection outlines basic first aid for victims of exposure. Awareness-level responders may identify contaminated people who present a significant risk of secondary contamination, but should avoid direct contact with these people to prevent exposure.

Victim Isolation

Encourage contaminated, conscious victims to move to an isolated area and await medical assistance from properly trained and protected personnel.

Scene Control

Do not allow anyone or anything to leave the area without evaluation for decontamination by properly protected qualified personnel.

Incident Termination Procedures

✅LE1421.9. Describe OSHA requirements for terminating a hazmat incident

All awareness-level responders should follow agency policies and procedures to terminate their involvement in a hazmat incident.

Occupational Safety and Health Administration (OSHA) regulations require a structured termination process. The three steps are:

On-Scene Debriefing

During the on-scene debriefing process, officers are advised of the materials to which they may have been exposed, signs and symptoms of overexposure, and who to contact if they notice signs or symptoms of exposure. If exposure exceeds the acceptable published limits, the agency will send the officer for medical evaluation.

1

2

Incident Critique

During the incident critique phase, officers provide information on operational strengths and weaknesses.

3

After-Action Analysis

In the after-action analysis, the agency's goal is to review any weaknesses and implement any additional or corrective training, as necessary.

Chemical and Hazardous Materials

Responding to incidents involving methamphetamine laboratories and chemical suicide situations while ensuring public and officer safety.

Unit 2: Chemical and Hazardous Materials

Lesson 2: Methamphetamine and Chemical Suicide

Lesson Goal: At the end of this lesson, you will know how to respond to incidents involving methamphetamine and chemical suicide while ensuring public and officer safety.

> **Think About This:** You respond to a local residence where a woman has passed out on her front lawn. When you approach the woman, you notice that her garage is open, and you see many bottles and what looks like something cooking on a fire. There is also a strong smell of rotten eggs. What should you do first to respond to this situation?

Methamphetamine Laboratories (Meth Labs)

What Are Meth Labs?

Meth labs are locations where methamphetamine is manufactured. A meth lab can be as small as a soda bottle or as large as a warehouse. A simple chemical process converts pseudoephedrine or ephedrine into methamphetamine.

Dangerous chemicals used in the manufacturing process can be found anywhere in a home, vehicle, vessel, shed, motel, or other location.

Common Locations

- Residential homes
- Vehicles and vessels
- Storage sheds
- Motel rooms
- Warehouses
- Remote outdoor areas

Recognizing Indicators of a Meth Lab

Common Materials

Coffee filters, two-liter bottles, blenders, lithium batteries, red-tipped matches, cold tablets, camp stove fuels, drain cleaner, brake fluid, and bleach. The presence of a combination of these materials may indicate a meth lab.

Manufacturing Methods

Common methods include the one-pot "Shake and Bake" method, the red phosphorous method, and the "Nazi" (anhydrous ammonia) method.

Warning Signs

Strong chemical odors similar to rotten eggs or cat urine. Areas surrounding meth labs often have dead vegetation. Be aware of the toxic nature of discarded byproducts.

Safety Hazards of Meth Labs

Meth labs are significant safety hazards. The ingredients used to produce meth are typically flammable, explosive chemicals when under pressure or heated. Mixing these chemicals can produce violent explosions or toxic gases.

Do Not Inhale Fumes

Toxic gases can cause immediate harm to respiratory system and overall health.

Do Not Touch or Taste Chemicals

Direct contact with chemicals can cause severe burns, poisoning, or other injuries.

Do Not Turn Anything On or Off

Electrical switches or equipment could trigger explosions or release toxic gases.

Watch for Booby Traps

Meth labs can be booby-trapped or planted with traps designed to cause injury when triggered.

How to Respond to a Meth Lab

Immediate Actions

1. Evacuate occupants immediately
2. Leave the premises
3. Establish a perimeter
4. Follow agency policies and procedures
5. Request specialized units

Critical Precautions

The decontamination process for a meth lab incident is the same as for any hazmat exposure. Do not place anything in the patrol vehicle before decontamination or allow the removal of any items from the site.

Use caution when coming into contact with any person exposed to a meth lab. Remember that many meth labs are mobile and are found in vehicles.

Important: After the initial response, interview all involved people, document the incident, and identify any need for post-exposure medical evaluations.

Chemical Suicide

Chemical suicide, also known as detergent suicide, is a way of committing suicide that involves mixing two or more easily acquired chemicals. Once mixed, these chemicals produce gases that quickly fill an enclosed area.

Chemical suicide typically occurs in vehicles, closets, bathrooms, or other small, confined spaces where the concentration of gas can quickly accumulate to deadly levels. The most common method uses hydrogen sulfide and hydrogen cyanide.

Indicators of Chemical Suicide

Visual Warnings

- Warning sign(s) taped to doors or windows
- Suicide note inside vehicle or area
- Unresponsive or sleeping person in vehicle

Odor Indicators

- Unusual odors such as rotten eggs
- Sulfur smell
- Burnt almonds odor

Physical Evidence

- Yellow-green or white residue on surfaces
- Pennies tarnished with residue
- Household cleaning or pesticide containers

Additional Chemical Suicide Indicators

Scene Modifications

- Buckets for mixing chemicals
- Vehicle's inside door handles removed
- Tape or towels sealing a door or air vents
- A bag over the person's head

Response Protocol

If you encounter a chemical suicide situation, follow the procedures for a hazmat response, including establishing a safe perimeter.

Do not enter or let the public enter an area or vehicle, and do not rescue or resuscitate a person if these indicators are present.

Chemical Suicide Exposure Symptoms

Mild Exposure

Irritation to the eyes, nose, and throat. These symptoms may appear quickly upon exposure to low concentrations of the chemicals.

Moderate Exposure

Headaches, dizziness, nausea, vomiting, coughing, and difficulty breathing. Symptoms become more severe with increased exposure time or concentration.

High Exposure

Severe respiratory irritation, severe eye irritation, convulsions, coma, and death. Immediate medical intervention is critical at this level.

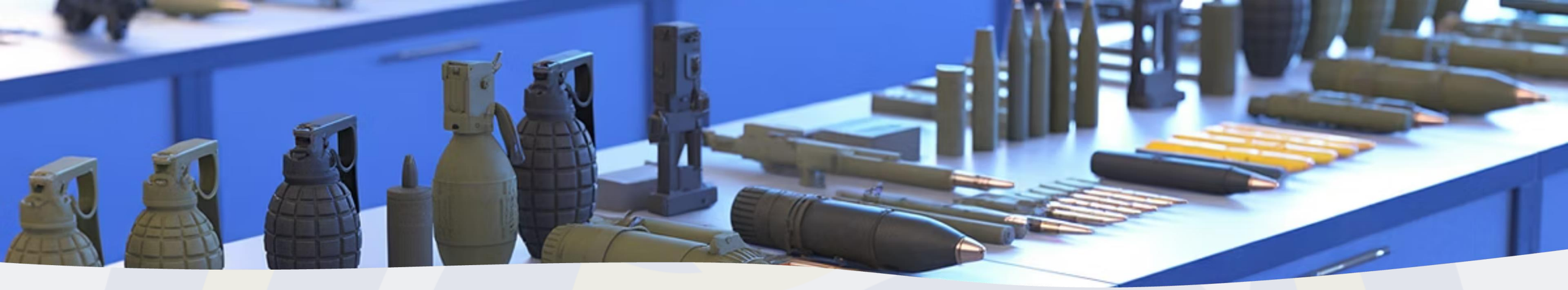
Symptoms of chemical suicide can be different depending on the amount of exposure. Always maintain a safe distance and follow hazmat protocols.

Unit 3: Explosive Devices

Lesson 1: Types of Explosive Devices

Lesson Goal: At the end of this lesson, you will know how to recognize types of explosive devices and basic protective actions.

> Many types of explosive devices exist. Agencies do not expect you to know and be able to identify all varieties of bombs, explosives, or military ordnance. Regardless of the type of explosive, always be careful and follow agency policies and procedures when dealing with a potential explosive device.



Military Ordnance

Common Types

Military devices can be easily acquired and are generally recognizable. They include hand grenades, landmines, and rocket launchers.

You may encounter such devices when responding to a report of a found, abandoned, or suspicious military item. Military memorabilia or souvenirs accidentally discovered can be live or inert.

Response Protocol

Always assume that such devices are live.

- Do not handle them
- Clear the area
- Request assistance from a bomb squad
- Wait for proper removal or disposal

Improvised Explosive Devices (IEDs)

An **improvised explosive device (IED)** is a homemade bomb built and used in ways other than conventional military action. An IED is made from commercially available materials and can be disguised as almost anything.

Hidden in Backpacks

IEDs can be concealed in everyday items like backpacks, making them difficult to detect in public spaces.

Trash Bins

Waste containers provide easy concealment for explosive devices in high-traffic areas.

Concealed Under Debris

IEDs may be hidden under debris or constructed to prevent discovery in various locations.

IED Concealment Methods

Since these items may not be easily recognized, treat anything found under suspicious circumstances as a possible explosive device. Remember to consider the possibility that a door or entryway could have an IED attached.

Common Hiding Places

- Trash bins and waste containers
- Backpacks and luggage
- Road signs and street furniture
- Under debris or rubble
- Attached to doors or entryways
- Inside vehicles

Key Principle

IEDs can be disguised as almost anything and constructed from commercially available materials. Maintain heightened awareness in all environments and treat suspicious items with extreme caution.

Mail Bombs

Mail bombs are a special class of suspicious items. They could be delivered by the U.S. Postal Service, a commercial delivery service, or by hand. Mail bombs can be difficult to detect.

Indicators of Mail Bombs

Physical Characteristics

- Rigid envelopes or packages
- Too much postage
- Discoloration
- Protruding wires

Address Issues

- Misspellings of common words
- Handwritten addresses
- Poorly typed addresses
- Incorrect titles or names

Unusual Features

- Strange odors
- Excessive weight
- Oily stains or residue
- No return address

If you or others become suspicious of a mailed item, do not handle it. Isolate the item and evacuate the area.

Vehicle-Borne Improvised Explosive Devices (VBIEDs)

A motor vehicle used as a bomb is a **vehicle-borne improvised explosive device (VBIED)**. VBIEDs can be very powerful and dangerous. They are capable of carrying extremely large amounts of explosives.

It is very difficult to bring 7,000 pounds of explosives into a building, but a small rental truck carrying that amount could blow up in front of a building and cause mass destruction.

VBIED Indicators

01

Threat Intelligence

A threat that specifically mentions explosives in a vehicle

02

Suspicious Parking

A vehicle that is parked suspiciously close to a building or in a restricted parking area without a proper decal or sticker

03

Unfamiliar Vehicle

A car that is unfamiliar to building occupants or seems to have a heavy load, indicated by riding low on its rear axle

04

Physical Evidence

A vehicle that has a strange smell or leaks powder or liquid

05

Witness Reports

Reports that a driver or passenger exited a vehicle and left hurriedly

06

Canine Alert

A bomb canine alerting officers that a vehicle is a threat

VBIED Response Protocol

Immediate Actions

1. Note the description and size of the vehicle
2. Evacuate the area around the vehicle
3. Establish a perimeter
4. Request bomb squad assistance
5. Document all observations

Critical Considerations

Evacuation distance from a vehicle should be much greater than evacuation distance from a building because a VBIED is potentially very large, and pieces of the vehicle can act as shrapnel.

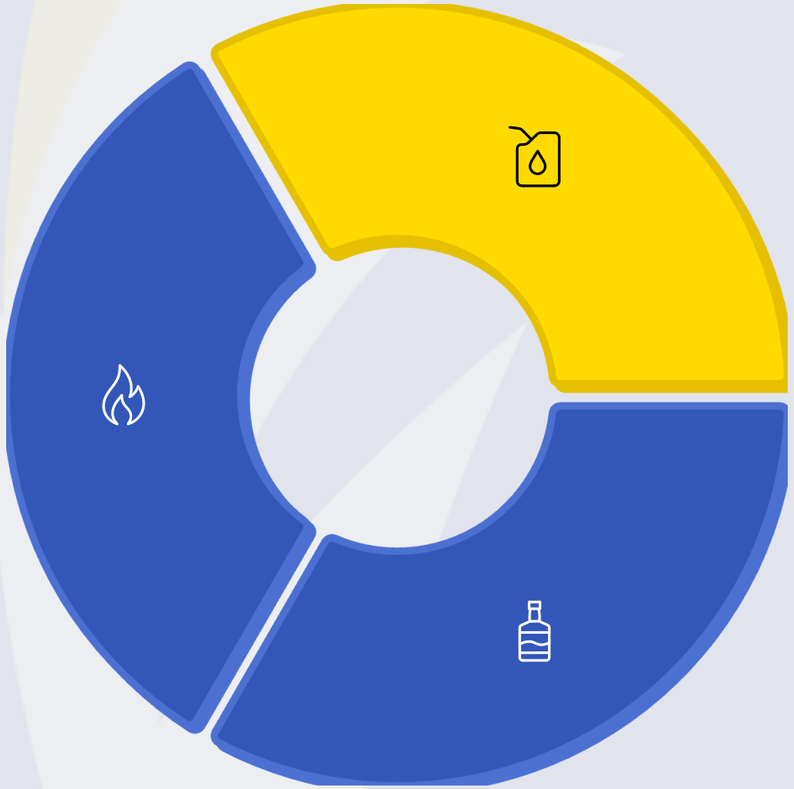
Maintain awareness of secondary devices and additional threats in the area.

Incendiary Devices

Incendiary devices can start fires, destroy property, and harm people. Well known examples are Molotov cocktails, napalm, and firebombs. Rioters, arsonists, and criminals frequently use incendiary devices.

Ignition Source

The component that initiates the combustion process, such as a fuse, match, or electrical spark.



Combustible Filler

The material that burns, commonly gasoline, motor oil, or other flammable liquids.

Container

The vessel holding the combustible material, typically glass bottles or other breakable containers.

Incendiary Device Components and Response

Common materials used in the manufacture of incendiary devices are roadway flares, gasoline or motor oil, and glass containers. These devices are very similar to explosive devices and can function in the same manner.

Placement Methods

They can be placed anywhere or thrown at a target

Response Protocol

Respond the same way you would to bomb situations

Safety Rule

Never touch, move, or disturb an incendiary device

Means of Detonation

A creative bomb maker can construct an explosive device to detonate through a number of methods. Understanding these detonation methods is critical for officer safety and proper response protocols.

Tripwires

Thin wires or strings stretched across pathways that trigger detonation when disturbed or broken.

Pressure Switches

Devices placed under rugs, beneath doormats, or in soil that detonate when weight is applied.

Motion Detectors

Sensors that detect movement in a specific area and trigger the explosive device.

Infrared Beams

Invisible light beams that trigger detonation when interrupted by movement.

Remote Triggers

Cell phones, key fobs, or radio devices used to remotely detonate explosive devices from a distance.

Electrical Switches

Wall light switches or other electrical controls wired into the bomb's triggering circuit.

Unit 3: Explosive Devices

Lesson 2: Responding to a Bomb Threat

Lesson Goal: At the end of this lesson, you will understand your role when responding to a bomb threat while ensuring public and officer safety.

> **Think About This:** A bomb threat has been called into a local hardware store in your community. You arrive on the scene and begin to interview the person who took the call about the bomb threat. As you continue your interview, the owner of the store tells you that she noticed a large duffle bag at one of the cash registers. What should you do next?

Initial Response to a Bomb Threat

When responding to a bomb threat, get as much information as possible from dispatch. This initial information guides your actions upon arrival.

Nature of Complaint

Type and details of the threat received

Means of Threat

How the threat was communicated

Time Received

When the threat was reported

Detonation Time

Alleged time of explosion

Device Description

Details about the device, if known

Device Location

Where the device is located, if known

Threat Recipient

Who received the threat

Gathering Critical Information

Communication Methods

Most threats come via telephone. Some, however, come by voice mail, a note left at the scene, social media, a mailed letter, a fax, or an email.

If dispatch does not have all of the information needed, gather as much missing information as possible from witnesses or the complainant.

Time Considerations

Identify the time the complainant received the threat. If the threat contained a phrase such as, "The bomb will go off one hour from now," the time of the call becomes very important.

This allows you to estimate the possible time of detonation, the level of risk, and a deadline by which evacuations or searches must be completed.

- A common policy or rule is to be out of a building at least 30 minutes before the alleged time of detonation and not return until the building has been cleared.

Location Intelligence

If a threat includes information about a location of an explosive device, remember this information when approaching. This could change how you approach, and allow you to stay as far away from the device as possible.

1

Obtain Building Layouts

Street maps, building layouts, or someone familiar with the area can help provide additional, more detailed information related to the device's location, if known.

2

Assist Bomb Squad

This could help the bomb squad find the suspected device and predict possible damage caused by detonation.

3

Identify Hazards

Describe where the item is in relation to both the layout of the building or area and any possible hazards such as fuel storage tanks, stored chemicals, tanks of pressurized gas, steel rods, rolls of wire, or containers of bolts or nails.

Using Radio and Transmitting Equipment

Critical Decision

When approaching a possible bomb situation, decide whether to turn off radios and radio wave-transmitting devices.

There is no universal agreement on whether to do this at or near a bomb threat scene. Agency policies will determine whether to use the radio.

Safety Rationale

Avoiding radio use may stop the accidental triggering or detonation of a bomb designed to explode by radio waves.

Notify dispatch and supervisors just before arrival if you plan to turn off radios or other equipment that emits radio waves.

Approaching the Scene Safely and Tactically

If you know the device's location, choose a route that leads to a stopping point a safe distance from the area. Never park too close to the incident or any suspicious item. Do not park in a manner that will block additional units.

Determine Safe Distance

Follow your agency policies to determine a safe distance for evacuations when parking a patrol vehicle.

Assess Need to Move Closer

If there is a compelling reason, you may need to move closer. The first officers on the scene often move closer to talk with representatives of the building, interview witnesses, and further assess the situation.

Maintain Safe Position

Once you have parked, maintain a safe location and distance from the threat. Use natural or artificial structures for protective cover.

Adjust as Needed

Adjust your distance and location if new information indicates the initial stopping point is too close.

Observations During Approach

It is essential to follow a tactical approach when arriving at the site of a bomb threat. As you approach the scene, note landmarks and approximate safe distances so that you can give specific directions to other responding units. These may also serve as good evacuation gathering areas.

Look for Secondary Devices

When approaching the scene, look for secondary devices or suspicious packages and signs of hazardous materials.

Monitor Physical Symptoms

You might notice an unusual smell or irritation to your skin, eyes, or breathing passages. If this occurs, you should, if possible, move upwind and uphill from the hazard and seek medical attention.

Assess for Explosion Signs

If you approach the scene and see signs of an explosion, the situation has changed. Now, there may be additional safety issues such as broken gas lines, weakened building structures, debris, and fires.

Post-Explosion Response

If signs of an explosion are present, immediately alert EMS, the fire department, and the bomb squad, and request additional backup. Remember to always review and follow your agency's policies and guidelines regarding bomb threats.

Increase Perimeter Distance

Expand the secure area to protect responders and the public from additional hazards.

Treat as Crime Scene

The area has now become a possible crime scene requiring evidence preservation.

Preserve Evidence

Be aware that items that may not initially appear important may be potential evidence.

Assessing the Credibility of the Threat

Locate the person who received the threat, even though that person may not be at the scene. The recipient is sometimes the most important witness; so, interview them as soon as possible. If the recipient is present, do not allow them to leave the scene. Keep track of them for additional questioning by the bomb squad and investigators.

Key Interviews

- Threat recipient
- Building owner or representative
- Witnesses
- Custodians
- Security personnel

Meeting Location

Interview the complainant and the owner or representative of the building or threatened area. Ask them to meet you away from the threatened area.

Sources of additional information may include witnesses or key people with special knowledge about the area.

Critical Questions for Building Representatives

1. **Threat Credibility**
   Is the threat credible? What kind of risk is involved?
2. **Evacuation Planning**
   What is the evacuation plan, and are there any problems with evacuating?
3. **Communication Methods**
   How best can we all communicate during the incident?
4. **Building Documentation**
   Are any building plans available for review?
5. **Incident History**
   Does the organization or building have a history of incidents or threats?

The owner or building representative may be able to answer these important questions. The information they provide can help you assess the situation and determine appropriate response actions.

Additional Investigation Steps

Video Surveillance

If there is video surveillance, view the footage as soon as possible. Exchange information with the owner or representative to help confirm and learn any additional information that may verify the threat's credibility.

Suspect Information

Ask questions about possible suspects:

- Ex-employees
- Disgruntled employees
- Angry customers
- Expelled or suspended students
- Employees having domestic disputes

Find out who controls access to the building.

Evidence Collection and Permissions

1

Collect Physical Evidence

If the threat takes physical form, such as a letter or note, collect that item as evidence.

2

Interview Witnesses

Identify and interview the person in possession of evidence and anyone who might know the caller's motivation.

3

Document Everything

Secure, log, and protect all evidence according to proper procedures.

Credibility will be the major issue in determining whether to search or evacuate. The owner or building representative must give permission to search or evacuate unless you find a device. In this case, the area has become a crime scene, and you will order a mandatory evacuation.

Determining Threat Credibility

Treat all threats and bomb situations as credible until proved otherwise. This assumption will help you decide what action to take next.

1

Initial Assessment

Gather all available information about the threat

2

Evaluate Evidence

Finding a device, suspicious item, or other suspicious circumstances may indicate that the threat is credible

3

Analyze Details

The amount of detail provided in the threat may also show that the threat is real and let you know the risk level involved

4

Determine Action

You may recommend a search or evacuation, participate in a search, notify specialized units, or move the public farther from the threat

Unit 3: Explosive Devices

Lesson 3: Searching for an Explosive Device

Lesson Goal: At the end of this lesson, you will understand your role in searching for an explosive device.

Search Considerations

In a bomb threat situation, the decision to conduct a search depends on different factors. Always look for safe locations and protective cover to defend against an explosion.

Permission Obtained

If permission is obtained to search a building or area

Risk Level

The level of risk for those conducting the search

Threat Credibility

The credibility and amount of detail provided in the threat

Additional Threats

Additional threats or the possibility of secondary devices

Agency Policies

Agency policies on searching for explosives

Safe Distance Guidelines

1,000 Feet

A general safe distance for the initial perimeter is 1,000 feet from the supposed location of the bomb. This is a minimum evacuation distance and applies to situations in which the type or amount of explosive is unknown.

- If there is no good protective cover available, or if the type and amount of the explosive requires it, substantially increase the evacuation distance. Upon arrival, direct everyone to move to a safe location. If circumstances allow, evacuate people upwind, or at least crosswind.

Permission to Search

Standard Protocol

In most cases, you must ask the owner or building representative for permission to search the property. The owner or building representative is usually cooperative regarding a search.

Emergency Exception

In an emergency, if the owner or building representative cannot be located, you may conduct the search without consent.

Level of Risk for Searchers

Sometimes the risk level might be too high to conduct a search. The information received in a threat or warning may indicate that the device is booby-trapped. The bomber could also trigger the device remotely.

- ### Booby-Trap Concerns

  If there is a booby-trap concern, only special units or bomb squads should conduct the search.

- ### Imminent Detonation

  If the bomb is supposed to detonate within a short time, postpone the search. Make sure everyone remains at a safe distance outside the building until after the alleged time of detonation.

- ### Post-Detonation Time

  After that time passes, reevaluate the situation and determine if the search should resume. In some instances, an agency's procedure might require a waiting period before beginning a search.

Secondary Explosive Devices

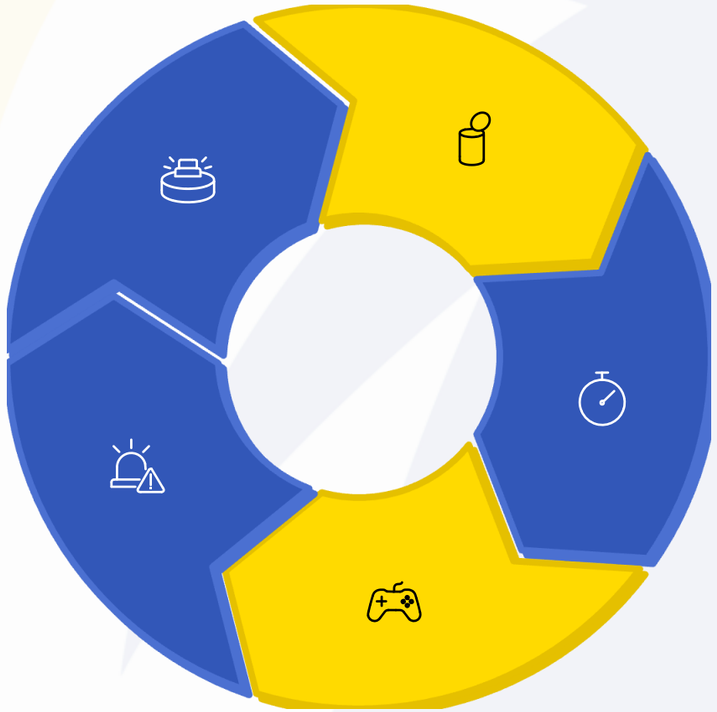
A **secondary explosive device** is a bomb placed at the scene of an ongoing emergency response that is intended to cause casualties among responders. Secondary explosive devices are designed to inflict additional injury, damage, and fear by exploding after a primary explosion or other major emergency response event has attracted large numbers of responders to the scene.

Hidden or Camouflaged

Typically concealed in ordinary objects

Always Assume

During a search, always assume that there is a secondary device in the area



Common Objects

Vehicles, flashlights, backpacks, flowerpots, or garbage cans

Timed Detonation

May detonate at a certain time

Remote Trigger

Radio-controlled devices or cell phones can cause detonation

Conducting the Search: Planning Phase

When planning a search, use resources, such as a person who has knowledge of the building layout, any existing search plan or search teams, and information contained in the threat or warning.

N

Create Search Plan

If no search plan exists, make a plan that will systematically cover all necessary areas and remove confusion.

Follow Systematic Patterns

A chaotic search, done without knowledge of the building's layout, particularly in a large or complex building, might mean some areas are searched several times, while others are completely missed.

Search Thoroughly

Searching systematically requires that you follow the search plan faithfully and that searchers use appropriate search methods and patterns. Conduct the search thoroughly. Remember that explosives can be hidden anywhere.

Exterior Search Protocol

Unless you know the exact location of the device, conduct an exterior search of the building perimeter. Follow this by searching evacuation routes, evacuee collection points, staging areas, and command posts. These are ideal locations for a secondary device.

Building Perimeter

If the building is next to a street, begin at the edge of the street

Evacuation Routes

Search all designated evacuation pathways

Collection Points

Inspect evacuee gathering areas

Staging Areas

Check responder staging locations

Command Posts

Secure command and control areas

Interior Search: Public Areas

After the exterior search, conduct an interior search. Look for any items that seem out of place, and search potential hiding spots. The most obvious areas to search are any mentioned in the threat.

Entryways and Foyers

Main entrance areas and vestibules where public first enters

Lobbies and Waiting Areas

Public gathering spaces and reception areas

Restrooms

Public bathroom facilities throughout the building

Cleaning and Storage Closets

Utility spaces and maintenance areas

Elevator Shafts

Including the tops of elevators and mechanical spaces

If you find no device in the suspected places, search the publicly accessible areas first before moving to restricted areas.

Interior Search: Full Building

If the public area search yields nothing, determine whether to search the entire building. A building's interior search should go from bottom to top, beginning with the basement areas.

Basement Areas

Including utility rooms and areas with heating, cooling, electrical power, and telephone equipment

Ground Floor

All accessible rooms, offices, and common areas

Upper Floors

Systematic floor-by-floor search moving upward

Roof and Attic

Top-level areas and mechanical spaces

Search Safety Protocols

Be alert to the possibility of booby-trapped detonation devices. Watch where you step and do not back up without first looking behind you.

Doorway Inspection

Before entering a doorway, visually inspect the doorway and the surrounding area. Watch for tripwires.

Floor Awareness

Look for lumps or bulges in the carpet and rugs, and step over floor mats.

Controlled Movement

Do not rush into any room or space. Move deliberately and carefully.

Search Team Coordination

Team Assignments

Divide and assign certain floors or rooms to different search teams. Each team should place tape across the doorway of a room or area when they have completely searched it.

If using floor plans, check off rooms or areas as you search.

Additional Vigilance

Pay attention to:

- Any vehicle parked unusually close to the building
- Abandoned luggage
- Gym bags or backpacks
- Buggies or strollers
- Suspicious packages

Post-Search Communication

If you find nothing suspicious, be careful telling the property owner. Liability could be an issue if you offer such definitive statements.

❌ Avoid Saying

"There are no explosives at this location"

"It is safe to go back inside"

✓ Better Approach

"We have completed our search of the accessible areas"

"No suspicious items were found during our search"

- Use careful language that describes what was done without making absolute guarantees about safety or the absence of explosives.

Recognizing a Suspicious Item

Many bombs do not appear to be bombs at all. Sometimes an explosive device is found simply because it is a suspicious item. A bomb may resemble almost anything.

If you find an item that seems suspicious, ask someone if the item belongs there. Bombers may conceal explosives within some form of packaging. **Never try to open or handle a suspected device or package.**

Sometimes officers will not see the device, and the information will come from interviewing someone who has seen it. The more details you can get, the better the bomb team can perform its job.

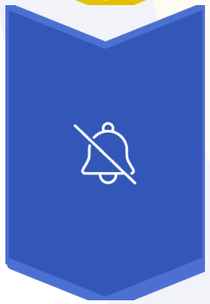
Responding to a Suspicious Item Discovery

Quick Visual Assessment

If you find a suspicious item, vacate the room or area immediately. Take a quick look at the device before leaving.

Note Identifying Features

Note any identifying features, including type, color, shape, and size of the device, as well as any names, labels, placards, chemical symbols, or signs indicating the type of explosive.



Immediate Notification

Immediately notify anyone nearby, a building representative, and a commanding officer so that the evacuation process may begin.