

# **Basic Course Workbook Series Student Materials**

**Learning Domain 43  
Emergency Management  
Version Two**

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Student Materials  
Learning Domain 43  
Emergency Management  
Version Two**

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## **THE ACADEMY TRAINING MISSION**

The primary mission of basic training is to prepare students mentally, morally, and physically to advance into a field training program, assume the responsibilities, and execute the duties of a peace officer in society.



## FOREWORD

The California Commission on Peace Officer Standards and Training sincerely appreciates the efforts of the many curriculum consultants, academy instructors, directors and coordinators who contributed to the development of this workbook. The Commission extends its thanks to California law enforcement agency executives who offered personnel to participate in the development of these training materials.

This student workbook is part of the POST Basic Course Training System. The workbook component of this system provides a self-study document for every learning domain in the Basic Course. Each workbook is intended to be a supplement to, not a substitute for, classroom instruction. The objective of the system is to improve academy student learning and information retention.

The content of each workbook is organized into sequenced learning modules to meet requirements as prescribed both by California law and the POST Training and Testing Specifications for the Basic Course.

It is our hope that the collective wisdom and experience of all who contributed to this workbook will help you, the student, to successfully complete the Basic Course and to enjoy a safe and rewarding career as a peace officer serving the communities of California.

A handwritten signature in black ink, appearing to read 'Paul Cappitelli', with a stylized flourish at the end.

PAUL CAPPITELLI  
Executive Director



# LD 43: Emergency Management

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# Preface

## Introduction

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### **Student workbooks**

The student workbooks are part of the POST Basic Course Instructional System. This system is designed to provide students with a self-study document to be used in preparation for classroom training.

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### **Regular Basic Course training requirement**

Completion of the Regular Basic Course is required, prior to exercising peace officer powers, as recognized in the California Penal Code and where the POST-required standard is the POST Regular Basic Course.

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### **Student workbook elements**

The following elements are included in each workbook:

- chapter contents, including a synopsis of key points,
  - supplementary material, and
  - a glossary of terms used in this workbook.
-

# How to Use the Student Workbook

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## Introduction

This workbook provides an introduction to the training requirements for this Learning Domain. You may use the workbook in several ways: for initial learning, for test preparation, and for remedial training.

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## Workbook format

To use the workbook most effectively, follow the steps listed below.

Step	Action
1	Begin by reading the: Preface and How to Use the Workbook, which provide an overview of how the workbook fits into the POST training program and how it should be used.
2	Refer to the Chapter Synopsis section at the end of each chapter to review the key points that support the chapter objectives.
3	Begin reading the text.
4	Complete the workbook learning activities at the end of each chapter. These activities reinforce the material taught in the chapter.
5	Refer to the Glossary section for a definition of important terms. The terms appear throughout the text and are bolded and underlined (e.g., <b><u>term</u></b> ).

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# Chapter 1

## Terrorist Tactics and Organizations

### Overview

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**Learning need** Peace officers must become familiar with what terrorist threats are; the definitions, tactics, groups and potential targets.

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**Learning objectives** The chart below identifies the student learning objectives for this chapter.

<b>After completing study of this chapter, the student will be able to...</b>	<b>E.O. Code</b>
• recall the definition of terrorism.	43.01.EO1
• identify typical terrorist methods, motivations and tactics.	43.01.EO2
• identify domestic terrorist groups.	43.01.EO3
• identify special interest terrorist groups.	43.01.EO4
• identify international terrorist groups.	43.01.EO5

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## Overview, Continued

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**In this chapter** This chapter focuses on providing a basic understanding of terrorism, their methods, tactics and groups.

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# Terrorism

[43.01.EO1]

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## Introduction

Terrorism has touched the United States at several locations over the years. In 1995, the bombing of the Murrah Building in Oklahoma City.

After the September 11, 2001, World Trade Center airplane bombings, citizens no longer viewed terrorism as just a foreign problem. In recent years, terrorism has taken on a new form with the introduction of chemical, biological, radiological, nuclear, and explosive (CBRNE) weapons. The first step in preparing to respond to incidents of this kind is to understand the nature of the threat.

---

## Leadership

During a major disaster, man-made, natural or a terrorist attack the peace officer will be the first person people look to for leadership. If the peace officer fails to display leadership or take command of the situation the officer will be the first person criticized during and after the event.

The successful outcomes will depend on the leadership actions taken by the peace officer at the outset of the event. It is critical the peace officer arrive at the scene, take charge, assess the situation, start to assist the victims, save lives, institute the **Incident Command System (ICS)**, establish a command post, set perimeters, and deploy resources as they begin to arrive.

In the beginning it is the street cop who will be in charge and everyone will look to that officer for leadership. It is imperative peace officers conduct themselves in a calm, rational manner, make sound decisions based on experience and training. Peace officers must move about their business with self assurance and project a high degree of confidence. Behaviors like this will cause victims and other people involved in the event to believe that sooner or later “everything will be OK.”

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## Terrorism, Continued

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### **Ethics**

Major disasters or terrorist attacks create chaos and confusion. The peace officer's job will be to start managing the chaos and confusion. It is at this time when ethical behavior and decision making will take on a most important role. The peace officer will be called on to make life and death decisions. Peace officers carry on their shoulders the reputations of their organization, their community, and to a larger extent the country. Hurricane Katrina proved this. It is at this time peace officers must do the right thing for the right reasons.

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### **Terrorism defined**

*United States Code Title 22, Section 2656f(d)* states:

Premeditated, politically motivated violence perpetrated against noncombatant targets by sub-national groups or clandestine agents usually intended to influence an audience.

*U.S. Department of Justice* states:

A violent act or an act dangerous to human life, in violation of the criminal laws of the United States or any segment to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

*The Federal Bureau of Investigation (FBI)* states:

The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

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# Typical Terrorist Methods, Motivations and Tactics

[43.01.EO2]

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## **Introduction**

Research and study of terrorist groups show that terrorist groups have typical methods, motivations and tactics. In the upcoming segment you will become familiar with those methods, motivations and tactics that have been found to be typical for terrorist groups.

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## **Typical methods, motivations and tactics**

Common elements of terrorists methods, motivations, and tactics include:

- A desire to further political or social objectives,
  - to target civilian population, with
  - intent to coerce a government or its civilian population.
-

# Domestic Terrorist Groups

[43.01.EO3]

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## Introduction

Domestic terrorism groups usually include Right-Wing Terrorists, Left-Wing Terrorists, Special Interest Terrorist, and “Lone Wolf” Terrorists.

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## Domestic terrorism: Right Wing Groups

Right-Wing Groups		
Motivations	Tactics	Targets
<ul style="list-style-type: none"><li>• New World Order</li><li>• Gun Control</li><li>• Apocalyptic Views</li><li>• White Supremacy</li><li>• Anti-government</li><li>• Anti-taxation</li><li>• Anti-abortion</li><li>• Religion</li></ul>	<ul style="list-style-type: none"><li>• Bombings</li></ul>	<ul style="list-style-type: none"><li>• Federal, State and Local Governmental Agencies</li></ul>

---

## Types of groups

Nationalist/Separatist groups include the Patriots Council (1995), the Dean Harvey Hicks and the Covenant, Sword, and Arm of the Lord (1985).

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## Domestic Terrorist Groups, Continued

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**Domestic terrorism:  
Left Wing  
Groups**

<b>Left-Wing Groups</b>		
<b>Motivations</b>	<b>Tactics</b>	<b>Targets</b>
<ul style="list-style-type: none"><li>• Revolutionary Socialist</li><li>• Protestors against Capitalism</li><li>• Protestors against Imperialism</li></ul>	<ul style="list-style-type: none"><li>• Bombings</li></ul>	<ul style="list-style-type: none"><li>• Federal, State and Local Governmental Agencies</li><li>• Symbols of U.S. Government and Democracy</li></ul>

**Types of  
groups**

Left-Wing Terrorism groups include the Puerto Rican Separatists and the Weather Underground.

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# Special Interest Terrorist Groups

[43.01.EO4]

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## Introduction

Special Interest Terrorist Groups differ from traditional right and left-wing groups in that they pursue specific objectives.

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## Special interest terrorist groups

These terrorist groups attempt, through their violent criminal actions, to force members of society to change their attitudes about issues they consider important to them.

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## Special interest groups: Domestic

Domestic Special Interest Groups		
Motivations	Tactics	Targets
<ul style="list-style-type: none"><li>• Animal Rights</li><li>• Environmental Preservation</li><li>• Abortion Rights</li></ul>	<ul style="list-style-type: none"><li>• Bombings</li><li>• Arson</li><li>• Sabotage</li></ul>	<ul style="list-style-type: none"><li>• Public Health</li><li>• Laboratories</li><li>• Business</li><li>• Abortion Clinics</li></ul>

---

# International Terrorist Groups

[43.01.EO5]

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## Introduction

International terrorism groups usually include state sponsors of terrorists, formalized terrorist groups, and loosely affiliated radical extremists.

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## International terrorism

International terrorism is usually perpetrated against the United States by individuals and/or groups. They are usually based and/or directed by individuals, groups or countries outside the United States.

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## International terrorist groups

International Terrorist Groups		
Classification	Tactics	Targets
<ul style="list-style-type: none"><li>• State Sponsors of International Terrorism</li><li>• Formalized Terrorist Groups</li><li>• Loosely Affiliated International Radical Extremists</li></ul>	<ul style="list-style-type: none"><li>• Bombings</li><li>• Hijackings</li><li>• Assassinations</li></ul>	<ul style="list-style-type: none"><li>• Symbolic Targets</li><li>• Mass Destruction</li><li>• Mass Casualties</li></ul>

---

## State sponsors

International terrorists view terrorism as a tool of foreign policy and engage in anti-western terrorism activities by fund raising, organizing, networking, and providing other support.

State sponsors include such foreign states as Iran, Syria, Sudan, Libya, Cuba, and North Korea.

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*Continued on next page*

## International Terrorist Groups, Continued

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### **Formalized terrorist groups**

More formalized terrorist groups are autonomous organizations with their own infrastructure, personnel, financial arrangements, and training facilities.

Formalized terrorist groups are Hezbollah, Irish Republican Army, Sikh and the Tamil Tigers.

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### **Loosely affiliated radical extremists**

Those loosely affiliated radical extremists are neither surrogates of, nor strongly influenced by, any one nation. They are considered international “wild cards.” They have the ability to tap into a variety of official and private resources.

These groups include but are not limited to Al Qaeda and groups “affiliated” with Al Qaeda such as Abu Sayyaf and Ansar al-Islam.

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### **International terrorism**

Some recent terrorist acts include:

- The World Trade Center bombing in 1993 that killed 6 people and injured over 1,000 people when a car bomb exploded on B-2 parking level of the north tower.
  - The bombing of the USS Cole,
  - World Trade Center 9/11/2001, and
  - The Pentagon.
- 

### **Trends in international terrorism**

International terrorist groups are moving away from the state sponsored terrorism and becoming more autonomous:

- Al Qaeda
  - Hezbollah
  - PLO
-

# Chapter Synopsis

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<b>Learning need</b>	Peace officers must become familiar with what terrorist threats are; the definitions, tactics, groups and potential targets.
<b>Terrorism defined</b> [43.01.EO1]	Law Enforcement uses three definitions of terrorism, they are found in USC title 22, Section 2656(d), the U.S. Department of Justice and the Federal Bureau of Investigation (FBI). Law Enforcement generally uses the definition provided by the FBI.
<b>Terrorist methods, motivations, and tactics</b> [43.01.EO2]	All terrorists use methods to accomplish goals, some methods are specific to the terrorist group. Each terrorist act has some motivation attached to the act and those motivations can vary depending on the terrorist group's goals. Tactics can vary and they are generally specific to the terrorist group. International Terrorists have a preference for high profile bombings while some domestic groups use arson or sniper attacks.
<b>Domestic terrorism</b> [43.01.EO3]	Domestic Terrorists are defined by their political or personal views; they can include religious, hate groups, and separatist movements.
<b>Special interest terrorists</b> [43.01.EO4]	Special interest terrorist groups have interest in changing or bringing public attention to their cause through acts of terrorism. Examples of special interest groups are: abortion groups, religious, and environmental organizations.
<b>International terrorism</b> [43.01.EO5]	International terrorist groups can be state sponsored or formalized groups such as Al Qaeda or Hezbollah. International groups almost all have purely political motivations for their acts and they use tactics that create mass destruction and large casualty counts.

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## Workbook Learning Activities, Continued

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**Learning  
activity**  
(continued)

3. Define domestic terrorism, identify current groups located in the United States today.

4. Define special interest groups or a “Lone-Wolf” terrorist group located in the United States and list them by name.

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*Continued on next page*

## Workbook Learning Activities, Continued

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**Learning  
activity**  
(continued)

5. Define what international terrorism is and list known groups found around the world today.

# Chapter 2

## Counterterrorism Concepts

### Overview

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**Learning need** Peace officers must become familiar with and understand counterterrorism concepts.

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**Learning objectives** The chart below identifies the student learning objectives for this chapter.

<b>After completing study of this chapter, the student will be able to...</b>	<b>E.O. Code</b>
<ul style="list-style-type: none"><li>• identify the Department of Homeland Security threat levels.</li></ul>	43.02.EO1
<ul style="list-style-type: none"><li>• recognize terrorism indicators and counterterrorism measures.</li></ul>	43.02.EO2
<ul style="list-style-type: none"><li>• identify law enforcement prevention/deterrence actions.</li></ul>	43.02.EO3
<ul style="list-style-type: none"><li>• identify public safety information sharing resources.</li></ul>	43.02.EO4

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## Overview, Continued

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**In this chapter** This chapter focuses on understanding counterterrorism measures as they apply to threat levels, pre-incident indicators, prevention and public information sharing. Refer to the chart below for specific topics.

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# Department of Homeland Security Threat Levels

[43.02.EO1]

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## **Introduction**

After the attack on 9/11 of the World Trade Center the Department of Homeland Security (DHS) was created by the President of the United States. DHS has established security threat levels for the nation. Additionally law enforcement, by necessity, adopted an expanded role and assumed new responsibilities for responding to possible terrorist attacks.

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## **Homeland security threat levels**

The Department of Homeland Security Advisory System was created by Presidential Directive to provide a “comprehensive and effective means to disseminate information regarding the risk of terrorist acts to federal, state, and local authorities and to the American people.” It consists of five color-coded threat levels.

Risk includes both the probability of an attack occurring and its potential gravity. Low (green) is declared when there is a low risk of terrorist attacks. Guarded (blue) is declared when there is a general risk of terrorist attacks. Elevated (yellow) is declared when there is a significant risk of terrorist attacks. High (orange) is declared when there is a high risk of terrorist attacks. Severe (red) reflects a severe risk of terrorist attacks. The different levels may trigger specific actions by federal agencies and state and local governments as well as the level of security at some airports or hubs.

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*Continued on next page*

## Department of Homeland Security Threat Levels, Continued

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Federal  
threat  
levels

<b>Homeland Security Advisory System</b>		
<b>Level</b>	<b>Description</b>	<b>Color Code</b>
SEVERE	Severe risk of terrorist attacks	Red
HIGH	High risk of terrorist attacks	Orange
ELEVATED	Significant risk of terrorist attacks	Yellow
GUARDED	General risk of terrorist attacks	Blue
LOW	Low risk of terrorist attacks	Green

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# Terrorism Indicators and Counterterrorism Measures

[43.02.EO2]

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## Introduction

There are twelve indicators (building blocks) of a terrorist act.

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## Terrorism indicators/counterterrorism measures

The chart below shows the twelve building blocks of a terrorist attack and counterterrorism measures.

Terrorism Indicators/Counterterrorism Measures		
Indicators	Descriptions	Counterterrorism Measures
<b>Formation or increase in group membership</b>	<ul style="list-style-type: none"><li>• Recruitment flyers</li><li>• Rallies/meetings</li><li>• Websites</li><li>• Documents/statements</li></ul>	<ul style="list-style-type: none"><li>• Identification of recruitment</li></ul>
<b>Fundraising</b>	<ul style="list-style-type: none"><li>• Identification theft</li><li>• Forged checks</li><li>• Business scams</li><li>• Robberies</li><li>• Burglaries</li><li>• Drug sales</li><li>• Extortion</li></ul>	<ul style="list-style-type: none"><li>• Remove financial support</li></ul>
<b>Weapon selection</b>	<ul style="list-style-type: none"><li>• Explosives and firearms</li><li>• Military and Law Enforcement Armories</li><li>• Manufacturing and construction</li><li>• Black market sources</li></ul>	<ul style="list-style-type: none"><li>• Monitor substances used in weapons</li></ul>

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*Continued on next page*

# Terrorism Indicators and Counterterrorism Measures,

Continued

Terrorism indicators/counterterrorism measures (continued)

Terrorism Indicators/Counterterrorism Measures		
Indicators	Descriptions	Counterterrorism Measures
<b>Weapon Selection</b> (continued)	<ul style="list-style-type: none"> <li>• State sponsors(e.g., Syria)</li> <li>• Covert bomb factories</li> <li>• Gun shops</li> <li>• Hardware stores</li> <li>• Farming/nurseries</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor substances used in weapons</li> </ul>
<b>Select target</b>	<ul style="list-style-type: none"> <li>• Critical infrastructure</li> <li>• Critical assets</li> <li>• Symbolic sites</li> <li>• Gathering places</li> <li>• Specific terrorist goal</li> </ul>	<ul style="list-style-type: none"> <li>• Surveillance</li> </ul>
<b>Specific date</b>	<ul style="list-style-type: none"> <li>• Anniversary date</li> <li>• Significant birthdates</li> <li>• Historical dates</li> <li>• Religious holidays</li> </ul>	<ul style="list-style-type: none"> <li>• Increase security on key dates</li> </ul>
<b>Conduct reconnaissance</b>	<ul style="list-style-type: none"> <li>• Proximity and frequency</li> <li>• Duration of surveillance</li> <li>• Unusual interest</li> <li>• Identification and Uniform theft</li> <li>• Use of computer hackers</li> <li>• Notes, maps, and drawings</li> <li>• False alarms</li> <li>• Still/video cameras</li> </ul>	<ul style="list-style-type: none"> <li>• Counter-surveillance</li> </ul>

*Continued on next page*

# Terrorism Indicators and Counterterrorism Measures,

Continued

Terrorism indicators/ counterterrorism measures (continued)

Terrorism Indicators and Counterterrorism Measures		
Indicators	Descriptions	Counterterrorism Measures
<b>Move weapon to target location</b>	<ul style="list-style-type: none"> <li>• Transportation               <ul style="list-style-type: none"> <li>- Vehicle</li> <li>- Human</li> <li>- Watercraft</li> <li>- Aircraft</li> </ul> </li> <li>• Nervous actions</li> <li>• Odd clothing for locale</li> <li>• Overloaded vehicle</li> <li>• Fixed stare</li> <li>• Protruding wires</li> <li>• Unusual odors</li> <li>• Unusual packages</li> </ul>	<ul style="list-style-type: none"> <li>• Car stops</li> <li>• Pedestrian stops</li> <li>• Field interrogation cards</li> <li>• Report writing</li> </ul>

*Continued on next page*

# Terrorism Indicators and Counterterrorism Measures,

Continued

Terrorism indicators/ counterterrorism measures (continued)

Terrorism Indicators and Counterterrorism Measures		
Descriptions	Descriptions	Counterterrorism Measures
<b>Terrorist egress</b>	<ul style="list-style-type: none"> <li>• False, multiple passports</li> <li>• No current/fixed address</li> <li>• Materials in possession</li> <li>• Use of rental or recently purchased vehicles</li> <li>• Multiple hotel receipts</li> <li>• Using all cash transactions</li> <li>• Possession of one-way travel tickets</li> <li>• Disguises</li> </ul>	<ul style="list-style-type: none"> <li>• Increased awareness of suspicious behavior</li> <li>• Investigation</li> </ul>
<b>Weapon activation</b>	<ul style="list-style-type: none"> <li>• Device activators               <ul style="list-style-type: none"> <li>- buttons, switches, cell phones</li> </ul> </li> <li>• Weapon specific signs (CBRNE)               <ul style="list-style-type: none"> <li>- Chemical</li> <li>- Biological</li> <li>- Radiological</li> <li>- Nuclear</li> <li>- Explosive</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Mitigate with response procedures</li> </ul>
<b>Media Attention</b>	<ul style="list-style-type: none"> <li>• Pre-incident announcement</li> <li>• Use of media to trigger cell</li> <li>• Claims of responsibility</li> <li>• Covert messages</li> <li>• Websites</li> <li>• BLOGS</li> <li>• Group statement of support</li> </ul>	<ul style="list-style-type: none"> <li>• Increase media awareness of specific terrorism problem</li> </ul>

*Continued on next page*

# Terrorism Indicators and Counterterrorism Measures,

Continued

**Terrorism indicators/ counterterrorism measures**  
(continued)

<b>Terrorism Indicators and Counterterrorism Measures</b>		
<b>Descriptions</b>	<b>Descriptions</b>	<b>Counterterrorism Measures</b>
<b>Terrorist claim of responsibility</b>	<ul style="list-style-type: none"> <li>• Media statements</li> <li>• Direct formal notification to government</li> <li>• Witnesses</li> <li>• Extremist BLOGS and writings</li> </ul>	<ul style="list-style-type: none"> <li>• Law enforcement investigation</li> </ul>
<b>Reduce public support of government</b>	<ul style="list-style-type: none"> <li>• Shows government can not protect the people</li> <li>• Protracted loss of life undermines public support</li> <li>• Fear of more attacks causes public to call for policy changes</li> <li>• Fear causes unrest and uncertainty</li> </ul>	<ul style="list-style-type: none"> <li>• Government must maintain strong appearance</li> </ul>

*Continued on next page*

# Terrorism Indicators and Counterterrorism Measures,

Continued

---

## **Additional indicators**

### Equipment indicators:

- Tactical Gear
- Personal Protective Equipment (PPE)
- Official vehicles (e.g., water truck, ambulance, fire truck, etc.)
- 2-way radio equipment
- Surveillance equipment
- Disguises (Uniforms)
- Identification blanks for manufacturing
- Props
- Scientific equipment
- Laboratory components
- Spraying/disseminating devices

### Training/rehearsal indicators:

- Training camps in remote areas
  - Commercial schools and ranges
  - Explosive test evidence
-

# Law Enforcement Prevention/Deterrence Actions

[43.02.EO3]

---

## **Introduction**

The role of field personnel in combating terrorism is by continually changing your patrol mindset, applying community policing techniques, reporting suspicious activity, and recognizing suspicious activity.

---

## **Adopting a new mindset**

Terrorism is a long-term public safety issue. Terrorism is both a national and local law enforcement problem and acts of terrorism can occur in any community. Public confidence rests upon us! Combating terrorism is our job!

---

## **Changing your patrol mindset**

Since 9/11, law enforcement officers are required to have a thorough understanding of their role in preventing and deterring terrorist acts. The responsibility of field personnel has increased to include constant vigilance in their pursuit to identify possible terrorist activity. Combating terrorism is a line-level, local function of law enforcement.

---

## **Community oriented policing (COP)**

Community Oriented Policing (COP) opens lines of communication between law enforcement officers and the public. COP brings officers back to direct interaction with the public, which is the first step towards the identification of terrorist activity. COP seeks community involvement in combating terrorism.

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*Continued on next page*

## Law Enforcement Prevention/Deterrence Actions, Continued

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**Applying  
community  
oriented  
policing**

<b>Community Oriented Policing</b>	
<ul style="list-style-type: none"><li>• Cultivate street sources<ul style="list-style-type: none"><li>- Cab and bus drivers</li><li>- College professors</li><li>- Hotel managers</li><li>- Apartment managers</li><li>- Convenience store employees</li><li>- Other neighborhood workers</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Instruct sources what to report<ul style="list-style-type: none"><li>- Sales and rentals of specific items</li><li>- Consistent use of cash</li><li>- Unusual behaviors and activities</li><li>- Suspicious remarks or statements</li></ul></li></ul>

NOTE: Officers must continually evaluate their daily functions (e.g., citizen contacts, calls for service, traffic stops) to determine if they observe any indicators of terrorist activity. Officers must have a new sensitivity and awareness that was not required prior to 9/11.

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*Continued on next page*

## Law Enforcement Prevention/Deterrence Actions, Continued

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### Recognizing suspicious activity

Recognizing Suspicious Activity	
<ul style="list-style-type: none"><li>• Traffic Stops<ul style="list-style-type: none"><li>- Questionable identification</li><li>- Unusual behaviors</li><li>- Suspicious literature and documents</li><li>- Surveillance items</li><li>- Material and equipment</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Residences<ul style="list-style-type: none"><li>- Number of persons in the households</li><li>- Suspicious literature and documents</li><li>- Lack of furniture</li><li>- Uniforms</li><li>- Extremist materials</li><li>- Weapons</li></ul></li></ul>

---

### Reporting suspicious activity

As with all aspects of law enforcement, it is crucial that officers both document and report any possible terrorist-related activity so that information can be shared, evaluated, and analyzed.

When reporting suspicious activity, information and observations (intelligence) must be documented.

Intelligence must be shared with appropriate persons or organizations to be of value and seemingly trivial information may prove to be of crucial value.

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# Public Safety Information Sharing Resources

[43.02.E04]

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## Introduction

Sharing information between public agencies is a vital responsibility of a number of federal, state and local agencies.

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## Public information sharing

A number of federal, state and local agencies have responsibilities for information sharing of terrorism intelligence. Agencies include but are not limited to:

- Department of Homeland Security (DHS)-Federal
  - Federal Bureau of Investigation (FBI)-Federal
  - Alcohol, Tobacco, and Firearms (ATF)-Federal
  - California Department of Homeland Security-State
  - Local Police and Sheriff Homeland Security (e.g., RTAC [Regional Terrorism Assessment Center])
  - State of California Office of Emergency Services (OES)
  - Local Office of Emergency Services
  - Federal, state and local law enforcement agencies
- 

## Terrorism Liaison Officer (TLO)

Each local law enforcement agency has a designated **Terrorism Liaison Officer (TLO)**. Many agencies, depending on their size, have a number of TLO's.

---

# Chapter Synopsis

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**Learning need** Peace officers must become familiar with and understand counterterrorism concepts.

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**DHS threat levels**  
[43.02.EO1] There are five DHS threat levels, they are: SEVERE, HIGH, ELEVATED, GUARDED, LOW.

---

**Terrorism Indicators and counterterrorism measures**  
[43.02.EO2] There are a number of indicators leading up to a terrorist attack and counterterrorism measures law enforcement can use to deter a terrorist attack.

---

**Law enforcement prevention methods**  
[43.02.EO3] In the past several years both domestic and international terrorism acts have been on the increase in the United States. Law enforcement must develop new and improved methods of prevention and deterrence. Those methods include but are not limited to the following: adopting a new mindset, changing the patrol mindset, recognizing suspicious activity and reporting suspicious activity.

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**Public information sharing resources**  
[43.02.EO4] Peace officers need to be aware of governmental, public and private sources of information that are accessible to them.

---

# Workbook Learning Activities

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## **Introduction**

To help you review and apply the material covered in this chapter, a selection of learning activities have been included. No answers are provided. However, by referring to the appropriate text, you should be able to prepare a response.

---

## **Activity**

1. List and define the Department of Homeland Security Threat levels, define each one and identify the colors associated with each threat level.

2. List all of the terrorism indicators associated with a terrorist threat or act.

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*Continued on next page*

## Workbook Learning Activities, Continued

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**Activity**  
(continued)

3. List all of the prevention/deterrence factors.

4. List all of the public agencies law enforcement personnel can share information with and get information from.

## Workbook Corrections

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Suggested corrections to this workbook can be made by going to the POST website at: [www.post.ca.gov](http://www.post.ca.gov)

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# Chapter 3

## Threat and Vulnerability Assessment

### Overview

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**Learning need** Peace officers must understand what threat and vulnerability assessments are and the rationale associated with them.

---

**Learning objectives** The chart below identifies the student learning objectives for this chapter.

<b>After completing study of this chapter, the student will be able to...</b>	<b>E.O. Code</b>
<ul style="list-style-type: none"><li>• identify the concepts of threat and vulnerability assessments.</li></ul>	43.03.EO1
<ul style="list-style-type: none"><li>• identify local critical infrastructure sectors.</li></ul>	43.03.EO2
<ul style="list-style-type: none"><li>• identify threat assessment rationale.</li></ul>	43.03.EO3

---

*Continued on next page*

## Overview, Continued

---

**In this chapter** This chapter focuses on providing a basic understanding of threat and vulnerability assessment. Refer to the chart below for specific topics.

<b>Topic</b>	<b>See Page</b>
Concepts of Threat and Vulnerability Assessment	3-3
Identification of Local Critical Infrastructure Sectors	3-5
Threat Assessment Rationale	3-7
Chapter Synopsis	3-12
Workbook Learning Activities	3-13

---

# Concepts of Threat and Vulnerability Assessment

[43.03.EO1]

---

## **Introduction**

In the post 9/11 world, law enforcement officers have been thrust into and assumed new responsibilities with respect to counterterrorism. This chapter discusses that new role as it applies to threat and vulnerability assessment.

Students should discuss the need to identify vulnerabilities within our communities, identify potential targets of terrorist attacks, and describe tools (methodologies) available to conduct vulnerability assessments.

---

## **Terrorist target selection criteria**

The probability that an individual/location will be targeted by a terrorist is a function of several factors:

- attractiveness of a target,
- the potential for success, and
- the potential for avoiding identification and capture.

Keep in mind that some terrorists are willing to die for their cause and will select targets regardless of the probability of identification or capture.

---

## **Targets**

Terrorist may select their targets based on the following:

- A key element is symbolism
  - The higher the profile, the better
  - Depending on the group's motivations, the greater the potential for mass casualties, the better
  - Potential for major economic impact
- 

*Continued on next page*

## Concepts of Threat and Vulnerability Assessment, Continued

---

### Timing

The timing of a terrorist attack is often dictated by a date significant to the terrorist.

---

### Why conduct assessments

Assessments are conducted for a variety of reasons including:

- Identifying potential targets
    - Guides patrol and intelligence efforts
    - Secure identified targets
  
  - Accessing federal grant funds
    - Office of Domestic Preparedness (ODP) programs require assessments
  
  - Benefits
    - Interagency interaction and coordination
    - Visible preparation is a deterrent
    - Familiarity with infrastructure elements will aid if response is needed in future.
    - Targets Critical Infrastructure
    - Vital communication links
    - Essential services
-

# Identification of Local Critical Infrastructure Sectors

[43.03.EO2]

---

## Introduction

Critical infrastructure sectors are those systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or combination of those matters. – Public Law 107-56 (*United States of America PATRIOT ACT*)

---

## Critical infrastructure sectors

Critical infrastructure sectors are identified as the following:

Critical Infrastructure Sectors	
<ul style="list-style-type: none"><li>• Agriculture</li><li>• Food</li><li>• Water</li><li>• Public Health</li><li>• Emergency Services</li><li>• Government</li><li>• Defense Industrial Base</li></ul>	<ul style="list-style-type: none"><li>• Information and Telecommunications</li><li>• Energy</li><li>• Transportation</li><li>• Banking and Finance</li><li>• Chemical Industry and Hazardous Materials</li><li>• Postal and Shipping</li></ul>

---

## Include in your assessment

Assessments should include:

- Important infrastructure elements and high impact targets to consider beyond those defined as critical by DHS
  - High occupancy events or locations (i.e., theme parks, stadiums, tourist attractions)
  - Symbolic targets
- 

*Continued on next page*

## Identification of Local Critical Infrastructure Sectors, Continued

---

**Include  
in your  
assessment  
(continued)**

- Targets of single issue terrorists such as:
    - Abortion providers
    - Embassies, consulates, residences
    - Religious sites
  - Targets of radical environmentalists such as:
    - genetic research
    - biotechnology
    - fur breeders
    - firms doing animal research
  - Key assets
-

# Threat Assessment Rationale

[43.03.EO3]

---

## **Introduction**

Assessments are conducted for a variety of reasons including the identification of potential targets, access to federal grant funds, to acquire the benefits of mutual aid, provide a visible deterrent and to increase familiarity with the infrastructure.

---

## **Threat assessment team**

Threat assessment teams are comprised of law enforcement, fire services, emergency medical services, emergency management, utilities, major industry, and anyone who can contribute.

---

## **Assessment tool**

Several threat models exist. There is no national standard. The most common models are identified below:

- Criticality, Accessibility, Recuperability, Vulnerability, Effect, Recognizability (CARVER)
  - Modified CARVER
  - Office for Domestic Preparedness (ODP) project, 1999-2004
  - Proprietary risk assessment methodologies
- 

*Continued on next page*

## Threat Assessment Rationale, Continued

---

### **CARVER**

Military target analysis method adapted for use in vulnerability assessment  
Military Reference Manuals:

FM 31-20-5, pp. 3-15 – 3-20

JP 3-05.5, App. J

J34 AT/FP Installation Planning Template, Annex A

Stands for:

- Criticality
  - Target value
  - Damage to this target would significantly impair political, economic or government operations
  - Critical note – essential to ongoing operations
  
- Accessibility
  - How easily can an attacker reach the target?
  - Physical access
  - Virtual access
  - Surveillance
  - Ability to deny access to target
  
- Recuperability
  - Recovery time
  - How Long will it take to repair, replace or bypass?
  - Cost?
  - Is the target replaceable at all?
  - Closely related to Criticality

---

*Continued on next page*

## Threat Assessment Rationale, Continued

---

### **CARVER** (continued)

- Vulnerability
    - Terrorists' intent
    - Terrorists' capabilities
    - Environment
    - Physical plant
    - Security measures in place
  
  - Effect
    - Consequences of a successful attack
    - May be political, military, economic, or psychological
  
  - Recognizability
    - Easily identifiable
    - Capable of being differentiated from other targets, other structures in area
- 

### **CARVER** **Matrix**

The Carver Matrix is a common threat assessment model used for mission planning.

Points for individual criteria are added into a total score. Scores from collected matrices can be used to “rank” targets within a jurisdiction. Point value assigned: Values range from 1 to 10.

A value of 1 is the lowest threat and a value of 10 would be the greatest threat. The raters point of view can cause subjectivity and skew the rating.

Example:                      Police Department:  
    **Criticality – 10**  
    **Accessibility – 5**  
    **Recuperability – 8**  
    **Vulnerability – 7**  
    **Effect – 10**  
    **Recognizability – 10**

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*Continued on next page*

## Threat Assessment Rationale, Continued

---

**CARVER Matrix**  
(continued)

CARVER Matrix							
Target	C	A	R	V	E	R	Total
1	10	5	8	7	10	10	50
2							

NOTE: Rating can vary with rater's perspective.

---

**CARVER + shock**

Rationale: The early CARVER model assumes terrorists target infrastructure elements; although it considered emotional effects it ignores modern attacks that are planned with mass psychological impact intended. (Example: Al Qaeda's Sept. 11, 2001 attacks)

**CARVER + shock**

Target	C	A	R	V	E	R	+ shock	Total
	10	5	8	7	10	10	10	60

CARVER + Shock adds psychological impact as a targeting criterion

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## Threat Assessment Rationale, Continued

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### **Office of Domestic Preparedness (ODP) model**

The Office of Domestic Preparedness (ODP) model was developed with a specific focus on WMD incidents.

The model includes:

- General Criteria
    - Potential for large number of casualties
    - Potential for primary or secondary hazard from materials on site
    - Long-term catastrophic consequences
    - Economic well being of the community
  
  - Vulnerability Assessment
    - Each target is evaluated and scored on the seven CARVER + shock vulnerability assessment factors
    - Points are totaled on a worksheet for each target
    - Using Vulnerability Assessment:
      - Identify our weaknesses
      - Harden targets
      - Track incidents (“terrorism indicators”) near identified targets
-

# Chapter Synopsis

---

**Learning need** Peace officers must understand what threat and vulnerability assessments are and the rationale associated with them.

---

**Concepts of threat and vulnerability assessments [43.03.EO1]** Threat and vulnerability assessments center on the ability to identify why, where and how communities are vulnerable to terrorist attack and the rationale behind target selection.

---

**Critical infrastructure sectors [43.03.EO2]** Critical infrastructures are defined as “...those systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economy security, national public health or safety, or combination of those matters.”

---

**Threat assessment rationale [43.03.EO3]** Threat assessment includes potential targets, assessment team composition and tools used to manage threat assessment.

---

# Workbook Learning Activities

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## **Introduction**

To help you review and apply the material covered in this chapter, a selection of learning activities have been included. No answers are provided. However, by referring to the appropriate text, you should be able to prepare a response.

---

## **Activity questions**

1. Define the concept of threat and vulnerability assessment in your own words. List the criteria for terrorist target selection.

2. The timing of a terrorist act can be significant. Why?

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*Continued on next page*

## Workbook Learning Activity, Continued

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**Activity questions**  
(continued)

3. During the threat and vulnerability assessments consideration should be given to infrastructure and the importance of target selection for the terrorist. What are some of the considerations that need to be addressed during the assessment process?

4. Threat assessment teams should be comprised of people from a number of public entity disciplines. List some of the agencies that should be on an assessment team.

NOTE: Private organizations can be members of an assessment team (i.e., PG&E, Public utilities, etc.).

# Chapter 4

## Intelligence Resources

### Overview

---

**Learning need** Peace officers must have a comprehensive understanding of the intelligence cycle and the resources available to them.

---

**Learning objectives** The chart below identifies the student learning objectives for this chapter.

<b>After completing study of this chapter, the student will be able to...</b>	<b>E.O. Code</b>
• identify the intelligence cycle.	43.04.EO1
• identify intelligence resources	43.04.EO2

---

**In this chapter** This chapter focuses on the California Intelligence System and other resources. Refer to the chart below for specific topics.

<b>Topic</b>	<b>See Page</b>
The Intelligence Cycle	4-2
Intelligence Resources	4-4
Chapter Synopsis	4-7
Workbook Learning Activities	4-8

---

# The Intelligence Cycle

[43.04.EO1]

---

## Introduction

Peace officers in the State of California have at their disposal a number of intelligence resources. It is important for law enforcement to understand who those agencies are and how to access them and report suspicious activity that might be related to terrorism.

---

## Definitions

**Information:** Anything we know about any person, place or thing, from any source.

**Intelligence:** Information that has gone through the intelligence cycle.

**Open Source Information:** Publicly available information (i.e., any member of the public could lawfully obtain the information by request or observation), as well as other unclassified information that has limited public distribution or access. Ninety-five percent of all intelligence is based on open source information.

**Classified Intelligence:** Any intelligence that has been given a classification by an appropriate agency that is legally authorized to make such classification.

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## The Intelligence Cycle, Continued

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### **The intelligence cycle**

All information must undergo an analysis known as “The Intelligence Cycle.” (Also known as the “intelligence process.”)

The intelligence cycle is ongoing and never-ending. It starts with an understanding of what needs to be collected.

Planning and direction is essential for guidance as to what information needs to be collected and processed. During the collection phase, where all relative information is gathered, the person doing the collecting must use some discretion and eliminate information that is obviously erroneous or irrelevant. During the processing phase, the information is collated and initial weighing of the information to determine credibility is completed.

Although initial analysis is done at the collection level, the most sophisticated and thorough analysis is done by people specially trained to perform this function.

The production could be in any form, although usually in writing; it can be as simple as a conversation or an oral presentation. It is important that the dissemination be limited to those who need to know.

The evaluation, use, and feedback phase is critical for a number of reasons:

- The usefulness of the intelligence is determined
  - The feedback often leads to the initiation of the intelligence cycle and primes the process
-

# Intelligence Resources

[43.04.EO2]

---

## **Introduction**

The federal government and the state of California have many resources available to officers to report and aid in the identification of potential terrorist activity.

---

## **Information resources available**

Available information resources are:

- Terrorism Liaison Officer (TLO)
  - State Terrorism Threat Assessment Center (STTAC)
  - California State Warning Centers (CSWC)
  - Federal Terrorism Screening Center (TSC)
  - Regional Joint Terrorism Task Forces (JTTF)
  - Regional Terrorism Assessment Center (RTAC)
- 

## **Terrorism Liaison Officer (TLO)**

The TLO is the agency point-person for the focusing of terrorism-related information and the dissemination of that information both within and outside the organization.

Depending on the agency's size, the TLO may be the conduit between line officers, agency investigators, and outside resources. While small agencies may have one TLO, large agencies may have hundreds.

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## **State Terrorism Threat Assessment Center (STTAC)**

The mission of STTAC provides timely collection, coordination, analysis, investigation, and dissemination of criminal intelligence/information regarding terrorist activity to federal, state, and local law enforcement agencies.

NOTE: Regional Terrorism Assessment Center (RTAC) is part of the State Terrorism Threat Assessment Center (STTAC), sharing and dissemination system.

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*Continued on next page*

## Intelligence Resources, Continued

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**California  
State  
Warning  
Center  
(CSWC)**

The CSWC is the state “clearing house” for terrorist related information.

It is operated by the FBI (it augments but does not replace the STTAC). The CSWC provides capability to run subjects through the FBI’s databases and provides primary access.

Protocols for using the CSWC includes:

- Run local and NCIC checks first
  - CSWC sends query to FBI TSC
  - Response back to the field
- 

**Terrorist  
Screening  
Center  
(TSC)**

The FBI Terrorist Screening Center was established to be the point of fusion for all terrorism related information and intelligence.

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**Joint  
Terrorism  
Task Force  
(JTTF)**

Redding	Los Angeles
San Francisco	JTTF-LA
JTTF-SF	Riverside
Sacramento	Orange
JTTF-SAC	San Diego
Fresno	JTTF-SD
DOJ-STTAC	FBI-JTTF

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*Continued on next page*

## Intelligence Resources, Continued

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### Report activity

Reporting terror related information can be directed to the following agencies:

- State Terrorism Threat Assessment Center (STTAC)
- California State Warning Center (CSWC)
- Regional Joint Terrorism Task Forces (JTTF) are located in Fresno, Riverside, Los Angeles, Sacramento, Orange, San Diego, Redding, and San Francisco.
- Contact your local FBI field office.

NOTE: Dissemination of intelligence information must follow your agency's written protocol and policies.

---

## Chapter Synopsis

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**Learning need** Peace officers must have a comprehensive understanding of the intelligence cycle and the resources available to them.

---

**Intelligence cycle**  
**[43.04.EO1]** The overview of the California Intelligence System covers the definitions for information, intelligence, open source information and classified information.

---

**Intelligence resources**  
**[43.04.EO2]** The federal government and the State of California have many resources available to officers to report and aid in the identification of potential terrorist activity.

---

# Workbook Learning Activities

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## Introduction

To help you review and apply the material covered in this chapter, a selection of learning activities have been included. No answers are provided. However, by referring to the appropriate text, you should be able to prepare a response.

---

## Activity questions

1. Peace officers are dispatched to an address in a working class neighborhood. When they respond they are told by the reporting party that three males of Middle Eastern descent have moved in next door. The reporting party said the males are renting the house. They know the landlord, who told them the males paid for their rent six months in advance with cash. The reporting party tells the officer the males talk to each other all of the time in Arabic. The officers have asked the reporting party how they know it is Arabic being spoken. He tells the officer he spent three years in the Army and one year of that was spent in Saudi Arabia and he knows what the Arabic language sounds like.

2. Describe the intelligence cycle you will put this information through.

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*Continued on next page*



## Workbook Learning Activities, Continued

---

**Activity  
questions**  
(continued)

5. What other steps could you take to handle this information?

# Chapter 5

## Weapons of Mass Destruction (WMD), Response Strategies and Personal Protective Equipment (PPE)

### Overview

---

**Learning need** Peace officers must be familiar with, understand, identify and effectively respond to a threat or an event involving Weapons of Mass Destruction (WMD).

---

**Learning objectives** The chart below identifies the student learning objectives for this chapter.

After completing study of this chapter, the student will be able to...	E.O. Code
<ul style="list-style-type: none"><li>• identify Weapons of Mass Destruction (WMD).</li></ul>	43.05.EO1
<ul style="list-style-type: none"><li>• identify routes and assessment of WMD exposure.</li></ul>	43.05.EO2
<ul style="list-style-type: none"><li>• identify the components of the R.A.I.N. concept.<ul style="list-style-type: none"><li>- Recognize</li><li>- Avoid</li><li>- Isolate</li><li>- Notify</li></ul></li></ul>	43.05.EO3
<ul style="list-style-type: none"><li>• identify biological WMD agents.</li></ul>	43.05.EO4
<ul style="list-style-type: none"><li>• identify the characteristics of nuclear/radiological WMD agents.</li></ul>	43.05.EO5
<ul style="list-style-type: none"><li>• identify the characteristics of incendiary devices.</li></ul>	43.05.EO6
<ul style="list-style-type: none"><li>• identify types of chemical WMD and toxic industrial chemical/materials.</li></ul>	43.05.EO7

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*Continued on next page*

## Overview, Continued

**Learning objectives**  
(continued)

<b>After completing study of this chapter, the student will be able to...</b>	<b>E.O. Code</b>
<ul style="list-style-type: none"> <li>• identify the effects of toxic industrial chemicals/materials.</li> </ul>	43.05.EO15
<ul style="list-style-type: none"> <li>• identify the types and characteristics of explosives and improvised explosive devices.</li> </ul>	43.05.EO8
<ul style="list-style-type: none"> <li>• identify the importance of WMD job aids for law enforcement First Responders               <ul style="list-style-type: none"> <li>- Louisiana State University (LSU) WMD Response Guide</li> <li>- Emergency Response Guide (ERG)</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• identify response strategies and decontamination issues.</li> </ul>	43.05.EO10
<ul style="list-style-type: none"> <li>• identify the phases of a WMD incident.</li> </ul>	43.05.EO11
<ul style="list-style-type: none"> <li>• identify the basic on-scene actions at a WMD incident.</li> </ul>	43.05.EO12
<ul style="list-style-type: none"> <li>• identify incident response priorities               <ul style="list-style-type: none"> <li>- life vs. property</li> <li>- crime scene protection</li> <li>- preservation of evidence</li> </ul> </li> </ul>	43.05.EO13
<ul style="list-style-type: none"> <li>• identify types and levels of Personal Protective Equipment (PPE) and decontamination considerations.</li> </ul>	43.05.EO14

*Continued on next page*

## Overview, Continued

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**In this chapter** This chapter focuses on providing a basic understanding on weapons of mass destruction and the threat they pose to American society. Refer to the chart below for specific topics.

<b>Topic</b>	<b>See Page</b>
Weapons of Mass Destruction (WMD)	5-4
Routes and Assessment of WMD Exposure	5-8
Components of the R.A.I.N. Concept	5-10
Biological WMD Agents	5-12
Characteristics of Nuclear/Radiological WMD Agents	5-13
Characteristics of Incendiary Devices	5-17
Types of Chemical/Toxic WMD and Toxic Industrial Chemicals/Materials	5-19
Effects of Toxic Industrial Chemicals/Materials	5-22
Types and Characteristics of Explosive/Improvised Explosive Devices	5-29
Importance of WMD Job Aids for Law Enforcement First Responders	5-34
Response Strategies and Decontamination Issues	5-36
Phases of a WMD Incident	5-38
Basic On-Scene Actions at WMD Incidents	5-41
Incident Response Priorities	5-42
Types of Personal Protective Equipment (PPE) and Decontamination Considerations	5-44
Chapter Synopsis	5-48
Workbook Learning Activities	5-51

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# Weapons of Mass Destruction (WMD)

[43.05.EO1]

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## **Introduction**

Weapons of Mass Destruction come in a variety of types and categories. They all have one overriding theme, that being the destructive power and threat to human life.

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## **Weapons of mass destruction (WMD) defined**

*Title 18 United States Code* states: Any destructive device as defined in Section 921 of Title 18. Any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemical, or their precursors, or radiation at any level dangerous to human life. Any weapon involving a disease organism.

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## **Destructive devices**

Section 921, Title 18 Destructive Devices states:

Any explosive, incendiary or poison gas:

- Bomb
- Grenade
- Rocket having propellant charge greater than 4 oz.
- Missile having explosive/incendiary charge of greater than  $\frac{3}{4}$  oz.
- Mines
- Devices similar to any of the devices described in the preceding clauses

NOTE: These are federal code sections dealing with weapons of mass destruction (WMD). Most states have their own penal code or health and safety code sections covering the same substances and devices. California *Penal Code Section 11415* defines destructive devices.

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## Weapons of Mass Destruction (WMD), Continued

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### **Common WMD acronyms**

There are a variety of acronyms used to describe Weapons of Mass Destruction. Each of these is used to identify the general categories of WMD materials with some being more inclusive than others.

NBC (Nuclear, Biological, Chemical) the acronym most commonly used by the military

COBRA (Chemical, Ordnance, Biological, Radiological) which is preferred by the Center for Domestic Preparedness (CDP) which is a branch of the Office of Domestic Preparedness (ODP)

CBRN (Chemical, Biological, Radiological, and Nuclear)

CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosive)

BNICE (Biological, Nuclear, Incendiary, Chemical, and Explosive)

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### **B-NICE**

The WMD curriculum in this course follows the B-NICE model for several reasons:

- For the average responder, radiological and nuclear emergencies are functionally synonymous.
- Incendiary devices are being used by terrorist groups with regularity.

NOTE: This acronym is commonly used by the Fire Department.

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## Weapons of Mass Destruction (WMD), Continued

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### Timeline of WMD effects

Depending upon the material, the discovery of WMD effects may vary from instantaneous recognition (e.g., an explosion) to several days or weeks (e.g., individuals becoming ill as the result of the release of a biological agent).

Typical time spreads:

- Conventional explosion or nuclear detonation (milli-seconds)
- Incendiary device (minutes)
- Chemical release (minutes to hours)
- Radiological release (minutes to hours)
- Biological release (days to weeks)

NOTE: Instructors should emphasize that terrorists often combine WMD agents (e.g., a conventional explosion precipitating the release of radiological materials or “dirty bomb” which can impact the time it takes for effects to manifest themselves). This may confuse response tactics.

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## Weapons of Mass Destruction (WMD), Continued

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### **Additional hazards**

There is always the possibility of additional hazards when Weapons of Mass Destruction have been deployed. Peace officers should also be aware of:

- Secondary Devices - devices employed to disrupt emergency operations and/or cause death/serious injury to law enforcement First Responders.
  - Secondary Contamination - The transfer of contaminants from one person to another (e.g., victims approaching and touching law enforcement First Responders when requesting assistance).
  - Suspects - WMD are weapons employed by terrorists to cause mass panic, serious injury and death to further their political, religious or philosophical ideology. Peace officers must remember that terrorists are criminal suspects who pose a serious threat to an officer's safety. They are to be considered armed and extremely dangerous and treated as any other homicide suspect.
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### **Indicators**

There are numerous indicators that may precede the deployment of a Weapon of Mass Destruction. The indicators are only limited by the imagination and the nature of the terrorist activity intended.

Indicators of a Weapon of Mass Destruction may include but are not limited to:

- Terrorist threat/warning
  - Unusual occurrences preceding a hazardous material release (e.g., theft of gasoline tanker truck)
  - Presence of a hazardous material in an unusual location (e.g., white powdery substance in a basketball gymnasium)
  - Abandoned vehicles, luggage, packages, etc.
  - Suspicious activity at a known terrorist target
  - Information received from the community
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# Routes and Assessment of WMD Exposure

[43.05.EO2]

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## **Introduction**

The respiratory system is the most critical route to protect. Many protective measures are common-sense based (e.g., avoiding ingestion) unless the actions of the terrorist deliberately target a route of exposure (e.g., the injection of a ricin-laced pellet as an assassination device).

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## **WMD routes of exposure**

The common routes of exposure for WMD materials include:

- Inhalation
  - Ingestion
  - Absorption
  - Injection
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## **Important terms and concepts**

Signs of WMD exposures are what can be seen by the law enforcement First Responder.

### **Signs:**

- Could include, but are not limited to people having seizures, uncontrolled vomiting, etc.

Symptoms are typically communicated by the affected individual and are not always apparent to the law enforcement First Responder.

### **Symptoms:**

- Could include, but are not limited to abdominal pain, blurred vision, etc.
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## Routes and Assessment of WMD Exposure, Continued

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**Important terms and concepts**  
(continued)

### **Incubation or Incubation Period:**

- This is the time it takes for an exposed individual to manifest the signs and symptoms or the onset of the disease.
- Incubation periods vary widely among biological agents and are impacted by the general health of the affected person.
- Persons taking immuno-suppressing substances (e.g., transplant patients) or those who have a weaker immune system will typically be the first individuals to be affected by a disease organism.

### **Rate of Action:**

- This refers to the time between exposure and lethality.
  - Some chemical warfare agents such as the VX nerve agent can kill within minutes of exposure.
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# Components of the R.A.I.N. Concept

[43.05.EO3]

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## Introduction

The acronym R.A.I.N. is used to outline protective measures to be taken by law enforcement First Responders while responding to a WMD threat or event.

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## R.A.I.N.

R.A.I.N. is an acronym for Recognize, Avoid, Isolate, and Notify.

- **Recognize** the hazard/threat
- **Avoid** the hazard/becoming contaminated/injured
- **Isolate** the hazard area
- **Notify** the appropriate support

This acronym will be applied throughout this curriculum to refer to the protective measures which may be taken by a law enforcement First Responder dependent upon the type of WMD threat that is thought to exist.

For example, recognition that an explosion has occurred which is based upon direct visual cues is much different than being able to recognize a biological agent that has been deployed based upon the specific signs and symptoms manifested by victims.

“**Recognize**” (What do I hear, see or smell?) refers to the officer’s ability to sense or extrapolate that a WMD agent has been deployed. It presupposes rapid interpretation and quick mental processing of the event.

“**Avoid**” (What do I stay away from?) relates to taking appropriate actions to avoid exposure, contamination, illness, or injury. This also incorporates the concepts of “time, distance, and shielding” (e.g., minimizing time in contact with the hazard, putting distance between oneself and the hazard, and utilizing effective protective barriers between oneself and the threat.).

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## Components of the R.A.I.N. Concept, Continued

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### R.A.I.N.

**“Isolate”** (Whom do I protect?) refers to the reduction of potential exposure or contamination by removing individuals from the immediate area of the threat as well as preventing others from entering an area of danger.

**“Notify”** (Whom do I call?) refers to passing on essential information to command authorities and other appropriate entities.

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# Biological WMD Agents

[43.05.EO4]

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## Introduction

Biological WMD agents are disease-causing organisms or the toxins produced by living organisms.

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## Biological WMD

The Department of Defense has identified 17 specific biological agents as being those most likely to be employed by terrorists. They are:

- Anthrax
  - Botulium Toxins
  - Brucellosis
  - Cholera
  - Clostridium Perfringens
  - Hemorrhage Fevers
  - Meliodosis
  - Plague
  - Q-Fever
  - Ricin
  - Rift Valley Fever
  - Saxitoxins
  - Staphylococcal Enterotoxins B
  - Trichothecene Mycotoxins
  - Tularemia
  - Venezuelan Equine Encephalitis (VEE)
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# Nuclear/Radiological WMD Agents

[43.05.E05]

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## **Introduction**

For the average law enforcement first responder it is sufficient to merely recognize that the disintegration of atoms creates several types of ionizing radiation. Radiation is the invisible energy which is emitted by certain types of unstable or “radioactive” atoms. The detonation of a nuclear device causes blast damage in addition to the release of ionizing radiation.

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## **Advantages of nuclear WMD**

To the terrorist, the advantages of using a nuclear or radiological material in a WMD incident include, but are not limited to the following:

- Materials are generally available (e.g., proliferation of medical isotopes being transported by common carriers).
  - Renders emergency services virtually ineffective resources (i.e., hospitals, EMT’s, and fire departments, etc.).
  - Potentially devastating to individuals and infrastructures.
  - Inherently feared and carries deep-seated psychological impact.
  - Difficult for law enforcement and other First Responders to design effective countermeasures.
  - Next level of escalation.
  - Creates mass casualties.
- 

## **Disadvantages of nuclear WMD**

To a terrorist, the disadvantages of using a nuclear or radiological material include, but are not limited to the following:

- Extremely heavy material – difficult to transport in larger quantities.
  - Short term effects from exposure may take hours or days to manifest themselves. Longer term effects such as cancers or birth defects may take years to be discovered.
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## Nuclear/Radiological WMD Agents, Continued

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### Disadvantages of nuclear WMD (continued)

- Deployment is dangerous to the terrorist (contamination is a very real possibility during manufacturing and transporting).
  - Requires numerous difficult steps to create a fission reaction. Dispersal of radioactive material is much easier and is therefore viewed as a much more viable threat.
  - Manufacture or acquisition of weapons-grade fissionable materials or an actual operational nuclear device can cost millions of dollars. Acquisition of this type of weapon is generally considered to be beyond the capabilities of other than state-sponsored terrorist organizations.
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### Nuclear detonation

The detonation of a nuclear fusion device causes a blast radius (size dependant) from 10 to 30 miles from ground zero.

The detonation causes extensive damage to the infrastructure and causes hundreds of thousands of casualties.

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### The nature of ionizing radiation

For the average law enforcement First Responder it is sufficient to merely recognize that the disintegration of atoms creates several types of ionizing radiation. Radiation is the invisible energy which is emitted by certain types of unstable or “radioactive” atoms.

Radiation is invisible to the eye, however its presence can be identified using readily available detection devices (e.g., “Gieger” counters, dosimeters, etc.).

NOTE: A **Geiger Counter** is a radiation detection and measuring device.

Radioactive emissions may be emitted as waves or particulates. Radioactive sources and electromagnetic waves exist all around us in nature (e.g., radiation from the sun, radon gas, etc.).

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## Nuclear/Radiological WMD Agents, Continued

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### **The nature of ionizing radiation** (continued)

The average annual doses from natural resources is approximately 360 millirems (a scientific measurement of energy), however this figure is functionally meaningless to the average law enforcement First Responder.

Some types of radiation can penetrate clothing, packaging materials, vehicles, and buildings. The lethality of exposure to radiation will depend upon the intensity of the source material, the amount of time the individual is in proximity to the source material, and how close the individual has come to the source material.

The amount of radiation energy which is absorbed by a person is the “dose” the person has received. The greater the doses of radiation, the greater the risk of long-term and short-term health effects.

The four types of radiation emitted by radioactive material are alpha, beta, gamma, and neutron radiation. Radiation travels from its source in all directions (including upwind) and the distance it can travel ranges from ¼ inch to hundreds of feet depending upon the specific type of material.

The further radiation travels, the weaker (and less hazardous) it becomes. In fact, the reduction in effect is logarithmic so as the distance from the source is doubled, the effect is reduced by a factor of four.

Radioactive material is material containing unstable (radioactive) atoms that emit radiation. The material may be in the form of a solid, a liquid, or a gas. It is generally felt that the greatest potential radiological threat to a law enforcement First Responder will come from the release of a radioactive material, particularly a powder or dust, caused by the detonation of a conventional explosive device which is attached to a container of radiological material. This Radiological Dispersion Device (RDD) may spread contaminants over a wide area.

Importantly, the resulting powder or dust can easily be inhaled by an unprotected law enforcement First Responder.

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## Nuclear/Radiological WMD Agents, Continued

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### Types of radiation

The four types of radiation emitted by radioactive material are alpha, beta, gamma, and neutron radiation. Radiation travels from its source in all directions (including upwind) and the distance it can travel ranges from ¼ inch to hundreds of feet depending upon the specific type of material.

Types of Radiation		
Type	Physical Characteristics	Penetration Capacity
Alpha	Particles	Can be blocked by paper or clothing.
Beta	Particle (smaller than alpha)	Can be blocked by skin.
Gamma	Ray or Wave	Can be blocked by lead.
Neutron	Ray or Wave	Cannot be blocked. Will penetrate all known objects.

### Critical self-protection concepts

Self protection concepts include applying Time, Distance, and Shielding.

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# Characteristics of Incendiary Devices

[43.05.EO6]

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## Introduction

Incendiary devices were present in over 20% of domestic bombing incidents. They are extraordinarily easy to manufacture out of inexpensive and readily available materials. Incendiaries are very reliable and tend to ignite about 75% of the time.

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## Facts regarding terrorist use of incendiary devices

Comprehensive instructions for creating incendiary devices are available on the Internet and in many publications.

Incidents involving the use of incendiary devices were preceded by articulated threats less than 5% of the time.

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## Triggering methods

Incendiary devices are typically triggered by one of three methods:

- Chemical activation
  - Electronic activation
  - Mechanical activation
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## Delivery methods

The most common delivery methods of incendiary devices are:

- Stationary placement
  - Hand-thrown (e.g., the traditional “Molotov Cocktail”)
  - Self-propelled
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## Components

The three fundamental components of virtually every incendiary device include:

- The ignition source (e.g., matches)
  - The combustible filler (e.g., gasoline)
  - The housing or container for the combustible filler material (e.g., plastic gallon jug)
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## Characteristics of Incendiary Devices, Continued

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### **Construction materials**

Common incendiary device construction materials include, but are not limited to:

- Common highway road flares or “fusees” which offer 10 - 30-minute burn times and which generally are resistant to both wind and water.
  - Gasoline and motor oils (which may be combined with substances such as powdered or liquid soaps to change the viscosity and create a poor man’s Napalm).
  - Light bulbs (are easily breakable, readily available, and inexpensive filler containers).
  - Matches and fireworks (ignition sources).
  - Various electrical parts including switches, timers, and batteries.
  - Propane, and other cylinders contain combustible material under pressure.
  - Plastic pipes, bottles, cans, and other containers limited only by the imagination of the device maker.
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# Types of Chemical WMD and Toxic Industrial Chemicals/Materials

[43.05.E07]

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## Introduction

Chemical agents are substances that can injure, incapacitate or kill through a variety of means. The two types of chemical agents are Chemical WMD and Toxic Industrial Chemicals.

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## Advantages of chemical WMD

To a terrorist, the advantages of using chemical WMD include, but are not limited to the following:

- They are relatively easy to make.
  - Precursors and/or toxic chemicals in their final form are readily available.
  - Generally speaking, chemicals are cheap to acquire, especially when compared to some other categories of WMD agents.
  - Chemicals tend to create an immediate reaction upon exposure particularly in comparison to biological pathenogens where it may take days or weeks for signs and symptoms to manifest themselves.
  - Chemicals tend to spread easily.
  - The release of toxic chemicals can tie up huge amounts of resources to remove, neutralize, or clean-up the affected area and to treat those individuals who have been exposed. Incidents tend to be extremely manpower and equipment intensive.
  - The psychological impact of actual or potential toxic chemical exposure is significant.
  - Deployment of toxic chemicals represents an escalation in the level of attack.
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# Types of Chemical WMD and Toxic Industrial Chemicals/Materials, Continued

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## **Disadvantages of chemical WMD**

To a terrorist, the disadvantages of using a chemical WMD include, but are not limited to the following:

- Typically requires huge quantities of a substance to create a mass effect. This is obviously more true with toxic industrial chemicals in contrast to nerve agents whose sole purpose is to create a lethal reaction.
  - Production and deployment can be potentially hazardous to the terrorist. An untrained individual can easily begin uncontrolled chemical reactions (e.g., creating fires, explosions, toxic fumes, etc.).
  - Generally speaking, public safety agencies are better prepared to respond to a chemical emergency than to some other types of WMD incidents. This is a disadvantage to the terrorist. The existence of hazardous materials response teams, for example, means that some resources may be available to mitigate the effect of a chemical release. This will be dependent, however, on many variable factors such as the type of chemical used, how much of the substance is released, and its relative toxicity.
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## **Realities regarding chemical agents**

Some important points for law enforcement First Responders concerning chemical WMD agents:

- The presence of chemical warfare agents and many toxic industrial chemicals can be detectable by trained individuals using a variety of available analysis devices which are designed to be used in the field.
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# Types of Chemical WMD and Toxic Industrial Chemicals/Materials, Continued

**Realities regarding chemical agents**  
(continued)

- Fundamental self-protective measures (e.g., avoidance, distance, etc.) are effective for minimizing potential exposure to chemical WMD agents. Various levels of Personal Protective Equipment (PPE) can prevent exposure or contamination, but this is dependent upon the degree to which the PPE employed has been designed for the type of hazard anticipated. Also, the effectiveness of any PPE presupposes that the wearer is properly trained in the use of the PPE, that the PPE is used correctly, and that the PPE has not been compromised (e.g., cracks in masks, tears in suits, etc.).
- A variety of first aid measures and medications are available to treat individuals exposed to chemical WMD agents.
- Many chemical substances can be neutralized or removed from a contaminated person.

**Categories of chemical weapons**

Chemical weapons can be broken into two fundamental categories: **Incapacitating agents** and **toxic agents**. Incapacitating agents include a variety of chemical irritants familiar to law enforcement personnel.

Categories of chemical weapons	
Incapacitating Agents	Toxic Agents
<p><b>Irritants:</b></p> <ul style="list-style-type: none"> <li>- CS                      - CR</li> <li>- CN                      - OC</li> </ul> <p>Most of these substances are lacrimators (tear producers), however, exposure can create other physical and psychological symptoms. These substances are not usually considered to be lethal.</p>	<ul style="list-style-type: none"> <li>- Nerve</li> <li>- Blister</li> <li>- Chocking</li> <li>- Blood</li> </ul>

# Effects of Toxic Industrial Chemicals/Materials

[43.05.EO15]

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## **Introduction**

Law enforcement personnel need to become conversant with potential indicators and the effects of a chemical agent release.

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## **Indicator and effects of chemical agent attack**

Indicators and effects may include, but are not limited to:

- Dead plants
  - Dead or dying animals
  - Numerous sick or dead victims
  - Presence of a visible vapor cloud
  - Reports of strange odors
- 

## **Factors which impact a chemical attack**

There are a variety of factors which impact the effectiveness of a chemical attack.

Individual factors may include, but are not limited to:

- Humidity
  - Temperature
  - Precipitation
  - Wind Speed
  - Buildings and terrain
  - Chemical persistency
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## Effects of Toxic Industrial Chemicals/Materials, Continued

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**Factors  
which  
impact  
a chemical  
attack**  
(continued)

Factors such as humidity and temperature can impact the extent to which a chemical moves or disperses in the environment. Wind speed is an obvious factor in the dispersal of airborne chemicals. The faster the wind speed the more readily an airborne substance will tend to disperse.

Chemical persistency refers to the time a chemical substance remains in the environment. Water, for example, will evaporate more quickly than motor oil. As a result, motor oil is the more persistent of the two substances.

Building and terrain can channel and direct the plume path of chemical agents.

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**Understanding  
chemical  
“persistency”**

An industrial chemical like chlorine is considered to have low persistency because it will rapidly disperse in air.

The VX nerve agent, in contrast, is a more viscous substance and residues may remain at the dispersal point for a protracted period of time.

Persistency also has a great deal to do with factors such as vapor density. Depending on the substance, chemicals of varying vapor densities may have a greater or lesser tendency to rise or fall in air. The key point for law enforcement First Responders is that toxic chemicals which are heavier than air may hug the ground and collect in confined spaces.

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## Effects of Toxic Industrial Chemicals/Materials, Continued

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### **Understanding nerve agents**

Nerve agents are among the most toxic chemical substances ever developed. They are hazardous in their liquid and vapor states and can cause death within minutes of exposure. The means of exposure may include absorption, inhalation, ingestion, and injection.

Nerve agents, like their close relatives the organophosphate pesticides, inhibit acetylcholinesterase in tissue, resulting in excess acetylcholine. Acetylcholine is the chemical that carries nerve impulses from one neuron (nerve cell) to another. It is the enzyme that removes the acetylcholine after the impulse has been transmitted to prepare the junction (synapse) to transmit another impulse. Inhibiting the body's production of this enzyme will prevent the junction from being cleaned.

The result is continual nerve impulses causing convulsions, uncontrolled muscle spasms, and other glandular reactions. Exposure to these agents typically occurs via airborne vapors or direct skin contact with the liquid.

Signs and symptoms of nerve agent exposure are dramatic and include the following factors which form the acronym "SLUDGEM":

- **S**alivation (e.g., uncontrolled drooling and the creation of excess quantities of saliva)
- **L**acrimation (excess tearing)
- **U**rination
- **D**efecation
- **G**astrointestinal distress
- **E**mesis (vomiting and dry heaves)
- **M**iosis (pin point pupils)

**NOTE:** Sometimes nerve agent exposure may be reported to public safety agencies as a person (or persons) manifesting heart attack symptoms. The presence of multiple victims exhibiting these types of symptoms may be an important clue to law enforcement First Responders.

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## Effects of Toxic Industrial Chemicals/Materials, Continued

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### Understanding blister agents

Blister agents are designed to cause red skin (erythema), blisters, eye damage, respiratory damages, and gastrointestinal damage. Their effect on exposed tissues is similar to a corrosive chemical such as lye or sodium hydroxide.

Blister agents are also called “Vesicants.”

Most of the blister agents will cause a delayed reaction. This is problematic for law enforcement First Responders who may be unaware of exposure until skins and symptoms present themselves. **It is crucial that law enforcement First Responders undergo decontamination whenever there is a possibility of exposure to blister agents!** Exposure is rarely fatal unless the respiratory system is involved. Respiratory protection is vital!

Distilled mustard and nitrogen mustards are blister agents and were developed because regular mustard loses effectiveness in low temperatures. The later products have higher freezing temperatures.

Lewisite, which was developed after the other mustard products, was specifically designed to cause an **immediate and painful** reaction.

The mustard agents can have distinct odors (e.g., a garlic or onion smell for the mustards or the odor of geraniums for Lewisite). If a law enforcement First Responder detects these smells exposure has probably already occurred. Reports of these types of smells by victims may provide a clue that a blister agent release has occurred.

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## Effects of Toxic Industrial Chemicals/Materials, Continued

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### **Understanding blood agents**

Blood agents (cyanides) are chemical substances which inhibit the exchange of oxygen to the cells through the bloodstream. The disruption of the normal oxygen exchange process causes rapid and labored respiratory arrest, and finally death.

Hemoglobin carries oxygen to the cells and carbon dioxide back to the lungs for disposal. The blood agents (cyanides) react with the iron in the hemoglobin and prevent it from properly taking up and dispensing the oxygen and carbon dioxide.

The effect of blood agent exposure is the same as asphyxiation, but more sudden. Exposure to high concentrations can cause seizures, respiratory and cardiac arrest. Routes of exposure include skin absorption, inhalation, ingestion, and injection.

Blood agents or cyanide compounds are common industrial chemicals and are often encountered by emergency responders during regular hazardous materials incidents. Some victims may report the odor of bitter or burnt almonds or peach pits.

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### **Understanding choking agents**

Choking (Pulmonary) agents include common industrial chemicals such as chlorine and phosgene. Exposure to these chemicals may cause eye and airway irritation, dyspnea (shortness of breath), chest tightness, and delayed pulmonary edema (the lungs filling with fluid). These agents can also cause death if exposure levels are sufficient.

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## Effects of Toxic Industrial Chemicals/Materials, Continued

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**Understanding  
choking  
agents  
(continued)**

When chlorine is inhaled into the lungs it reacts with the moisture and changes into hydrochloric acid. As a consequence the lungs rapidly fill with more fluids resulting in less lung capacity to exchange oxygen. A person may literally experience a dry-land drowning.

Importantly, individuals who survive exposure to a choking agent will often sustain permanent lung damage and some loss of lung capacity due to scarring. Inhalation is the primary route of exposure for choking agents.

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**Toxic  
industrial  
chemical /  
material  
(TIC) /  
(TIM)**

A Toxic Industrial Chemical/Material (TIC/TIM) is any substance which (in given quantity) produces a toxin effect in exposed personnel by inhalation, ingestion, or absorption.

Quantity or “concentration” directly impacts the adverse effects of exposure. The more concentrated the chemical, the more intense the effects.

Although the super-toxic chemical warfare agents (nerve agents) are frequently discussed as terrorist weapons, toxic industrial chemicals/materials are readily available to terrorists and can still cause significant casualties.

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## Effects of Toxic Industrial Chemicals/Materials, Continued

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**Toxic industrial chemical / material (TIC) / (TIM)**  
(continued)

Locations where toxic industrial chemicals/materials are commonly found, but are not limited to:

- Chemical manufacturing plants
  - Food processing facilities (e.g., large quantities of anhydrous non-household ammonia)
  - Transportation centers
  - Storage tanks and facilities
  - Airports
  - Barge terminals
  - Pumping stations
  - Mining operations
  - Pesticide manufacturers and distributors
  - Educational, medical, and research laboratories
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**Possible TIC / TIM effects**

There are acute effects and chronic effects of exposure to Toxic Industrial Chemicals (TIC) or Toxic Industrial Materials (TIM) that can include, but are not limited to:

<b>Acute Effects</b>	<b>Chronic Effects</b>
<ul style="list-style-type: none"> <li>• Headaches</li> <li>• Nausea</li> <li>• Respiratory failure</li> <li>• Dry-land drowning</li> <li>• Oxygen displacement</li> <li>• Temporary or permanent blindness</li> </ul>	<ul style="list-style-type: none"> <li>• Tumors (malignant or benign)</li> <li>• Blood poisoning</li> <li>• Long term respiratory inhibition</li> <li>• Leukemia</li> <li>• Sterility</li> <li>• Permanent blindness</li> </ul>

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# Types and Characteristics of Explosive/Improvised Explosive Devices

[43.05.EO8]

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## **Introduction**

Explosives (bombs) as WMD agents are used in the majority of terrorist attacks worldwide. They are clearly the “weapons of choice” for terrorists. Armed attacks are a distant second. Hijacking, assassinations, and other terrorist tactics collectively account for the remainder of terrorist attacks world wide. The majority of all terrorist incidents within the United States involve explosives.

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## **Terrorist use of explosives**

To terrorists, the advantages of using explosives as a weapon require few skills to produce an enormous psychological impact on populations and cause mass casualties. Explosives are inexpensive and easy to obtain.

To terrorists, the disadvantages of using explosives as a weapon are, they may be unreliable, volatile and can cause injury and death to the terrorists making the bomb.

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## **Explosive types**

There are two kinds of explosives, they are:

Low explosives, better known as propellants, are designed to deflagrate (burn) and produce gas output. They are initiated by burning or shock.

High explosives, designed to detonate, do so at velocities higher than the speed of sound.

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# Types and Characteristics of Explosive/Improvised Explosive Devices, Continued

**Explosives terminology**

Terminology	Description
<b>Blast Pressure</b>	<ul style="list-style-type: none"> <li>• Positive blast pressure (overpressure) moves rapidly away from the explosion center. This is known as the primary phase in which thousands of pounds per square inch of pressure are exerted.</li> <li>• The massive change in air pressure can do great harm to the human body.</li> <li>• Negative blast pressure occurs after the positive blast pressure phase. It is a vacuum that returns air to the center of the explosion. This phase is less violent but it lasts longer.</li> </ul>
<b>Fragmentation</b>	<ul style="list-style-type: none"> <li>• An explosive device may propel fragments and nearby debris at missile-like speed.</li> <li>• This can cause lacerations, abrasions, contusions, and penetration of any part of the body.</li> </ul>
<b>Thermal Effects</b>	<ul style="list-style-type: none"> <li>• Heat produced by the detonation of either high or low explosives varies according to the ingredients of the device.</li> <li>• High explosives generate greater temperatures.</li> <li>• Low explosives have a longer duration time.</li> </ul>

*Continued on next page*

# Types and Characteristics of Explosive/Improvised Explosive Devices, Continued

**Types of Explosives**

Types	Characteristics
<b>C - 4</b>	<ul style="list-style-type: none"> <li>• White to light brown plastic</li> <li>• Plastic demolition</li> <li>• Highly stable</li> </ul>
<b>T.N.T. (Trinitrotoluene)</b>	<ul style="list-style-type: none"> <li>• Light yellow to brown or light gray</li> <li>• Three common forms:               <ul style="list-style-type: none"> <li>- cast</li> <li>- pressed</li> <li>- flake</li> </ul> </li> <li>• Used in demolition charges and grenades</li> <li>• Standard military explosives</li> </ul>
<b>Dynamite</b>	<ul style="list-style-type: none"> <li>• Stick / cylindrical form</li> <li>• Wrapped in white or colored wax paper</li> <li>• Sizes vary</li> <li>• Highly stable</li> </ul>
<b>T.A.T.P. (Triacetone triperoxide)</b>	<ul style="list-style-type: none"> <li>• White crystalline powder</li> <li>• Normally refrigerated</li> <li>• Highly sensitive and powerful</li> <li>• Highly explosive</li> <li>• Very unstable</li> <li>• Susceptible to heat, shock and friction</li> </ul>
<b>Nitroglycerin</b>	<ul style="list-style-type: none"> <li>• Heavy / colorless oily explosive liquid</li> <li>• Obtained by nitrating glycerol</li> <li>• It is a contact explosive</li> <li>• Highly unstable</li> </ul>

*Continued on next page*

## Types and Characteristics of Explosive/Improvised Explosive Devices, Continued

### Types of Explosives (continued)

Types	Characteristics
<b>P.E.T.N. (Pentaerythritol Tetranitrate)</b>	<ul style="list-style-type: none"> <li>• Odorless white crystalline solid</li> <li>• Powerful high explosive</li> <li>• More unstable than T.N.T.</li> </ul>

### Types of Improvised Explosive Devices (IED)

Devices	Characteristics
<b>Vehicle Bombs</b>	<ul style="list-style-type: none"> <li>• Power devices</li> <li>• Usually triggered with a timer or remote</li> </ul>
<b>Pipe Bombs</b>	<ul style="list-style-type: none"> <li>• Most common explosive device</li> <li>• They are opposite of vehicle bombs when it comes to size and destructive potential</li> <li>• A timing fuse usually controls detonation</li> </ul>
<b>Satchel Charge</b>	<ul style="list-style-type: none"> <li>• The term is derived from an old military term for an explosive device consisting of a canvas pack containing explosives</li> <li>• Can be thrown</li> <li>• Container may be packed with materials such as nails and glass to inflict more casualties</li> </ul>

*Continued on next page*

# Types and Characteristics of Explosive/Improvised Explosive Devices, Continued

**Types of Improvised Explosive Devices (IED)**  
(continued)

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Devices	Characteristics
<b>Suicide Bombers</b>	<ul style="list-style-type: none"><li>• Human borne bombs are utilized extensively throughout the world. Though they have not yet reached the United States, plots have been interdicted</li><li>• Human-borne bombs are the ultimate “smart bomb” because the bomber can pick the exact location and time for the greatest impact</li></ul>

---

# Importance of WMD Job Aids for Law Enforcement First Responders

[43.05.EO9]

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## **Introductions**

Peace officers have a variety of guides available to aid them in responding, identifying and managing WMD incidents. The two most common are the Louisiana State University (LSU) Response Guidebook and the Emergency Response Guide (ERG).

---

## **Louisiana State University (LSU) WMD response guidebook**

The Louisiana State University (LSU) WMD response guidebook, is designed to assist law enforcement First Responders in making initial assessments of all types of WMD incidents.

The LSU WMD response guidebook utilizes a progressive matrix to guide the responder through forced-choice questions to determine what type of WMD event may have occurred. It also utilizes victim symptomology to further identify what specific types of WMD weapons have been deployed.

The LSU WMD response guidebook enumerates the types of indicators that would be associated with a specific type of WMD attack, along with the routes of possible exposure connected with such a weapon. It further relates what type of immediate on-scene actions should be taken by law enforcement First Responders (e.g., isolation distances and personal protective clothing).

---

## **Emergency Response Guidebook (ERG)**

The Emergency Response Guide (ERG) was designed primarily to identify hazards and emergency response considerations associated with the transportation of hazardous materials. Useful information concerning fire and explosion hazards, health risks, protective clothing recommendations, and first aid measures are identified as considerations such as evacuation and protective action distances.

Although originally developed to address toxic industrial chemicals and other hazardous materials, the document has been updated in recent years to include potential terrorist weapons, such as nerve agents. The front part of the ERG contains illustrations of transportation placards which may be displayed upon a vehicle or upon a container used by a terrorist.

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*Continued on next page*

# Importance of WMD Job Aids for Law Enforcement First Responders, Continued

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## Emergency Response Guide (ERG) (continued)

The ERG is divided into a number of color-coded sections which are designed to make the document easy to use.

- The yellow pages of the ERG, for example, numerically list the four-digit **Identification Number** which may be displayed upon a transportation placard. Looking this number up provides the name of the material and directs the user to the appropriate **Guide Number**.
  - The Guide Number directs the user to the orange section of the ERG which is also listed numerically. The Guide Number page provides useful information such as:
    - Potential hazards
    - “Public safety information” such as protective clothing recommendations, evacuation distances, first aid measures, and emergency actions for fires, spills, and leaks.
  - The blue pages of the ERG contain an alphabetical listing of materials by name. If the identification number is unknown, but the name of the material is somehow available, this is an alternative method of locating the appropriate Guide Number.
  - If a material listed in either the yellow or blue sections of the ERG is highlighted, and there is no fire, the law enforcement First Responder can go directly to the green section of the ERG for information concerning isolation and protective action distances.
-

# Response Strategies and Decontamination Issues

[43.05.EO10]

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## Introduction

The initial response to a WMD incident will follow the same guidelines as any other hazardous materials release with the exception peace officers must consider the presence of terrorist suspects and/or secondary devices.

Is it essential that the law enforcement First Responder provide as clear a picture as possible to dispatch and other responding personnel so that appropriate resources can be called upon to assist in a WMD incident.

---

## Response strategies

It is essential that law enforcement personnel recognize that the response to a WMD incident must be deliberate, coordinated, and safely executed.

Indications that a WMD incident has occurred may include but are not limited to:

- 9-1-1 calls made by individuals reporting a threat or an actual incident
- Media reports of a threat or incident
- Medical sources reporting suspicious symptoms or a large number of persons becoming ill with similar or unusual symptomology.
- A report to a dispatcher from a field officer or firefighter

Law enforcement officers are likely to be the law enforcement First Responders to a WMD emergency. The effectiveness of the initial responders sets the stage for how all subsequent response actions will be conducted.

NOTE: Additional information on response strategies to WMD and incendiary devices refer to LD 26: *Unusual Occurrences* and LD 41: *Hazardous Materials*.

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*Continued on next page*

## Response Strategies and Decontamination Issues, Continued

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### **Decontamination issues**

There are two types of decontamination, should it been required, in the event of the deployment of a Weapon of Mass Destruction.

Emergency decontamination includes:

- Gross decontamination - Brushing off visible contaminants
- Removal of outer garments
- Flushing with large quantities of water
  - Water is the most commonly used decontamination agent.
  - Large quantities should be used to ensure complete removal of the contaminant.
  - Individuals should be concerned about decontamination run off.

Technical decontamination can only be performed by trained and certified personnel.

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### **Medical evaluations**

Individuals who have undergone either emergency or technical decontamination should be medically evaluated.

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# Phases of a WMD Incident

[43.05.EO11]

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## Introduction

There are five phases of all WMD incidents. The phases are categorized by the occurrence of specific behavior of the community response.

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## The five phases of a WMD incident

Five Phases	
<b>Prevention and Deterrence Phase</b>	<ul style="list-style-type: none"><li>• This is the pre-incident period when public safety agencies have been successful in either dissuading a terrorist from perpetrating an act or when an actual pre-incident interdiction has occurred.</li><li>• With the passage of SB1350 and the development of the resultant Law Enforcement Response to Terrorism (LERT) course, California requires the need for every law enforcement First Responder in the state to have training related to terrorism pre-incident indicators and basic threat assessment concepts.</li><li>• The spirit behind this effort and the recognition of this phase is to ensure that information which is potentially indicative of terrorist activity is <u>recognized</u> and <u>reported</u> in a timely fashion.</li></ul>

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*Continued on next page*

## Phases of a WMD Incident, Continued

The five phases of a WMD incident (continued)

<b>Five Phases</b>	
<b>Notification Phase</b>	<ul style="list-style-type: none"> <li>• When information is transmitted to public safety agencies concerning the event. It is the point of first discovery that something has happened (e.g., an explosion has occurred).</li> <li>• Ends with the arrival of the first responding public safety unit at which time the incident is considered to move into the response phase. Depending upon the scope of the incident, the response phase may continue for a protracted period of time.</li> <li>• Important considerations during the Notification Phase include, but are not necessarily limited to:               <ul style="list-style-type: none"> <li>- Selection of an appropriate approach route (e.g., from the upwind, uphill, upstream direction)</li> <li>- Planning initial response actions.</li> <li>- Mentally preparing to survive the incident.</li> </ul> </li> </ul>
<b>Response Phase</b>	<ul style="list-style-type: none"> <li>• As the name would imply, the phase is the period when public safety agencies are literally responding to the scene to provide services such as rescue, incident stabilization support, protection of property, etc. Although this is no longer considered the Notification Phase per se, further “notifications” will continue to be made during the response phase to summon specialized resources, mutual aid, or other necessary resources (e.g., bomb squad).</li> </ul>

*Continued on next page*

## Phases of a WMD Incident, Continued

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**The five phases of a WMD incident**  
(continued)

<b>Five Phases</b>	
<b>Restoration Phase</b>	<ul style="list-style-type: none"><li>• Involves issues such as the restoration of essential services (e.g., power, water, transportation corridors, etc.).</li></ul>
<b>Recovery Phase</b>	<ul style="list-style-type: none"><li>• Relates to the re-building of the target location to as close to a pre-incident condition as is realistically possible.</li></ul>

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# Basic On-Scene Actions at WMD Incidents

[43.05.EO12]

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## Introduction

Peace officers have the responsibility of managing a WMD incident. Certain actions must be taken at the scene. Those actions include, at a minimum, isolation, identification, notification, protection/mitigation, documentation and transition.

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## Law enforcement actions at a WMD incident scene

Law Enforcement actions/responsibilities at a WMD incident scene may include:

Actions/Responsibilities	Examples
<b>Isolation</b>	protecting the incident scene integrity, controlling ingress and egress
<b>Identification</b>	reporting on hazards, conditions, persons, situations of interest, and relevancy
<b>Notification</b>	requesting appropriate support services, ensuring that key persons and agencies are alerted
<b>Protection/Mitigation</b>	taking action to protect persons and property, protecting the environment, preventing further damage or injury
<b>Documentation</b>	creating records and reports, obtaining photographs, diagrams, videos to memorialize scene conditions and physical evidence
<b>Transition</b>	appropriately handling incident responsibility over to other individuals and agencies, providing information, conducting individual and group briefings

All of the aforementioned actions will typically be occurring during the response phase of a WMD incident.

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# Incident Response Priorities

[43.05.EO13]

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## **Introduction**

The three main public safety priorities at a WMD incident in order of their priority are lives vs. property, crime scene protection and preservation of evidence.

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## **Three main incident response priorities**

The three main public safety priorities are:

- Life vs. property
    - life takes precedents over preservation of property or evidence
    - incident stabilization (e.g., preventing and or containment)
  - Crime scene protection
  - Preservation of evidence
- 

## **Other considerations**

Other important law enforcement priorities at a WMD incident scene include, but are not limited to:

- Coordinating initial evacuation of persons from the incident scene
  - Establishing appropriate perimeter security to control the ingress and egress of the incident scene, keeping in mind the zone.
  - Engaging in crowd management activities to control the large numbers of onlookers, volunteers, and unsolicited law enforcement First Responders who tend to flock to the scene of a major public safety emergency.
  - Identifying all potentially involved individuals present at the incident scene.
  - Always consider the possibility of secondary devices and secondary attacks.
- 

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## Incident Response Priorities, Continued

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### **Other considerations** (continued)

Preserving the integrity of a crime scene at a WMD incident includes activities such as:

- Identifying the location of fragile evidence to the other law enforcement First Responders
- Acting to preserve/protect perishable evidence
- Directing people away from potential evidence
- Engaging in whatever means are available to safely document the evidence (e.g., notes, pictures, etc.)

NOTE: Additional information on “HOT Zones” refer to Learning Domain 41, *Hazardous Materials Awareness*.

NOTE: Additional information on “Secondary Devices” refer to Learning Domain 26, *Unusual Occurrences*.

---

# Types of Personal Protective Equipment (PPE) and Decontamination Considerations

[43.05.EO14]

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## Introduction

Peace officers must understand the different levels and types of Personal Protective Equipment (PPE) and all of the considerations associated with decontamination.

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## Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) for responding to a WMD incident falls into four basic categories:

Levels	Types of Personal Protective Equipment (PPE)
<b>Level D</b>	<ul style="list-style-type: none"><li>- Clothing which provides nuisance protection only and <u>no</u> protection from the effects of a WMD agent.</li></ul> <p>Examples:                      A standard law enforcement uniform, tactical clothing, or a dust mask.</p>

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*Continued on next page*

## Types of Personal Protective Equipment (PPE) and Decontamination Considerations, Continued

**Personal Protective Equipment (PPE)**  
(continued)

Levels	Types of Personal Protective Equipment (PPE)
<b>Level C</b>	<ul style="list-style-type: none"> <li>- Personal Protective Equipment includes an air purifying respirator (APR) (e.g., a “gas mask”) equipped with a canister-type filter coupled with a chemical suit ensemble incorporating boots, gloves, and a hood.</li> <li>- Only short-term and limited splash protection is provided by the suit and the APR is only effective in areas with a sufficient oxygen concentration <u>and</u> where the filter is appropriate to the respiratory hazard which is present.</li> </ul> <p>Examples:                      The military’s Mission Oriented Protective Posture (MOPP) ensemble which is designed to permit troops to function in a nerve agent environment.</p>
<b>Level B</b>	<ul style="list-style-type: none"> <li>- Personnel Protective Equipment ensemble incorporates the addition of supplied air through a <b>Self-Contained Breathing Apparatus (SCBA)</b>.</li> <li>- Provides the highest level of respiratory protection, but the suit (often of much higher quality and greater durability than a Level C suit) provides limited protection from known hazardous vapors at known concentrations that can be absorbed through the skin.</li> <li>- Is most often characterized by the SCBA being worn outside the suit.</li> </ul>

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# Types of Personal Protective Equipment (PPE) and Decontamination Considerations, Continued

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**Personal Protective Equipment (PPE)**  
(continued)

Levels	Types of Personal Protective Equipment (PPE)
<b>Level A</b>	<ul style="list-style-type: none"><li>- The ensemble typically consists of a SCBA worn inside a fully-encapsulated and vapor-tight chemical protective suit.</li><li>- Often nicknamed a “moon suit,” a Level A ensemble is cumbersome and the time an individual can spend in the suit is extremely limited.</li><li>- Provides the highest level of protection.</li></ul>

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**Decontamination considerations**

Decontamination is the process of removing gross contaminants from a person, object, or area by either destroying, making harmless, neutralizing, or removing the hazard.

Hazardous materials teams may use a variety of methods to decontaminate individuals. The most common decontamination tool is copious amounts of water used as a “wash-down” shower.

Decontamination is the process of making a person, object, or area, “safe” by either destroying, making harmless, neutralizing, or removing the hazard. The use of substances such as bleach to decontaminate individuals is becoming less common because of the potential damage bleach can create and the problems associated with regulating the concentration.

Whenever possible, individuals setting up the decontamination process will try to capture run-off water to prevent potential environmental damage. The run-off may be collected for later disposal by a hazardous waste management contractor.

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## Types of Personal Protective Equipment (PPE) and Decontamination Considerations, Continued

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**Decontamination considerations** (continued) Any person requiring decontamination must have a medical evaluation and clearance. (This requirement also includes law enforcement First Responders.)

NOTE: All items leaving the “hot” or contaminated area must be decontaminated. This includes corpses (human and animal), equipment, and packaged items of evidentiary value.

NOTE: Some items cannot be decontaminated so must be contained in place until they can be destroyed (e.g., leather, unfinished wood, paper and some types of cloth).

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## Chapter Synopsis

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**Learning need** Peace officers must be familiar with, understand, identify and effectively respond to a threat or event involving Weapons of Mass Destruction (WMD).

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**Definition for weapons of mass destruction (WMD) [43.05.EO1]** Weapons of mass destruction are defined by Title 18 *United States Code*.

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**Routes of exposure [43.05.EO2]** The common routes of exposure for a WMD are: inhalation, ingestion, absorption, and injection.

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**Protective measures R.A.I.N. [43.05.EO3]** The acronym R.A.I.N. is used to outline protective measures to be taken by law enforcement First Responders while responding to a WMD threat or event.

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**Biological WMD agents [43.05.EO4]** Biological WMD agents are disease-causing organisms or the toxins produced by living organisms.

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**Nuclear / radiological WMD agents [43.05.EO5]** There are advantages and disadvantages for terrorists to use nuclear or radiological material in a WMD incident.

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## Chapter Synopsis, Continued

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**Incendiary devices**  
[43.05.EO6]

Incendiary devices were present in a number of the domestic incidents occurring in the United States. Incendiaries are reliable and tend to ignite most of the time. Incidents involving the use of incendiary devices were infrequent articulated threats.

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**Types of Chemical WMD and toxic industrial chemicals / materials**  
[43.05.EO7]

The presence of chemical warfare agents and many toxic industrial chemicals can be detected by training individuals to use a variety of available analysis devices which are designed to be used in the field.

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**Effects of toxic industrial chemicals/ materials**  
[43.05.EO15]

Law enforcement personnel need to become conversant with potential indicators and the effects of a chemical agent release.

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**Explosives and improvised explosive devices (IED)**  
[43.05.EO8]

The Improvised Explosive Device (IED) has become the weapon of choice for terrorists worldwide. They are commonly referred to as an (IED). IED's are generally homemade devices, they are cheap, easy to make and require very few resources.

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**Importance of WMD job aids**  
[43.05.EO9]

Peace officers have a variety of guides available to aid them in responding, identifying and managing WMD incidents. The two most common are the Louisiana State University Response Guide (LSU) and the Emergency Response Guide (ERG).

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## Chapter Synopsis, Continued

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**Response strategies and decontamination issues**  
[43.05.EO10]

The initial response to a WMD incident will follow the same guidelines as any other hazardous materials release with the exception peace officers must consider the presence of terrorist suspects and/or secondary devices. It is essential that law enforcement personnel recognize that the response to a WMD incident must be deliberate, coordinated, and safely executed.

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**Phases of a WMD incident**  
[43.05.EO11]

There are five phases to all WMD incidents. The phases are categorized by the occurrence of specific behavior of the community response.

---

**Basic on-scene actions**  
[43.05.EO12]

General law enforcement actions/responsibilities at WMD incident scene may include: Isolation, Identification, Notification, Protection/Mitigation, Documentation, and Transition.

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**Incident response priorities**  
[43.05.EO13]

The three main public safety priorities at a WMD incident in order of their priority are lives vs. property, crime scene protection and preservation of evidence.

---

**Personal Protection Equipment (PPE) and decontamination considerations**  
[43.05.EO14]

Personal Protective Equipment (PPE) for responding to a WMD incident falls into four basic categories: Level D, Level C, Level B, and Level A.

Decontamination is the process of removing gross contaminants from a person, object or area by either destroying, making harmless, neutralizing, or removing the hazard.

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# Workbook Learning Activities

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## **Introduction**

To help you review and apply the material covered in this chapter, a selection of learning activities have been included. No answers have been provided. However, by referring to the appropriate text, you should be able to prepare a response.

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## **Learning activity**

1. You are dispatched to an incident where victims are exhibiting eye and skin pain and reddening of the skin. Upon arrival you are told that there is a smell of garlic in the area. There has been no explosion.

What is the most likely WMD agent?

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*Continued on next page*

## Workbook Learning Activities, Continued

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**Learning  
activity**  
(continued)

2. You are assigned to patrol in a marked unit. You receive a call from radio dispatch telling you to proceed to the local light rail station at the corner of 6<sup>th</sup> and J Street. Dispatch also informs you that several people have called in to report that people in the station are gagging, passing out and running from the train platform. Several people have fallen off the platform and are injured as a result of the fall. Describe what actions you are going to take while responding to the train station?

3. What issues should you consider on your way to the call?

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## Workbook Learning Activities, Continued

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**Learning  
activity**  
(continued)

4. When you arrive what is the first plan of action?

5. When does the Notification Phase of this event begin?

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*Continued on next page*

## Workbook Learning Activities, Continued

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**Learning  
activity**  
(continued)

6. What other resources do you think you might need to handle the initial response to this call?

7. What Personal Protective Equipment (PPE) might you need to handle this event?

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*Continued on next page*



## **Workbook Learning Activities, Continued**

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**Student notes**

# Chapter 6

## Command Systems

### Overview

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**Learning need** Peace officers must have a basic understanding of the command systems used in the State of California for emergency management.

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**Learning objectives** The chart below identifies the student learning objectives for this chapter.

<b>After completing study of this chapter, the student will be able to...</b>	<b>E.O. Code</b>
<ul style="list-style-type: none"><li>• identify law enforcement First Responder roles and responsibilities associated with responding to a critical incident.</li></ul>	43.06.EO1
<ul style="list-style-type: none"><li>• recall the history of the Incident Command System (ICS).</li></ul>	43.06.EO2
<ul style="list-style-type: none"><li>• identify the features of ICS.</li></ul>	43.06.EO3
identify the five functional components of ICS.	43.06.EO4
<ul style="list-style-type: none"><li>• identify the components of the State of California Standardized Emergency Management System (SEMS)</li></ul>	43.06.EO5
<ul style="list-style-type: none"><li>• identify the components of the National Incident Management System (NIMS)</li></ul>	43.06.EO6

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*Continued on next page*

## Overview, Continued

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**In this chapter** This chapter focuses on the basic principles of the Incident Command System, the Standardized Emergency Management System and the National Incident Management System.

<b>Topic</b>	<b>See Page</b>
Law Enforcement First Responder Roles and Responsibilities	6-3
History of the Incident Command System (ICS)	6-5
Features of ICS	6-6
The Five Functional Components of ICS	6-9
Components of the State of California Standardized Emergency Management System (SEMS)	6-11
Components of the National Incident Management System (NIMS)	6-14
Chapter Synopsis	6-17
Workbook Learning Activities	6-19

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# Law Enforcement First Responder Roles and Responsibilities

[43.06.EO1]

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## **Introduction**

At the onset of a major incident whether man-made, natural, or terrorist-related the focal point for successful resolution of the event is the law enforcement First Responder. In almost all cases the first person on the scene will be a patrol officer from some law enforcement agency.

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## **Law Enforcement First Responder role**

Peace officers must understand their role when responding to a major incident and understand the importance of the Emergency Management Command Systems (EMCS) used in the state of California.

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## **Law Enforcement First Responder responsibilities**

As a general rule, law enforcement First Responders must understand they will start to handle the situation with almost no resources, but they are on the way. The law enforcement First Responder needs to be concerned with officer safety, attending to casualties, setting up some kind of perimeter, and establishing a command post.

As resources arrive, law enforcement First Responders will be the person who briefs incoming personnel, deploys them and takes command of the situation. The law enforcement First Responder's actions and decisions will set the tone for the overall conduct of the operation.

More than anything law enforcement First Responders must understand they will be on their own with only on-duty personnel available to help and assist them. In the case of local emergencies, assistance in the form of law enforcement, fire and medical will begin to arrive within minutes, but for major events that require state and federal assistance it will take more time to respond.

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## Law Enforcement First Responders Roles and Responsibilities, Continued

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**Law  
Enforcement  
First  
Responder  
Responsibilities**  
(continued)

It is critical that law enforcement First Responders take command of the situation using Emergency Management Command Systems. It is essential that law enforcement First Responders understand the basic tenants of the Incident Command System (ICS), the State of California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

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**Key  
point**

Other agencies (mutual aid, regional resources, state, and federal agencies) are responding to support you, not to take over your incident.

---

# History of the Incident Command System (ICS)

[43.06.EO2]

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## Introduction

The Incident Command System (ICS) was developed by the fire service after the great Malibu fires in 1979.

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## History of the Incident Command System (ICS)

The Incident Command System (ICS) uses the military model of command and control; success of the system is based on the delegation of authority and responsibility. The ICS was adopted by the law enforcement community in the late 1980's and became widely used for all types of emergency management. Today all California law enforcement agencies by state law must use the ICS if they wish to receive monetary reimbursement for declared emergencies.

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## Incident Command System (ICS)

The Incident Command System (ICS) in California developed in the following manner.

- 1970s – Developed by California's **Fire Resources of California Organized for Potential Emergencies (FIREScope)** program; fire services began to use ICS to manage incidents.
  - 1980s – **Law Enforcement Incident Command System (LEICS)** brought principles of ICS into Law Enforcement.
  - 1990s – National curriculum ("generic" ICS) developed; Standardized Emergency Management System (SEMS) adopted in California.
-

# Features of ICS

[43.06.EO3]

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## Introduction

One of the advantages of the Incident Command System (ICS) for California law enforcement is the use of common terminology and common features which allow for greater command and control. The features of the system allow command officers the ability to exercise flexibility over the command system. The flexibility of the system results in a higher degree of operational efficiency.

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## Features of ICS

Every ICS has several primary features. The chart below provides those primary features.

Features	Descriptions
Common Terminology	<ul style="list-style-type: none"><li>• Position titles and organizational units are standardized.</li><li>• Common names are established for resources and facilities.</li><li>• Clear text is used for all radio traffic.</li></ul>
Modular Organization	<ul style="list-style-type: none"><li>• The system adjusts to the needs of the incident.</li><li>• Functional units are staffed as needed.</li><li>• When any unit is not staffed, responsibility for that function remains with the next higher level.</li><li>• Develops from the top down.</li><li>• Flexible to meet the complexity and size of the incident.</li></ul>
Integrated Communications	<ul style="list-style-type: none"><li>• A communications plan is established for each incident.</li><li>• Frequency designations</li><li>• Calls signs</li><li>• Standard Operating Procedures (SOP)</li></ul>

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## Features of ICS, Continued

**Features  
of ICS**  
(continued)

Features	Descriptions
Incident Action Plan (IAP)	<ul style="list-style-type: none"> <li>• The Incident Action Plan is developed for each Operational Period which is usually 12 hours.</li> <li>• An Operational Period is a designated segment of time which varies with the incident.</li> <li>• An Incident Action Plan sets forth:               <ul style="list-style-type: none"> <li>- Goals (strategic guidance)</li> <li>- Objectives (operational direction)</li> <li>- Specific Assignments</li> <li>- Operational Resources</li> </ul> </li> <li>• The Incident Action Plan provides uniform guidance to all response elements.</li> </ul>
Unity of Command	<ul style="list-style-type: none"> <li>• Reporting relationships are clearly understood.</li> <li>• No matter what position you are assigned to, you have one “boss.”</li> </ul>
Span of Control	<ul style="list-style-type: none"> <li>• The number of individuals or resources that one supervisor can manage effectively</li> <li>• Range: 3 to 7</li> <li>• Optimum is 1 supervisor to 5 individuals or resources.</li> </ul>

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## Features of ICS, Continued

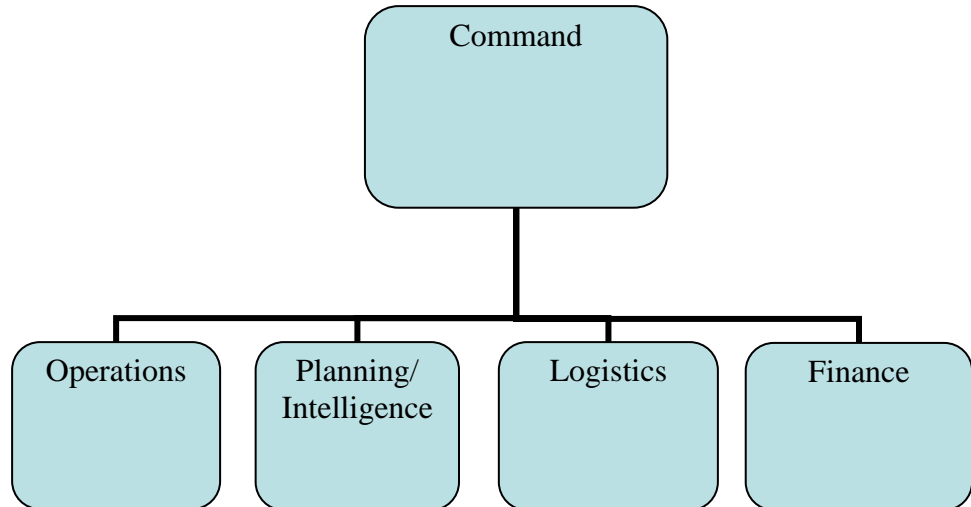
Features  
of ICS  
(continued)

Features	Descriptions
Designated Incident Facilities	<ul style="list-style-type: none"> <li>• <b><u>Incident Command Post</u></b> <ul style="list-style-type: none"> <li>- one incident command post per incident,</li> <li>- houses the Incident Commander and command staff</li> <li>- planning and communications</li> <li>- agency representatives</li> </ul> </li> <li>• Staging Area</li> <li>• Personnel and equipment temporarily assigned for deployment</li> <li>• <b><u>Base</u></b> <ul style="list-style-type: none"> <li>- Logistic and Administration are coordinated and located</li> </ul> </li> <li>• <b><u>Camp</u></b> <ul style="list-style-type: none"> <li>- Resources that supports the bases</li> </ul> </li> <li>• <b><u>Helispot</u></b> <ul style="list-style-type: none"> <li>- Temporary locations at an incident</li> </ul> </li> <li>• <b><u>Helibase</u></b> <ul style="list-style-type: none"> <li>- Location where air operations are conducted</li> </ul> </li> </ul>
Comprehensive Resource Management	<ul style="list-style-type: none"> <li>• Consolidated control of resources</li> <li>• Reduces communication load</li> <li>• Reduces self-assignment</li> <li>• Maximizes use of limited resources</li> </ul>

# The Five Functional Components of ICS

[43.06.EO4]

## Five ICS functions



### 1. Command

- Overall policy and guidance for the incident
- Incident Commander
- Deputy Incident Commander (IC)
- Unified Command

### 2. Operations

- Commonly organized by functional branches.
- Implements the action/operational plan to deal with the incident.
- Allocates resources to the incident.
- Communicates with field units and other command centers.

*Continued on next page*

## The Five Functional Components of ICS, Continued

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**Five ICS  
functions**  
(continued)

3. Planning/Intelligence
    - Collect, evaluate, and disseminate information
    - Prepare an action/operational plan
    - Maintain documentation of the response effort
    - Prepare demobilization plans
    - May incorporate technical specialists
    - Responsible for situational reporting
  4. Logistics
    - Provide resources to the overall operation
    - Support the responders
  5. Finance/Administration
    - Administrative concerns
    - Compensation and claims
    - Begin documentation to support disaster claims
    - Generally the last section to be staffed out
-

# Components of the State of California Standardized Emergency Management System (SEMS)

[43.06.EO5]

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## Introduction

The California **Standardized Emergency Management System (SEMS)** was developed after the Alameda County, San Francisco, Oakland, Loma Prieta earthquake in 1989 and the Oakland Hills fire of 1991. Authority for the mandatory use of SEMS is found in California Government Code Section 8607(a).

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## Standardized Emergency Management System (SEMS)

SEMS is designed to ensure that all public agencies have a common system to utilize while responding to all types of emergencies. The components of SEMS are:

- Incident Command System
  - Operational Area Concepts
  - Mutual Aid Agreements/Plans
  - Multi Agency Coordination
- 

## Incident Command System (ICS)

Incident Command System (ICS) is the common command structure all public agencies use to manage any type of emergency in the State of California. ICS is established by state law and for any public agency to seek reimbursement for declared emergencies the agency must have used ICS as a command system during the course of the emergency.

SEMS incorporates ICS as the official command system for the State of California and ICS is used by both local and state agencies during emergency management.

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# Components of the State of California Standardized Emergency Management System (SEMS), Continued

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## **SEMS request levels**

The State of California is divided into Operational Areas for the purposes of emergency management. Each Operational Area cooperates with the local Emergency Operation Center (EOC) for resource requests and information sharing. The Operational Area coordinates all local requests and funnels information to the State of California's Regional Emergency Operations Center. The Regional Emergency Operation Center funnels information and requests to the State of California's Office of Emergency Services (OES).

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## **Mutual aid**

A number of public agencies operate under Mutual Aid agreements, they include: Law Enforcement, Fire Services, Coroners Offices, Urban Search and Rescue, Emergency Managers, Emergency Medical Services, Public Health, and others. SEMS incorporates mutual aid as a part of its official response strategy. They use the "Step-up" system for requesting mutual aid:

- Field Request
- Local Government level request
- Operational Area level request
- Regional level request
- State level request
- Gubernatorial request for federal aid

When requesting mutual aid the following conditions must exist:

- An emergency must exist or be imminent.
  - The "Requesting Agency" must have reasonably committed the majority of available, on-duty personnel to the incident. This is generally considered to be one-half of the agencies work force on 12 hour shifts.
  - There must be a mission to be performed.
- 

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## Components of the State of California Standardized Emergency Management System (SEMS), Continued

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### **Multi-agency coordination**

The Multi-Agency Coordination System provides the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The components of multi-agency coordination systems include facilities, equipment, Emergency Operations Center (EOC), specific multi-agency coordination entities, personnel, procedures, and communications.

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# Components of the National Incident Management System (NIMS)

[43.06.EO6]

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## Introduction

The National Incident Management System (NIMS) was created after the terrorist attacks on September 11, 2001, by Presidential Directive 5 and Presidential Directive 8. NIMS is the command system used for all nationally declared emergencies in the United States.

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## National Incident Management System (NIMS)

The **National Incident Management System (NIMS)** authority is derived from Homeland Security Presidential Directives 5 and 8 (HSPD-5 & 8).

NIMS provides a flexible framework that facilitates government and private entities at all levels working together through standardized organizational structures. NIMS consist of six components:

- Command and Management
  - Preparedness Components
  - Resource Management
  - Communications and Information Management
  - Supporting Technologies
  - Ongoing Management and Maintenance
- 

## Command and management

In an incident management organization, the Command Staff consists of the Incident Commander and the special staff positions of Public Information Officer, Safety Officer, Liaison Officer, and other positions as required, who report directly to the Incident Commander. They may have an assistant or assistants, as needed. NIMS uses the Incident Command System for the official command structure.

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## Preparedness

Preparedness is the range of deliberate critical tasks and activities necessary to build and sustain operational capability. Preparedness is a continuous process involving efforts at all levels of government, between government and private-sector and nongovernmental organizations.

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*Continued on next page*

# Components of the National Incident Management System (NIMS), Continued

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## Resource management

There are five key principles for resource management:

- **Advance Planning** – preparedness organizations working together before an incident to develop plans for managing and using resources.
  - **Resource Identification and Ordering** – using standard processes and methods to identify, order, mobilize, dispatch, and track resources.
  - **Categorizing Resources** - by size, capacity, capability, skill and other characteristics. Facilitates the use of national standards for “typing” resources and “certifying” personnel.
  - **Use of Agreements** – developing pre-incident agreements for providing or requesting resources.
  - **Effective Management** – using validated practices to perform key resource management tasks.
- 

## Communication and information management

NIMS communications and information systems enable the essential functions needed to provide a common operating picture and interoperability for:

- Incident management communications
- Information management
- Interoperability standards

The NIMS concepts and principles upon which communications and information management are based on:

- A common operating picture that is accessible across jurisdictions and agencies necessary to ensure consistency at all levels, among those who respond to or manage incident response, and
  - Common communications and data standards fundamental to effective communications, both within and outside of the incident response structure and are enhanced by an adherence to standards.
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# Components of the National Incident Management System (NIMS), Continued

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## Supporting technologies

NIMS will leverage science and technology to improve capabilities at a lower cost. To accomplish this, NIMS will base its supporting technology standards on five key principles:

- **Interoperability and Computability:** Systems must be able to work together.
  - **Technology Support:** All organizations using NIMS will be able to enhance all aspects of incident management and emergency response.
  - **Technology Standards:** National standards will facilitate interoperability and compatibility of major systems.
  - **Broad Based Requirements:** NIMS provides a mechanism for aggregating and prioritizing new technologies, procedures, protocols, and standards.
  - **Strategic Planning, Research and Development:** The National Integration Center (NIC) will coordinate with the Department of Homeland Security to create a National Research and Development Center.
- 

## Ongoing management and maintenance

The Department of Homeland Security established the National Integration Center (NIC) to provide strategic direction and oversight for the NIMS program.

NIMS must be supported by ongoing training at every level, management, supervisory and field law enforcement First Responders. The system must be constantly updated. Threat assessments and revised standing plans to reflect new and emerging threats should be accomplished at least once a year and more often when needed.

NIMS must be practiced and rehearsed by using scenario training, table top exercises and where possible full field exercises. Testing, training and exercises should be frequent and no less than once a year.

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## Chapter Synopsis

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**Learning needs** Peace officers must have a basic understanding of the command systems used in the State of California for emergency management.

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**First responder role and responsibilities**  
[43.06.EO1] Personnel assigned to an emergency event have to understand their roles and responsibilities; this is particularly true with those events that involve multi-jurisdictional agencies.

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**History of the incident command system (ICS)**  
[43.06.EO2] ICS was developed in California in the late 1970's as a result of huge wild land fires in Southern California which burned out of control for weeks and destroyed thousands of acres of land and property. FIRESCOPE was created to devise ways to implement command systems which would accommodate multi-jurisdictional agencies when responding to an emergency event

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**Features of ICS**  
[43.06.EO3] ICS has primary features that consist of common terminology, modular organization, integrated communications, unity of command and consolidated action plans. ICS allows for a manageable span of control and the ability to comprehensively manage resources.

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**Five functional components of ICS**  
[43.06.EO4] ICS has five modular functions; the Command, Operations, Planning and Intelligence, Logistics and Finance. All or some of these modular components can be used depending upon the size and nature of the event to be managed.

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## Chapter Synopsis, Continued

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**Components  
of the  
California  
Standardized  
Emergency  
Management  
System  
(SEMS)  
[43.06.EO5]**

This is the command system used by the State of California to manage any emergency. ICS is a component part of SEMS.

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**Components  
of the  
National  
Incident  
Management  
System  
(NIMS)  
[43.06.EO6]**

This is the system used to manage incidents of national significant. It was created by Presidential Directives 5 and 8.

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# Workbook Learning Activities

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## **Introduction**

To help you review and apply the material covered in this chapter, a selection of learning activities have been included. No answers have been provided. However, by referring to the appropriate text you should be able to prepare a response.

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## **Learning activity**

1. You have been dispatched to the scene of a major traffic accident. Five cars are involved, one is on fire and at least one person is dead and three more are seriously injured. Create an Incident Command System using the five functional components and write a brief description of what each component is responsible to perform.

2. List the components associated with the Standardized Emergency Management System.

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## Workbook Learning Activities, Continued

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**Learning  
activity**  
(continued)

3. List the component parts associated with the National Incident Management System.

# Acronyms

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<b>B-NICE</b>	Biological, Nuclear, Incendiary, Chemical, Explosive
<b>CBRN</b>	Chemical, Biological, Radiological, Nuclear
<b>CBRNE</b>	Chemical, Biological, Radiological, Nuclear, Explosive
<b>CDP</b>	Center for Domestic Preparedness Training in Anniston, Alabama.
<b>Civ</b>	Civilian
<b>COBRA</b>	Chemical Ordnance, Biological, Radiological
<b>COP</b>	Community Oriented Policing
<b>CP</b>	Command Post
<b>CSWC</b>	California State Warning Center
<b>DHS</b>	Department of Homeland Security
<b>DOC</b>	Department Operations Center
<b>EOC</b>	Emergency Operations Center

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## Acronyms, Continued

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**ERG** Emergency Response Guide

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**FIRESCOPE** Fire Resource of California Organized for Potential Emergencies

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**HSPD** Homeland Security Presidential Directive

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**IAP** Incident Action Plan

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**IC** Incident Command(er)

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**ICP** Incident Command Post

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**ICS** Incident Command System

---

**IED** Improvised Explosive Device

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**JTTF** Joint Terrorism Task Force

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**LEICS** Law Enforcement Incident Command System

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**LERT** Law Enforcement Response to Terrorism (SB1350)

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**LSU** Louisiana State University

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## Acronyms, Continued

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**MACS** Multi-Agency Coordination System

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**MIL** Military

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**MREM** (milli-rem): roentgen equivalent in **m**an.

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**MOPP** Mission Oriented Protective Posture (Military PPE)

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**NBC** Nuclear, Biological, Chemical

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**NIC** NIMS Integration Center

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**NIMS** National Incident Management System

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**NRDC** National Research and Development Center

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**NRP** National Response Plan

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**ODP** Office of Domestic Preparedness

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**OES** Office of Emergency Services

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## Acronyms, Continued

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<b>PIO</b>	Public Information Officer
<b>PPE</b>	Personal Protective Equipment
<b>R.A.I.N.</b>	Self protection Acronym meaning: <b>R</b> ecognize, <b>A</b> void, <b>I</b> solate, <b>N</b> otify
<b>RDD</b>	Radiological Dispersion Device (“Dirty Bomb”)
<b>REOC</b>	Regional Emergency Operations Center
<b>RTTAC</b>	Regional Terrorism Threat Assessment Center
<b>SEB</b>	Staphylococcal Enterotoxins B: Biological Weapon
<b>SCBA</b>	Self Contained Breathing Apparatus
<b>SEMS</b>	Standardized Emergency Management System
<b>SIP</b>	Shelter-in-place
<b>SOC</b>	State Operations Center
<b>SOP’s</b>	Standard Operating Procedure(s)
<b>STTAC</b>	State Terrorism Threat Assessment Center

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## **Acronyms, Continued**

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**TEWS** Terrorism Early Warning System

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**TEWG** Terrorism Early Warning Group

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**TIC** Toxic Industrial Chemical(s)

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**TIM** Toxic Industrial Materials

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**TLO** Terrorism Liaison Officer

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**TPU** Time Power Unit

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**TSC** Terrorism Screening Center

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**USC** United States Code

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**VBIED** Vehicle Borne Improvised Explosive Device

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**VEE** Venezuelan Equine Encephalitis

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**WMD** Weapons of Mass Destruction

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## **Acronyms, Continued**

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# Glossary

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**Introduction**      **The following glossary terms apply only to Learning Domain 43:  
Emergency Management**

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**base**      The location from which primary logistics and administrative functions are coordinated and administered

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**camp**      Locations, often temporary, within the general incident area that are equipped and staffed to provide sleeping, food, water, sanitation, and other services to response personnel that are too far away to use base facilities

---

**classified intelligence**      Any information that has been given a classification by an appropriate agency

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**gieger counter**      Radiation detection and measuring device

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**guide number**      A component of the ERG that provides useful public safety information on potential hazards associated with an identified substance

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**helibase**      The location from which helicopter-centered air operations are conducted

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**helispots**      Temporary locations at the incident, where helicopters can safely land and take off. Multiple Helispots may be used for an incident and attached to an air wing

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**Incident Command Post (ICP)**      The location where the Incident Commander operates during response operations

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## Glossary, Continued

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**Incident  
Command  
System  
(ICS)**

The common command structure all public agencies use to manage any type of emergency

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**incapacitating  
agents**

Most of these substances are lacrimators (tear producers), however, exposure can create other physical and psychological symptoms

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**identification  
number**

A four digit identifier displayed on a transportation placard referenced in the ERG which provides the name and material of the substance

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**information**

Anything we know about any person, place or thing from any source

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**intelligence**

Information that has gone through the intelligence cycle

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**National  
Incident  
Management  
System  
(NIMS)**

A flexible framework that facilitates government and private entities at all levels working together through standardized organizational structures. Created after 9/11 to manage events on the national level. Authority for NIMS is found in Presidential Directives 5 and 8

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**open source  
information**

Publicly available information as well as other unclassified information that has limited public distribution or access

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## **Glossary, Continued**

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**Standardized  
Emergency  
Management  
System  
(SEMS)**

SEMS is designed to ensure that all public agencies have a common system to utilize while responding to all types of emergencies

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**Terrorism  
Liaison  
Officer  
(TLO)**

Each local law enforcement agency has a designated officer

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**toxic  
agents**

Category of chemicals weapons that are toxic to the body

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