GLOSSARY

Acute Exposure An exposure, often intense, over a relatively short period of

time.

Alpha Radiation The least penetrating type of nuclear radiation; not considered

dangerous unless alpha-contaminated particles enter the body.

Antibiotic A medication used to reduce the growth of organisms, such as

a bacterium.

Antiviral A medication used to reduce the growth of organisms, such as

a virus.

Asphyxiation One of the seven types of harm (see TRACEM-P) that can be

encountered at a terrorist incident. Asphyxiants interfere with oxygen flow during normal breathing. There are two types of

asphyxiants: simple and chemical.

B-NICE One of several acronyms for identifying the five categories of

terrorist incidents: Biological, Nuclear, Incendiary, Chemical,

and Explosive. See "CBRNE."

Bacteria Single-celled organisms that multiply by cell division and can

cause disease in humans, plants, or animals. Examples include anthrax, cholera, plague, tularemia, and Q fever.

Beta Radiation A type of nuclear radiation that is more penetrating than alpha

radiation and can damage skin tissue and harm internal organs.

Biological Agent Living organisms, or the materials derived from them, which

cause disease in, or harm, humans, animals, or plants, or cause deterioration of material. Biological agents may be found as liquid droplets, aerosols, or dry powders. A biological agent can be adapted and used as a terrorist weapon, such as anthrax, tularemia, cholera, encephalitis, plague, and botulism. There are three different types of biological agents: bacteria, viruses,

and toxins.

Biological Incident An event in which a biological agent is used as a terrorist

weapon.

Blister Agent A chemical agent, also called a vesicant, which causes severe

blistering and burns to eyes, skin, and tissues of the respiratory tract. Exposure is through liquid or vapor contact. Also referred to as mustard agents; examples include mustard and

lewisite.

Blood Agent

A chemical agent that interferes with the ability of blood to transport oxygen and causes asphyxiation. These substances injure a person by interfering with cell respiration (the exchange of oxygen and carbon dioxide between blood and tissues). Common examples are hydrogen cyanide and cyanogen chloride.

C2

U.S. military term for Command and control. Now replaced by C3I for Command, control, communication, and intelligence.

Category A Agents

The Centers for Disease Control and Prevention (CDC) categorizes what it considers to be the most dangerous biological agents because they

- can be easily disseminated or transmitted from person to person;
- result in high mortality rates and have the potential for major public health impact;
- might cause public panic and social disruption; and/or
- require special action--such as a specific vaccine--for public health preparedness.

These agents, known as Category A Agents, are

- **Anthrax** (Bacillus anthracis);
- **Botulism** (Clostridium botulinum toxin);
- Plague (Yersinia pestis);
- Smallpox (variola major);
- **Tularemia** (Francisella tularensis); and
- **Viral hemorrhagic fevers** (filoviruses (e.g., Ebola, Marburg) and arenaviruses (e.g., Lassa, Machupo)).

CBRNE

One of several acronyms for identifying the five categories of terrorist incidents: Chemical, Biological, Radiological, Nuclear, and Explosive. See "B-NICE."

Chemical Agent

There are five classes of chemical agents, all of which produce incapacitation, serious injury, or death: (1) nerve agents, (2) blister agents, (3) blood agents, (4) choking agents, and (5) irritating agents. A chemical substance used in military operations is intended to kill, seriously injure, or incapacitate people through its physiological effects.

Chemical Harm One of the seven types of harm (see TRACEM-P) that can be

encountered at a terrorist incident. There are two broad types of chemical agents that can cause harm: toxic and corrosive

materials.

Chemical Incident An event in which a chemical agent is used as a terrorist

weapon.

Chemical Asphyxiant

Referred to as blood poisons, these are compounds that interrupt the flow of oxygen in the blood or the tissues in three ways: (1) They react more readily than oxygen with the blood. Carbon monoxide is the best-known example. (2) They liberate the hemoglobin from red blood cells, resulting in a lack of transport for oxygen. Hydrazine is one such asphyxiant. (3) They cause a malfunction in the oxygen-carrying ability of the red blood cells. Benzene and toluene

are two of these.

Choking Agent A chemical agent that causes physical injury to the lungs. In

extreme cases, membranes swell and lungs become filled with liquid, which can result in asphyxiation resembling drowning. Death results from lack of oxygen; hence, the victim is

"choked." Common examples are chlorine and phosgene.

Chronic An exposure, often mild, over a long period of time.

Consequence Management As described in PDD-39, consequence management is the response to the disaster, and focuses on alleviating damage,

loss, hardship, or suffering. The Federal Emergency Management Agency (FEMA) has the lead in consequence

management.

Corrosive Materials One type of chemical agent that can cause chemical harm at an incident scene. They are liquids or solids causing visible

destruction or irreversible alterations in human skin tissue at

the site of contact.

Crisis Management As described in PDD-39, crisis management is the law

enforcement response, and focuses on the criminal aspects of the incident. The Federal Bureau of Investigation (FBI) has

the lead in crisis management.

Distance One of the three components of the time, distance, and

shielding (TDS) response; refers to the recommendation that one maintain distance from a hazard if at all possible. Refer to the *North American Emergency Response Guide* (NAERG) as

an appropriate resource.

Emergency Management Assistance Compact (EMAC) This is essentially a disaster mutual-aid agreement between States and territories. Commonly known by its acronym, EMAC, the program is administered by the National Emergency Management Association.

Emergency Operations Plan (EOP) An EOP is a document that (1) assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one agency; (2) sets forth lines of authority and organizational relationships, and shows how all actions will be coordinated; (3) describes how people and property will be protected in emergencies and disasters; (4) identifies personnel, equipment, facilities, supplies, and other recourses available for use during response and recovery operations; and (5) identifies steps to address mitigation concerns during response and recovery activities.

Emergency Support Functions(ESFs)

The Federal Response Plan (FRP) details 12 ESFs in place to coordinate operations during Federal involvement in an incident: transportation, communications, public works and engineering, firefighting, information and planning, mass care, resource support, health and medical services, urban search and rescue, hazardous materials, food, and energy.

Etiological Harm

One of the seven types of harm (see TRACEM-P) that can be encountered at a terrorist incident. Involves exposure to a living microorganism, or its toxins, which causes, or may cause, human disease. Biological agents are the most obvious examples of etiological agents.

Explosive

As defined by the U.S. Department of Transportation, "a substance fitting into one of these two categories: (1) any substance or article, including a device, designed to function by explosion; or (2) any substance or article, including a device, which, by chemical reaction within itself, can function in a similar manner even if not designed to function by explosion.

Explosive Incident

An event in which an explosives device is used as a terrorist weapon.

Federal Response Plan (FRP) Developed to help expedite Federal support to disasters. Generally, the FRP is activated when the State's resources are not sufficient to cope with a disaster, and the governor has requested Federal assistance. Superseded by the National Response Framework (NRF).

GEDAPER An acronym used to describe an incident analysis process.

> The steps include (1) Gathering information, (2) Estimating course and harm, (3) **D**etermining strategic goals, (4) Assessing tactical options and resources, (5) Planning and

implementing actions, (6) Evaluating, and (7) Reviewing.

Gamma Radiation Gamma rays are high-energy, ionizing radiation that travel at

> the speed of light and have great penetrating power. They can cause skin burns, severely injure internal organs, and have

long-term, physiological effects.

Incendiary Device Any mechanical, electrical, or chemical device used

intentionally to initiate combustion and start a fire.

An event in which an incendiary device is used as a terrorist Incendiary Incident

weapon.

A chemical agent, also known as riot control agents or tear **Irritating Agent**

gas, which causes respiratory distress and tearing designed to incapacitate. Common examples include chloropicrin,

MACE, tear gas, pepper spray, and dibenzoxazepine.

The primary Federal incident management field structure. The Joint Field Office (JFO)

Joint Field Office (JFO) is a temporary Federal facility that provides a central location for the coordination of Federal, State, tribal, and local governments and private-sector and nongovernmental organizations with primary responsibility for

response and recovery.

Local EOP The local EOP focuses on essential measures for protecting

> the public, to include warning, emergency public information, evacuation, and shelter. To be included in a local EOP should be a mechanism for emergency responders and managers to

notify and activate State resources.

Mechanical Harm One of the seven types of harm (see TRACEM-P) that can be

> encountered at a terrorist incident. Causes trauma from contact with mechanical or physical hazards. One form of mechanical injury can result from an explosive device. Other

types include routine slip, trip, and fall hazards.

NAERG The North American Emergency Response Guidebook.

National Response Framework (NRF)

The National Response Framework is a guide to how the Nation conducts all-hazards response, from the smallest incidents to the largest catastrophes. This key document replaces the Federal Response Plan and establishes a comprehensive, national, all-hazards approach to domestic incident response.

Nerve Agent

A substance that interferes with the central nervous system. Exposure is primarily through contact with the liquid (skin and eyes) and secondarily through inhalation of the vapor. Three distinct symptoms associated with nerve agents are pinpoint pupils, an extreme headache, and severe tightness in the chest. Examples of nerve agents are sarin, Soman, tabun, and VX agent.

Nuclear Incident

An event in which a nuclear agent is used as a terrorist weapon. There are two fundamentally different threats in the area of nuclear terrorism: (1) the use, or threatened use, of a nuclear bomb; and (2) the detonation of a conventional explosive incorporating nuclear materials.

PPE

Personal protective equipment.

Plan of Action

A written document that consolidates all of the operational actions to be taken by various personnel in order to stabilize the incident.

Presidential Decision Directive 39 (PDD-39)

Issued in June 1995, PDD-39, *United States Policy on Counterterrorism*, directed a number of measures to reduce the Nation's vulnerability to terrorism, to deter and respond to terrorist acts, and to strengthen capabilities to prevent and manage the consequences of terrorist use of nuclear, biological, and chemical weapons.

Psychological

One of the seven types of harm (see TRACEM-P) that can be encountered at a terrorist incident. Involves the emotional impact to terrorism. It could include signs and symptoms such as difficulty concentrating, sleep disorders, anxiety, emotional numbness, hypervigilance, etc.

Radiological Dispersal Devices (RDD)

A conventional explosive incorporating nuclear materials.

Radiation In this self-study program, refers to nuclear radiation, not

radiation as a type of heat transfer. There are three types of nuclear radiation: (1) alpha, (2) beta, and (3) gamma. One of

the seven types of harm (see TRACEM-P) that can be

encountered at a terrorist incident.

Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288 Authorizes the Federal Government to respond to disasters and emergencies in order to help State and local governments save lives, and to protect public health, safety, and property.

Shielding One of the three components of TDS; refers to maintaining

significant physical barriers between you and the hazard. Examples include vehicles, buildings, walls, and PPE.

Simple Asphyxiant Generally, an inert gas that displaces the oxygen necessary for

breathing, and dilutes the oxygen concentration below the

level that is useful for the human body.

Sizeup The rapid mental evaluation of the factors that influence an

incident. Sizeup is the first step in determining a course of

action.

Stafford Act See Robert T. Stafford Disaster Relief and Emergency

Assistance Act.

State EOP The State EOP is the framework within which the local EOP is

created and through which the Federal Government becomes involved. The States play three roles: (1) they assist local jurisdictions whose capabilities are overwhelmed by an emergency; (2) they themselves respond first to certain emergencies; and (3) they work with the Federal Government

when Federal assistance is necessary.

Strategic Goals Strategic goals are broad, general statements of intent.

TRACEM-P The acronym used to identify the seven types of harm one may

encounter at a terrorist incident: Thermal, Radioactive, Asphyxiation, Chemical, Etiological, Mechanical, and

Psychological.

Terrorism

As defined by the FBI, "the unlawful use of force against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in the furtherance of political or social objectives." This definition includes three elements: (1) terrorist activities are illegal and involve the use of force; (2) the actions are intended to intimidate or coerce; and (3) the actions are committed in support of political or social objectives.

Terrorism Incident Annex

The annex to the FRP that describes the Federal concept of operations to implement PDD-39 when necessary to respond to terrorist incidents within the United States.

Thermal Harm

One of the seven types of harm (see TRACEM-P) that can be encountered at a terrorist incident. Thermal harm is the result of exposure to the extremes of heat and cold.

Time

One of the three components of TDS; refers to the amount of time a responder should be exposed to an incident. It is recommended that one spend the shortest amount of time possible in the hazard area.

Time, Distance, and Shielding (TDS)

Three types of protective measures commonly associated with hazardous materials training.

Toxic Materials

A type of chemical that can cause chemical harm at an incident scene. They produce harmful effects depending on the concentration of the materials and the length of exposure to them. An individual can have chronic or acute exposures to toxic materials.

Toxins

Toxic substances of natural origin produced by an animal, plant, or microbe. They differ from chemical substances in that they are not manmade. Toxins may include botulism, ricin, and mycotoxins.

Vesicants

Chemical agents, also called blister agents, which cause severe burns to eyes, skin, and tissues of the respiratory tract. Also referred to as mustard agents, examples include mustard and lewisite.

Virus

The simplest type of microorganisms, lacking a system for their own metabolism. They depend on living cells to multiply and cannot live long outside of a host. Types of viruses include smallpox, Ebola, Marburg, and Lassa fever.