Date Revised: 12/09/19

Event Goal: To teach recruit officers how to respond to a critical incident.

Session Goal: This hands-on training lane provides the responder with a working knowledge of equipment capable of surveying and monitoring compounds

Learning Objectives:

- Identify typical terrorist methods, motivations and tactics [43.I.B]
- Identify the characteristics of incendiary devices [43.V.F]
- Identify incident response priorities
 - Life versus property
 - Crime scene protection
 - Preservation of evidence [43.V.N]
- Identify types and levels of Personal Protection Equipment (PPE) and decontamination considerations [43.V.O]
- Identify the importance of WMD job aids for First Responders
 - o Louisiana State University (LSU) WMD Response Guide
 - Emergency Response Guide (ERG) [43.V.J]
- Identify the components of the R.A.I.N. concept
 - o Recognize
 - o Avoid
 - o Isolate
 - Notify [43.V.C]
- Identify selected chemical agent detection and classification equipment and its application in a CBRNE environment, including the operations, capabilities, and limitations of M8/C8 paper, the M256A1 kit, the Chemical Agent Monitor (CAM), and the APD2000
- Identify radiological monitoring equipment and its application in a CBRNE environment to include the operations, capabilities, and limitations of the Ludlum 2241
- Utilize PPE Level C while engaged in police actions in a CBRNE environment

Session Time: 1.5 Hours

Resources:

- Power Point
- Audio/video device
- Classroom with tables
- Session Summary: The student will demonstrate the ability to perform triage of mass casualties at the scene of a CBRNE MCI and to support the efforts of on-scene responders to evacuate victims from the incident site through the initiation of definitive medical care.

Outline	Instructor Notes
I. Scene Survey and Safety – PPE Level B	Facilitated discussion (1.5 hours)

		LD43 – Emergency Manage	ment
Α.	CB	RN Dissemination Devices [43.I.B] [LD26] [1]	
	1.	Direct Deposit devices – Direct deposit	[LD 43] Identify typical terrorist
		devices are constructed to inject the agent	methods, motivations, and tactics
		directly into the target. This type of device	
		does not immediately suggest a weapon of	[LD 26] Recognize hazards of
		mass destruction, because it affects one	responding to a bombing incident
		person at a time. Most often, this type of	
		device is associated with spy novels and	[1] ASK – What are some delivery
		movies. The most famous use of a direct	methods for CBRN?
		deposit device occurred in 1978 when	 Looking for exploding,
		Bulgarian dissident Georgi Markov was	breaking or bursting, or
		murdered. Other direct deposit devices	spraying.
		include syringes, darts, and blowguns.	
		Direct deposit devices also include placing	
		CBRN hazards in food, water, and other	
		substances for direct ingestion. While the	
		direct deposit device is deadly for the	
		victim, the possibility of large-scale	
		devastation is minimal.	
	2.	Breaking Devices – Breaking devices	
		encapsulate the agent and release it when	
		broken. They are most effective with	
		chemical agents. The breaking device that	
		most often comes to mind is one made of	
		glass, such as the Molotov cocktail.	
		However, the most famous breaking	
		devices were used in the March 1995	
		Tokyo subway sarin attack.	
	3.	Bursting or Exploding Devices – Bursting or	
		exploding devices employ an explosive to	
		break the agent container and disseminate	
		the agent – chemical, biological, or	
		radiological/dirty bomb. An explosive or	
		bursting device employs a small booster	
		charge surrounded by the agent and that is	
		activated by a fuse, timer, or other device.	
		When the burster charge goes off, it	
		ruptures the device and disseminates the	
		agent. The IED is the most common of this	
		type of device. The use of exploding	
		devices to disseminate biological or	
		chemical agents is limited. The stress	
		(neat, cnemical reactions) from explosive	
		dissemination can reduce efficiency of the	
		agent or render it useless by inactivating	
		the organism or toxin. The most likely use	
		of an explosive device is to cause damage	

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		LD45 - Lillergency Manager	
		and fear from the actual explosion or to	
		disseminate radiological material that	
		would not be damaged from the heat of	
		the explosion	
	4.	Spraying Devices – Spraying devices	
		contain an agent reservoir and employ	
		pressure to disseminate the agent,	
		whether chemical and biological. Crop	
		dusters create a dispersal problem for	
		terrorists. When the agent is dropped, the	
		wind and drag behind the plane could	
		cause low concentrations in one area.	
		With low concentrations, the material	
		would become less effective with some of	
		the agents.	
	5.	Vectors – Vectors (organisms, such as	
		mosquitoes, fleas, or ticks that carry	
		disease-causing micro-organisms from one	
		host to another) would most likely be used	
		for dissemination of biological agents.	
		They are the least predictable and least	
		controllable of dissemination devices.	
		While use of vectors is conceivable (e.g.,	
		the release of thousands of mosquitoes	
		carrying blood-borne disease into a packed	
		stadium), the effectiveness and reliability	
		of this method does not compare to other	
		simpler means of dissemination.	
В	. Exp	olosive Materials – Explosives are	
	sub	ostances that – through chemical reaction –	
	rap	bidly and violently change to a gas,	
	aco	companied by high temperatures, extreme	
	sho	ock, and a loud noise. There are three types	
	of	explosions – atomic, mechanical, and	
	che	emical. A mechanical explosion is	
	cha	aracterized by a gradual build-up of pressure	
	in a	a container until it overcomes the structural	
	res	sistance of the container and an explosion	
	000	curs (i.e., pipe bomb). A chemical explosion	
	is t	he rapid conversion of a solid or liquid	
	exp	plosive compound into gasses having much	
	gre	eater volume than the substances from	
	wh	ich they are generated [43.V.F]	[LD 43] – Identify the characteristics
	1.	Classification by Type of Explosion –	of incendiary devices.
		Explosive are distinguished between low	
		explosive, which deflagrate, and high	
		explosives, which detonate.	

	LD43 – Emergency Manager	ment
	a. Low explosives burn through	
	deflagration rather than a detonation	
	wave and are usually a mixture.	
	b. High explosives explode in supersonic	
	reactions and without confinement.	
	High explosives are initiated by shock	
	or heat and have high brisance – the	
	shattering effect of an explosion.	
2.	Classification by Sensitivity of Materials	
	a. Primary explosives are extremely	
	sensitive and require a small amount	
	of energy to be initiated. Primary	
	explosives are mainly used in	
	detonators to initiate secondary	
	explosives. Examples are tetryl, lead	
	azide, mercury fulminate, and lead	
	styphnate.	
	b. Secondary explosives are relatively	
	insensitive and need a great amount of	
	energy to initiate decomposition.	
	Secondary explosives require a	
	detonator to explode. Examples are	
	dynamite, TNT, RDX, and HMX.	
	c. Tertiary explosives are the most	
	insensitive of high explosives, requiring	
	a large stimulus to cause detonation.	
	They require confinement, especially	
	when used in small quantities.	
	Examples are ammonium nitrate and	
	fuel oil, urea and nitro urea.	
3.	Effects of an Explosion – The	
	incendiary/thermal effect occurs in the	
	immediate vicinity of the seat of the	
	explosion with both high and low	
	explosives, varying greatly from one	
	compound to another. Low explosives	
	generally produce longer incendiary	
	thermal effects than will high explosives.	
	High explosives produce higher	
	temperatures, but for a shorter time. The	
	incendiary effect is usually seen as a bright	
	flash or fireball. The low explosive fireball	
	is more likely to cause a secondary fire	
	than the high explosive detonation [2]	[2] ASK – What are some effects of
4.	The fragmentation effect occurs when	an explosion?
	pieces of the explosive device or its	 Answer – Looking for
	container come apart and spread out from	incendiary (fire), thermal

	LD45 – Entergency Manager	inent
t	the seat of the explosion. This effect	(heat),fragmentation,
I	normally involves casings, but it can also	shrapnel, etc.
i	involve components such as batteries and	
:	switches. Fragmentation adds to the	
(destructive force of the explosive device,	
t	tearing into materials in its path.	
5	The shrapnel effect differs from	
t	fragmentation in that shrapnel does not	
	derive from working parts of the device. It	
	can include nails, marbles, ball bearings, or	
	other materials placed in and around a	
	device.	
6. ⁻	The blast pressure effect involves the	
I	resulting bubble surrounding the seat of	
i	an explosion. It encompasses the entire	
i	area behind the shock front emanating	
t	from the seat of the explosion. There are	
t	three stages of blast pressure:	
i	a. Positive pressure – The positive	
	pressure phase occurs when the blast	
	creates a shock wave that moves	
	rapidly from the seat of the explosion,	
	pushing the air away from it and	
	delivering violent force to everything	
	in its path. It is formed at the instant	
	of detonation when the blast	
	compresses the surrounding	
	atmosphere and pushes it outward.	
	 Peak overpressure – Peak 	
	overpressure is the highest amount of	
	positive pressure above normal	
	atmosphere that an explosive charge	
	achieves during detonation or	
	explosion. It pushes air away from the	
	seat of the explosion.	
	 Negative pressure – The negative 	
	pressure phase occurs when the	
	ambient pressure is less than	
	atmospheric pressure, causing a	
	suction effect. It follows immediately	
	after a positive phase, but lasts two to	
	three times longer. The negative	
	pressure phase is essentially a vacuum	
	or suction phase, thus accounting for	
	much of the debris found at the seat of	
	the explosion and nearby.	
	d. The ground shock (or water shock	

		LD43 – Emergency Manager	ment
		effect) occurs when the explosion is	
		initiated while buried in the earth or	
		submerged in water. Because of the	
		relative incompressibility of both earth	
		and water, the shock wave should	
		extend further and with more force	
		than air. This effect is like that of a	
		small earthquake. Structural damage	
		may be substantially greater.	
	7. 1	Firing train – Also called detonation or an	
	i	initiation sequence, the firing train is the	
		sequence of events that cascade from	
		relatively low levels of energy to cause a	
		chain reaction to initiate the final explosive	
		material or main charge. Low-explosive	
	4	trains are compating like a bullet - primer	[ID 42] Identify the characteristics of
		and propollant charge. High explosive	[LD 45] Identity the characteristics of
	4	trains can be more complex, either two	incentially devices
		trains can be more complex, either two-	[ID 24] Identify the primery
		step (detonator and dynamite) or three	[LD 34] Identify the primary
6		step (detonator, booster, and ANFO).	responsibilities of peace officers as
C.	Impr	rovised Explosive Devices (IED) [43.V.F]	EIVIS first responders at a medical
		4] [3]	emergency
	1. (Constructed in a nonstandard manner,	
	1	incorporating explosives or destructive,	[3] ASK – What are IED's designed to
	I	lethal, noxious, pyrotechnic, or incendiary	do?
	(chemicals	 Answer – Kill, injure, destroy,
	2. I	Designed to kill, injure, destroy, disfigure,	distract, harass, disfigure
	(distract, or harass	
	3. I	Delivered to a target	
	4. (Components of IED – IED generally consist	
	(of four basic components – power source,	
	i	initiator, explosives, and switch.	
	ä	a. Power sources are commonly electric	
		because the IED contains an electric	
		initiator. Batteries (a common power	
		source) are manufactured in many	
		shapes and sizes. In some cases, they	
		can be cut and shaped to make	
		detection more difficult. Most	
		commercially available batteries can	
		reliably cause an initiator to function.	
		Mechanical action, such as spring	
		under pressure, can store sufficient	
		energy to cause the functioning of a	
		non-electric initiator.	
	I	b. Initiators provide an additional energy	
		required to start a chain reaction with	
	ł	non-electric initiator. b. Initiators provide an additional energy required to start a chain reaction with	

	LD43 – Emergency Manager	ment
	the explosive, causing it to burn or	
	detonate. The most common types of	
	initiators are squibs and blasting caps.	
	Examples of effective improvised	
	initiators include a flash bulb with an	
	exposed filament, a percussion primer,	
	or even improvised blasting cap.	
	c Explosives (fillers) are a necessary	
	ingredient of the IED and the	
	component that causes most of the	
	damage As an IFD component	
	evolocives have a few additional	
	characteristics that warrant discussion	
	When an explosive incorporated into a	
	dovice, it is not necessarily in contact	
	uevice, it is not necessarily in contact	
	With all other IED components. These	
	components will often survive in some	
	Torm alter a device deconates.	
	d. Switches are incorporated into a	
	device as either an arming switch or a	
	fuse. They can be simple or complex in	
	nature. More than one switch can be	
	used to create redundancy in the	
	system. Many IED will incorporate	
	both an arming switch and a fusing	
_	switch.	
5.	Use of IED to Disperse CBRN Materials –	
	An IED may be used to initiate a CBKINE	
	event; in these cases, the IED is used to	
6	scatter the hazard	
6.	Delivery of IED – An IED can take any form,	
	limited by only the builder's imagination	
	and resources. IED generally fail into three	
	categories – package-type, venicie-borne,	[ID 2] Identify the elements of
	and suicide bomb [LD3] [4]	[LD 3] identify the elements of
	a. A package type IED concealed in	Gritical Sites, la satisma na muiring
	everyday packaging remains effective	Critical Sites, locations requiring
	and facilitates delivery to its intended	special attention, i.e. not spots,
	target. Packaging can consist of	potentially dangerous areas
	metals, plastics, paper, glass, wood, or	
	any combination of these materials.	[4] ASK – What is some common
	The packaging can enhance the	packaging of IED's?
	destructive effect and/or disguise its	 Answer – Looking for metals,
	true contents. Some examples are:	plastics, paper, glass, wood
	1) Pipes and tubes (steel and plastic)	or any combination of.
	2) Suitcases, handbags, purses	
	3) Postal mail	

		LD43 – Emergency Manage	ment
		4) Toys	
		5) Cellular phones and pagers	
		6) Computers	
		7) Furniture	
		8) Cigarette boxes	
		9) Flashlights	
		10) Bottles, cans, and jars (any	
		container)	
	7.	A vehicle-borne IED is a device that uses a	
		vehicle as the package or container of the	
		device. These IED come in all shapes,	
		colors, and sizes that vary by the type of	
		vehicle available – small sedans to large	
		cargo trucks. Larger vehicles obviously	
		enable larger amounts of explosives to be	
		used, resulting in a greater effect.	
		Functioning of these devices can vary	
		within the same methods as package-type	
		IED, and can have the same common	
		characteristics or indicators as other IED.	
	8.	Most often identified with events in the	
		Middle East, suicide bombers are a reality	
		throughout the world. The aim of the	
		terrorist is not to commit suicide, but to	
		kill or injure as many other people as	
		possible, whether responder or everyday	
		citizen. A person-borne suicide bomb	
		usually employs a high-	
		explosive/fragmentary effect and uses a	
		command detonation firing system – some	
		sort of switch or button the person	
		activates by hand. Explosives with	
		fragmentation can be contained in a vest,	
		belt, or clothing specifically modified to	
		carry concealed material. Vehicle-borne	
		suicide bombs employ the same methods	
		and characteristics of other package or	
		vehicle bombs, using a command	
_	_	detonation firing system.	
D.	Res	sponding to a Preblast Incident- As the	
	res	ponder arrives on the scene of a potential	
	exp	plosion incident, several decisions must be	[LD 21] Patrol strategies officers may
	ma	de based on the situation, the first of which	employ to provide protection and
	is v	whether to evacuate. If the information is	service within their assigned areas of
	ava	ailable, the responder needs to know the	patrol, to include preventive and

following [LD21]:

1. Location of bomb(s)

patrol, to include preventive and directed enforcement

	LD43 – Emergency Manage	ment
	2. What it looks like	[LD43] Identify incident response
	3. Type/size of bomb(s)	priorities: Life versus property, Crime
	4. Time of detonation	scene protection. Preservation of
	5. How will it detonate-timing, command	evidence
	temperature etc	
F	Safety Procedures- When responding to a	[5] ASK - What safety procedures do
L.	salety Flocedules- when responding to a	[5] ASK - What salety procedures do
	possible explosive incident, several safety	you think you should take when
	procedures should be followed. The following	dealing with a possible explosive
	are safety suggestions [43.V.N] [5]	incident?
	1. Do not transmit two-way radios, radar, or	 Answer – Looking for, don't
	television transmitting devices within	use your radio, turn off your
	1,000 feet of a device. This includes the	MDC, notifications, move and
	Mobile Data Terminal (MDT) in cellular	keep people away, find cover
	phones. The Electro Magnetic Radiation	and/or shielding, etc.
	(EMR) given off by these devices may	
	detonate the item.	
	2. Notify the proper authorities, depending	
	on the jurisdiction and the situation.	
	3 Clear and control the area as one would	
	during a hazardous materials incident. The	
	size and type of explosive terrain	
	shielding, and other factors will determine	
	the size of the area to be controlled. Move	
	the size of the area to be controlled. Move	
	people away from the item- do not move	
	the item away from the people.	
	4. Stage Emergency Medical Services (EMS),	
	fire, and police units outside the control	
	point. Emergency units are of little use if	
	they are destroyed in a blast.	
	5. Do not approach the suspected explosive	
	because it may have motion-sensitive or	
	acoustic fuses that function once a target	
	is sensed.	
	6. Reduce the potential effects of a blast and	
	flying shrapnel by opening doors and	
	windows and by placing emergency	
	vehicles in the path of the blast wave to	
	act as a shield.	
	7. Be aware of possible multiple devices	
F.	Priority Actions- Life-safety issues are	
	paramount during the first stages of a preblast	
	response. A responder must take great care to	
	avoid endangering him/herself. other	
	responders, and the public. Proper standoff	
	distances and shielding must be considered	
	when positioning vehicles and equipment and	
	when moving or evacuating personnel	

	[4	3.V.C]	[LD 43] Identify the components of
C	δ. Ε\	vacuation Issues-The decision to evacuate	the R.A.I.N. concept: Recognize,
	СС	ould move personnel from a building or other	Avoid, Isolate, Notify
	ar	ea of relative safety to another location with	
	fa	r more danger, such as an outside parking lot	
	w	here a vehicle-borne IED explodes or a sniper	
	a١	waits. If the decision is made to remain in	
	pl	ace, results could also be deadly and costly if	
	р. А	homb explodes. Such losses could have	
	si	gnificant and long-standing impact on either	
	n	ublic or private institutions. In the case of a	
	th	preat only (no device located) local and	
	de	enartmental guidelines help determine who	
	m	akes the evacuation decision or when to	
		vacuate- rarely is it the emergency	
	re	esponder: instead senior managers	
	σ	overnment administrators or husiness	
	5	where lead the decision-making process. If an	
		mergency responder is asked for advice	
	bi bi	a/she should evplain the options and	
	n	otential consequences, but let that person	
	m	ake the decision	
F		vacuation Considerations. There are three	
	ι. L\ σζ	operations of the second s	
	ge to	eneral considerations when declaing whether	
	di	stance, and chielding	
	1	Time is important in ovacuation, because	
	1.	the time of detenation is unknown, and	
		the length of time it will take to evacuate is	
		difficult to estimate. Even if a terrorist	
		annound to estimate. Even in a terrorist	
		provides the time the explosive will detenses that information could be	
		inaccurate. It is no unboard of for a	
		torregist to lie to gain more "success" in	
		the attack. The fues, switch, and other	
		the attack. The fuse, switch, and other	
		bomb components often may not work as	
	h	planned. The distance from the device should be	
	۷.	determined based on the size and	
		determined based on the size and	
		potential power of the explosive, as well as	
		available shielding. If the size and power is	
		unknown, distance decisions should be	
		pased on the worst-case scenario. The	
		responder should assume that the	
		container has the maximum amount of the	
		strongest explosive. People should be	
		moved away from the device, rather than	

	LD43 – Emergency Manager	ment
J. E n a si e n e 1	 moving the bomb away from the people. Emergency responders should never handle a suspected device. Shielding can be found in many forms, especially from vehicles. The more shielding available the better: two fire trucks are better than one. When selecting shielding, the emergency responder should remember that some materials make better shields than others. Sheets of plywood do not provide as much protection as does a wall of cinder blocks. Remember: If you can see the bomb, the bomb can kill you [6] vacuation Decision- Responsible officials haking the evacuation decision may consider in evacuation of the building or area if the tuation dictates. There are four main vacuation, and total evacuation. No evacuation/no threat- When the threat has been determined to be false, a decision of no evacuation/no threat is made, and all personnel in the area may continue with the normal routine. No evacuation/shelter in place- This is preferred when there is no time to evacuate based on the expected time of detonation. If the decision to shelter in place is made, personnel must use all possible means of shielding to reduce exposure. 	 [6] ASK – What are some good types of shielding? Answer – Looking for, Block walls, vehicles, buildings, etc.
3	preferred when there is no time to evacuate based on the expected time of detonation. If the decision to shelter in place is made, personnel must use all possible means of shielding to reduce exposure. Partial evacuation- A decision of partial	
	evacuation is made when it is determined that the explosive will not cause structural damage or that the effects will be contained. A letter bomb, for example, may require the evacuation of only the immediate area and not the entire building. Another situation requiring only partial evacuation would involve an explosive placed in a hospital. Removing all patients would not be feasible. Many situations would require shelter in place.	
4	evacuation requires removal of all	

LD43 – Emergency Management

personnel from the building or effected area.

- J. Scene Survey Considerations- Two situations are possible in preblast situations. Either a threat has been made or a suspicious package has been located. The course of actions taken by the responder can differ according to which of the situations exist. When responding to a suspicious package call, an emergency responder needs to be prepared for anything that could happen. While the scene survey techniques involve searching for an explosive device, there are suggested guidelines for responding to a suspicious package that may contain biological or chemical hazards [LD41, 30]
- K. Response to a Suspicious Package with Possible Chemical or Biological Hazards [43.V.J]
 - Do not touch, move, or open any suspicious package until an initial hazard risk assessment of the package can be performed in coordination with HAZMAT personnel.
 - 2. Evacuate personnel from the immediate area.
 - 3. Treat the scene as a crime scene. Preserve evidence and perform collection only in conjunction with appropriate law enforcement. Enough suspicious material must be retained for laboratory analysis and for forensic examination of criminal evidence.
 - 4. Maintain chain of custody.
 - Identify and list the names and contact information for anyone who may have been exposed to the suspicious substance so that they may be treated as necessary.
- L. Scene Survey Techniques- When a bomb threat has been made, a scene survey must occur (if time permits) to make evacuation determinations. There are different methods of approach, including company search procedures, the ATF bomb search technique, and the local department search proceduresonce again, follow any local protocol in existence.

[LD30] Identify the primary purpose of the: Initial survey of a crime scene; Crime scene search

[LD41] Identify a hazardous materials incident. Identify the specific challenges that are presented by incidents involving hazardous materials

[LD43] Identify the types and characteristics of explosives and improvised explosive devices

	LD43 – Emergency Manage	ment
1.	Before beginning the sweep of a room,	
	searchers should always listen to the	
	noises inside the room. Unusual ticking	
	sounds need to be identified immediately.	
2.	During the sweep of a room, searchers	
	may use electronic or medical	
	stethoscopes on the walls, furniture, and	
	floors.	
3.	The room should be searched four times at	
	four separate search elevations.	
	a. First elevation- from floor to waist high	
	b. Second elevation- from hip height to	
	chin or top of the head.	
	c. Third elevation- from chin or top of the	
	head to the ceiling.	
	d. Fourth elevation- inside false or	
	suspended ceilings, ceiling mounted	
	fixtures, air conditioning ducts, sound	
	or speaker systems, electrical wiring,	
	and structure frame members.	
4.	The room is typically searched at the first	
	elevation, second elevation, and third	
	elevation in exactly the same manner.	
5.	The room is entered by two searchers.	
6.	They visually split the room in half by	
	agreeing on imaginary line through the	
_	center of the room.	
7.	Each searcher will be responsible for	
	searching their half or their side of the	
_	imaginary line.	
8.	They stand at one of the room, back-to-	
	back. The wall is immediately next to the	
	right shoulder of one searcher. The wall is	
	immediately next to the left shoulder of	
	the other searcher. The imaginary line runs	
	between their backs and is perpendicular	
~	to them.	
9.	The searchers walk along the walls,	
40	searching at the first elevation.	
10.	They meet at the opposite end of the	
	room, then walk along the center of the	
	imaginary line back to the point of	
44	Deginning.	[ID1] The officer of a location and the
11.	me searchers then make similar	LLUI The officer as a leader and the
	symmetric searches around the room until	universal components of leadership

the entire room has been searched at the

first elevation.

[LD26] Identify the responsibilities of

	LD43 – Emergency Manage	ment
	12. The searches then conduct searches of the	the first responding officer on the
	second and third elevations.	scene of an unusual occurrence, to
	13. The search of the fourth elevation is	include: Assuming initial command,
	conducted in any manner that will allow	establishing a perimeter/protecting
	the access, view, or analysis of the more	the incident location, Isolating the
	difficult place to be searched.	hazard, maintaining ingress/egress
M.	Responding to a Postblast Incident- When	control, initiating appropriate
	called to the scene of an explosion or to a	notifications
	threat that results in an explosion, the	
	responder will encounter a situation (and blast	[LD41] Identify precautions peace
	effects) influenced by several factors, including	officers can take to protect
	[LD 26, 1, 41]	themselves from contacting
	1. The type, weight, and shape of the	hazardous materials
	explosive charge	
	2. The distance from the point of detonation	[LD43] Identify types and levels of
	3. The orientation of the structural	Personal Protective Equipment (PPE)
	component (with respect to the explosive	and decontamination considerations
	device)	
	4. The blast wave reflection from other	
	surfaces	
	5. The focusing of the blast wave	
	6. The type and strength of structures	
	7. The thickness, length, and height of walls	
	8. The type of frame or other support conditions	
N.	Hazards Encountered in Structures- There are	
	three common types of structural hazards a	
	responder may encounter following an	
	incident involving an explosive device- Glass.	
	fragments, and collapse/fire hazards [43.V.O]	
	1. Glass hazards- The primary sources of glass	
	hazards are windows. Glass hazards	
	generally come in one of three forms-	
	Projected, falling, or static glass. Projected	
	or flying glass shards are due to the	
	positive pressure phase of the blast wave.	
	Falling, or guillotine, glass not only poses a	
	threat during the actual explosion, but is	
	also a lingering threat during the response.	
	Static glass can be present in the structure	
	and can pose a hazard by causing	
	additional injuries to victims of the initial	
	explosion and to responders.	
	2. Fragment hazards- Blast pressure forces	
	applied to reinforced concrete can cause	
	fragment hazards due to spalling (tearing	
	apart) or breaching. Responders can be	

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	injured by concrete and steel that	
	dislodges from intact structures or a debris	
	field.	
	3. Collapse hazards- These occur due to	
	catastrophic failure of structural	
	components caused by the blast pressure	
	and may result in a progressive collapse, or	
	pancaking, of a structure. Intense fire can	
	also weaken structural supports, causing a	
	progressive collapse. As buildings collapse,	
	fire spreads and may possibly intensify due	
	to the presence of additional fuel, such as	
	ruptured gas lines. The initial damage may	
	only be to a small portion of a structure,	
	but the chain reaction of failures may	
	begin that could result in more extensive	
	damages. This collapse may not occur	
	immediately, but may take days to evolve.	
0.	Other Hazards Following an Explosion- Besides	
	structural hazards, many other hazards may be	
	present at the scene of an explosion, including	
	multiple devices, natural gas and electrical	
	lines and other utility hazards, other CBRNE,	
	lines and other utility hazards, other CBRNE, bodily fluids [7]	[7] ASK – What are some hazards you
	lines and other utility hazards, other CBRNE, bodily fluids [7] 1. Multiple devices- As in any situation	[7] ASK – What are some hazards you need to protect yourself from after
	 lines and other utility hazards, other CBRNE, bodily fluids [7] Multiple devices- As in any situation involving terrorism, responders continually 	[7] ASK – What are some hazards you need to protect yourself from after an explosion?
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	dissemination. All responders should be	
	alert for the signs and symptoms of a CBRN	
	attack in addition to the explosion. The	
	presence of the additional hazards will	
	affect response actions including	
	evacuation needs, triage needs, PPE level,	
	downwind hazards, and request for	
	additional resources.	
	4. Bodily fluids may contain pathogens that	
	create risks for responders contacting	
	those victims. This has become a concern	
	in suicide bombings in which terrorists	
	have spread Hepatitis and other pathogens	
	present in bone fragments projected into	
	victims.	
Ρ.	Priorities- In the response phase, the	
	responder has priorities to address. The first of	
	these is the safety of the responder and the	
	public. Every effort must be made to avoid	
	additional casualties among the public.	
	Responders must also ensure their personal	
	protection. Too often, responders rush into a	
	situation with little concern for their own	
	safety and become victims. As victims, they are	
	no longer able to assist in the response effort	
	and may require additional resources for	
	treatment (if survival is possible).	
Q.	Multiple Devices- Multiple devices are	
	additional explosives placed at the scene of an	
	ongoing emergency response and intended to	
	cause casualties among responders. They are	
	designed to explode after a primary explosion	
	or other major emergency response event has	
	attracted large numbers of responders to the	
	scene to inflict additional injury, damage, and	
	fear.	
R.	Guidelines for Responding to an Incident	
	Involving Multiple Devices	
	1. Anticipate the presence of multiple devices	
	at any suspicious incident	
	2. Survey the scene for multiple devices	
	before moving into the incident area	
	3. Avoid touching or moving anything that	
	may conceal an explosive device	
	4. Effectively manage the scene with	
	boundaries, exclusion zones, triage areas,	
	etc.	

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	5.	Evacuate victims and nonessential	
		personnel as quickly as possible	
	6.	Preserve the scene as much as possible for	
		the evidence collection and crime	
		investigation	
		a. The role of the law enforcement	
		responder at the performance	
		defensive level is not to conduct	
		evidence collection, but to control the	
		crime scene and preserve evidence. All	
		actions taken by the law enforcement	
		responder at the scene of a terrorist	
		act must be conducted with the	
		consideration of all potential evidence.	
S.	The	e FBI's 12-Step Process	
	1.	Preparation includes training, having the	
		proper supplies and collection tools, and	
		knowledge of qualified experts, or an	
		awareness of where they can be recruited	
		for an investigation. Investigators must be	
		familiar with PPE and problems with its	
		use.	
	2.	Approaching the scene involves early	
		recognition. The most difficult issue for	
		first responders is recognizing the nature	
		of the threat-whether the incident is	
		chemical, biological, radiological, or an	
		explosive device. Early recognition is	
		critical to the safety of responders and the	
		public. Documentation needs to begin as	
		investigators approach the scene.	
		Responders must be aware of the	
		possibility of multiple devices; PPE must be	
		considered.	
	3.	Securing and protecting the scene is a	
		priority. All unnecessary personnel must	
		be excluded from the scene. Initial	
		responders should be debriefed and the	
		process of documenting the scene	
		continued. All copies of existing	
		documentation should be obtained from	
		tirst responders. The process of	
		documenting the scene from a crime scene	
	_	investigator's perspective begins.	
	4.	Initiate preliminary surveys, including a	
		walk-through to provide an overview of	
		the scene and evaluation of the evidence,	

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	to brief the evidence collection team.	
	Transient evidence needs to be identified	
	and immediately collected if present.	
	Scene hazards must be identified, and	
	initial photographs and/or video should be	
	taken to brief the evidence team.	
5.	Evaluation of physical evidence	
	possibilities by the team leader to	
	determine the tools and equipment	
	needed for the collection process. Other	
	expert resources should be notified and a	
	plan established for the collection of	
	evidence. Investigative personnel should	
	be assigned specific duties.	
6.	Preparation of a narrative description	
	includes documentation of everything	
	from arrival to the release of the scene.	
7.	Photographing the scene is vital.	
	Everything should be photographed and	
	videotaped if possible. Photographs should	
	be taken from eye level to represent the	
	scene as it would be from a normal view.	
	Medium and close-up shots should also be	
	taken. Close-up shots should be with and	
	without scale. Document photographs in a	
	log.	
8.	Preparation of a diagram/sketch requires	
	accurate measurement of all evidence to	
	be documented on the sketch. It is best to	
	coordinate numbered designations with	
	the evidence log.	
9.	Conducting a detailed search utilizing the	
	most effective search methods/patterns.	
	Collect both control and blank samples.	
	Complete documentation is critical.	
10.	Recording and collecting physical evidence	
	should be done per preplanning. Two	
	investigators should observe the evidence	
	in its place and mark it for identification. If	
	possible, evidence logs should be kept at	
	the scene.	
11.	Conducting the final survey involves first	
	debriefing the entire crime scene team to	
	confirm the scene has been fully covered	
	and the documentation and packaging are	
	completed. Required forensic tests should	
	be discussed with the team, and the entire	

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team should meet with the IC to report its	
preliminary findings.	
12. Release of the scene occurs after review of	
the evidence collected and ensuring	
proper documentation and packaging. An	
inventory of all items seized must be left	
with the custodian/owner of the location	
searched. The IC is debriefed.	