

O P E R A T I O N S

RESCUE OF NON-AMBULATORY VICTIMS

- If there are LIVE, VIABLE VICTIMS who are non-ambulatory, firefighters should wear, at a minimum, turnout gear and SCBA to perform casualty rescue.
- If all victims are dead or dying, do not enter the area using turnout gear and SCBA.
- Use stretchers or backboards to move victims.
- If a rescuer comes in contact with any suspected liquid contamination, he must exit the area immediately, undergo decontamination, and be monitored by medical personnel.

TRIAGE

- Follow the Simple Triage and Rapid Treatment (START) system
- Segregate victims and prioritize them to go through decontamination based on:
 - Casualties closest to the point of release
 - Casualties reporting exposure to vapor or aerosol
 - Casualties with serious medical symptoms
 - Casualties with conventional injuries

CHEMICAL AGENT SYMPTOMOLOGY

AGENT	PHYSICAL PROPERTY	SIGNS AND SYMPTOMS	ODOR	DECONTAMINATION	PERSISTENCE	DISPOSAL
NERVE						
GA /GB/GD	Liquid	Pinpoint pupils, SLUDGE – Salivation, Lacrimation(tearing), Urination, Defecation, Gastrointestinal distress, Emesis(vomiting), twitching convulsions	Fruity	Remove contaminated clothing. Flush with soap and large volumes of water.	Minutes; days in heavy concentration	153
VX	Like oil		Sulfur		Days to weeks	
BLISTER						
Mustard	Liquid	Eye pain, gritty eyes, reddened skin, large fluid-filled blisters	Garlic	Remove contaminated clothing. Flush with soap and large volumes of water.	Days to years	153
Lewisite	Liquid	Immediate eye pain and burning lungs, bee-sting blisters, grayish skin	Geraniums		Hours to days	
BLOOD						
Hydrogen Cyanide	Gas	Bright red lips and skin, headache, gasping, nausea	Bitter Almonds	Remove contaminated clothing. Flush with soap and large volumes of water.	Minutes	117
Cyanogen Chloride						
CHOKING						
Phosgene	Gas	Coughing, choking, pneumonia	Freshly Mown Hay	Remove contaminated clothing. Flush with soap and large volumes of water.	Minutes	125
Chlorine	Gas	Coughing, choking	Bleach			

DECONTAMINATION

- Instruct all victims to disrobe and to go through gross decontamination ASAP.
- Bag and tag all personal items.
- Use high-volume/low-pressure water for decontamination.
- Attempt to control water run-off; however, decontamination of live victims takes priority over controlling water run-off.
- Have a separate decontamination for responders.
- Use the Ladder Pipe Decontamination System (LPDS) or the Emergency Decontamination Corridor System (EDCS).
- Nozzle pressure should be between 60 and 90 PSI.
- Consider cold weather decontamination issues. When contamination is less certain and time permits, decontaminate victims using the following guidelines:
 - When the ambient temperature is 65 °F or above, disrobing, decontamination, and post-decontamination processing can proceed outdoors.
 - When the ambient temperature is greater than 35 °F but less than 65 °F, disrobing and water decontamination can proceed outdoors, but after showering victims should be moved into a heated shelter.
 - When the ambient temperature is 35 °F or below, disrobing, water decontamination, and post-decontamination processing should take place in heated shelters.
- Asymptomatic victims may need to be decontaminated for psychological impact.

QUICK RESPONSE GUIDELINES FOR A SUSPECTED CHEM/BIO ATTACK

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INDICATORS OF A CHEM/BIO ATTACK

- Large volume of calls reporting sick or injured persons with no known cause.
- Numerous persons reporting similar illness (i.e., signs/symptoms).
- Numerous calls from the same general geographic area or large gathering of people (e.g., a sporting event) reporting unusual illness.
- Symptoms indicative of chemical agent exposure (e.g., drooling; tearing; shortness of breath; difficulty breathing; irritation of the eyes, nose, throat, and/or skin; redness or itching of skin).
- Report of an explosion resulting in little or no structural damage.
- Reports of unexplained liquids (e.g., droplets, oily substances).
- Reports of unusual odors (e.g., mowed grass, garlic, bitter almonds).
- Reports of a release of a spray (e.g., hissing sounds, presence of a mist or vapor).
- Suspicious devices/packages (e.g., spray devices, damp/wet packages or bags, explosive device that causes little explosive damage).
- Unexplained dead wildlife/animals.
- Discarded PPE (e.g., masks, gloves, gowns).

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SCENE ASSESSMENT AND SAFETY

- Don PPE (e.g., firefighter turnout gear and SCBA).
- Stage apparatus upwind and upgrade at least 300 feet away from scene.
- Observe plume direction.
- Secure the perimeter/deny access.
- Avoid contact with all liquids.
- Establish Hot, Warm, and Cold Zones.
- Move unininvolved civilians to safe zones.
- Be alert for the possibility of secondary devices. If a device is found:
 - Do not touch or disturb
 - Do not use radios or cell phones within 300 feet
 - Notify police and request bomb squad
 - Evacuate area around device
- Remember the perpetrator maybe among the victims.
- Request HazMat and police response.
- Shut down the HVAC system.
- Do not perform treatment in the Hot Zone.
- Remember it is a crime scene; do not disturb evidence.
- Establish accountability system for all personnel.

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DETERMINE IF THERE ARE LIVE VICTIMS

- Look through windows/doors to determine if there are any LIVE VICTIMS.
- Question victims to determine if there are still live victims inside of a building or enclosed area.
- If there are live, viable victims, the IC must determine procedures for performing rescue and recovery.
 - Immediate rescue using firefighter turnout gear and SCBA
 - Immediate rescue using Level A protection, if available
 - Wait for HAZMAT Team and perform delayed entry
- The use of turnout gear and SCBA provides sufficient protection to perform rescue of LIVE VICTIMS for 30 minutes in a possible nerve agent environment with the following associated risk:
 - 50% of the firefighters MAY experience increased sweating and muscle weakness 1-18 hours after exposure.
- If firefighters enter an area and find NO LIVE victims, they should immediately exit the area, undergo decontamination, and be monitored by medical personnel.

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RESCUE OF AMBULATORY VICTIMS

- Use bull horns and vehicle public address (PA) system to instruct ambulatory victims to evacuate.
- Instruct ambulatory victims to evacuate living non-ambulatory victims.
- If victims cannot be evacuated, instruct them to shelter in place in a safe area.
- After victims have been rescued, move them immediately to the decontamination areas for decontamination ASAP.
- Avoid physical contact with victims.



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