

QUICK RESPONSE GUIDELINES FOR A SUSPECTED CHEM/BIO ATTACK

ENROUTE

INDICATORS OF A CHEM/BIO ATTACK

- Large volume of calls reporting sick or injured persons with no known cause.
- Numerous persons reporting similar illness (signs/symptoms).
- Numerous calls from the same general geographic area or large gathering of people (a sporting event) reporting unusual illness.
- Symptoms indicative of chemical agent exposure (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 with little or no structural damage.
- Reports of unexplained liquids (droplets, oily substances).
- Reports of unusual odors (mowed grass, garlic, bitter almonds).
- Reports of a release of a spray (hissing sounds, presence of a mist or vapor).
- Suspicious devices/packages (spray devices, damp/wet packages or bags, explosive device that causes little explosive damage).
- Unexplained dead wildlife/animals.
- Discarded PPE (masks, gloves, gowns).

SCENE ASSESSMENT

SCENE ASSESSMENT AND SAFETY

- Don PPE (firefighter turn-out 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 uninvolved civilians to safe zones.
- Be alert for the possibility of secondary devices. If device is found:
 - Don't 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.

DETERMINE IF THERE ARE LIVE VICTIMS

- Look through windows/doors to determine if there are any live victims.
- Incident Commander must determine if rescue of victims will be conducted by using firefighter turnout gear and SCBA or to wait for arrival of HazMat teams with level A protection.
- Turnout gear and SCBA provide sufficient protection for 30 minutes to rescue known live victims in a nerve agent vapor hazard. If you are unable to visually see live victims from the outside, turnout gear and SCBA provide sufficient protection to conduct a 3 minute reconnaissance to search for live victims in an unknown nerve agent environment; **One minute if mustard agent is suspected.**
- The risks of these operations are:
 - 50% of firefighters may experience increased sweating and muscle weakness (nerve) or skin irritation (mustard) 1 - 18 hours after exposure.
- If no live victims, firefighters should exit the area ASAP, undergo decontamination, and be medically monitored.

RESCUE OF AMBULATORY VICTIMS

- Use bull horns and vehicle public address (PA) system to instruct live ambulatory victims to evacuate.
- Instruct ambulatory victims to evacuate alive 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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SCENE ASSESSMENT

OPERATIONS

RESCUE OF NON-AMBULATORY VICTIMS

- Don firefighter turnout gear and SCBA. Follow procedures as outlined in Firefighter Quick Response Guidebook.
- In a known or suspected bio incident, standard turnout gear with SCBA will provide enough protection for Bio agents.
- Use PPV fans to decrease chemical agent vapor concentration.
- Consider the downwind hazard of unprotected people before using PPV.
- Use negative pressure for ventilation of closed interior rooms.
- If all victims are dead or dying, do not attempt rescue with turnout gear or SCBA.
- Use stretchers or backboards to move victims.
- If rescuer comes in contact with liquid agent, decontaminate immediately.

TRIAGE

- Follow the Simple Triage and Rapid Treatment (START) system
- Segregate victims and prioritize victims to go through decon 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

DECONTAMINATION

- Instruct all victims to disrobe and to go through gross decon ASAP.
- Bag and tag all personal items.
- Use high volume/low pressure water to decontamination.
- Attempt to control water run-off. However, decontamination of live victims takes priority over controlling water run-off.
- Have a separate decon for responders.
- Use 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 and above, disrobing, decontamination, and post-decontamination processing can proceed outdoors.
 - When the ambient temperature is greater than 35°F and 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.

CHEMICAL AGENT SYMPTOMOLOGY

AGENT	PHYSICAL STATE	SIGNS AND SYMPTOMS	ODOR	DECONTAMINATION	PERSISTENCE	DOT ERG
NERVE						
GA/GB/GD	Liquid	Pinpoint Pupils, SLUDGE -Salivation, Lacrimination (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	153
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						125
CHOKING						
Phosgene	Gas	Coughing, choking, pneumonia	New-mown hay	Remove contaminated clothing. Flush with soap and large volumes of water.	Minutes	125
Chlorine	Gas	Coughing, choking	Bleach			124