

**GORHAM POLICE DEPARTMENT  
STANDARD OPERATING PROCEDURES  
BIOLOGICAL AND CHEMICAL THREATS**

**Effective: April 1, 2020**

**Review: April 1, 2023**

**I. PURPOSE**

To provide guidelines for responding to biological or chemical threats.

**II. DISCUSSION**

This guide is general in nature and not intended to be a technical guide for emergency responders.

**III. POLICY**

It is the policy of the police department to take all necessary precautions to protect police personnel and the public from potential biological or chemical threats.

**IV. DEFINITIONS**

**A. Anthrax:** An infectious, usually fatal disease of warm-blooded animals, especially cattle and sheep, caused by the bacillus anthracis bacterium. The toxin that exists as spores can live in the soil is very resistant and may survive for decades in certain soil conditions. Spores are dormant forms of a bacterium, and the bacterium produces the toxin.

**B. Bacteria:** Single celled organisms that multiply by cell division and can cause disease in humans, plants, and animals.

**C. Biological threat agent:** Living organism or the materials derived from them that cause deterioration of material. May be used as liquid droplets, slurry, aerosols, or dry powders.

**D. Biological threat:** The intentional use of biological threat agents as weapons designed to kill or injure, or to damage equipment.

**E. Blister agent:** A chemical agent, also called a vesicant, which causes blistering and burns to tissues, skin, eyes, and the respiratory tract. Exposure is through liquid or vapor contact. Also referred to as mustard agents, and include lewisite and mustard.

**F. Blood agent:** A chemical agent that interferes with the ability of the blood to transport oxygen and causes asphyxiation. Examples are cyanogens chloride, and cyanide.

**G. Choking agent:** A chemical agent that causes physical injury to the lungs. It may cause the lungs to fill with liquid, which results in lack of oxygen, hence choking on liquids. Examples include chlorine and phosgene.

**H. Etiological agents:** Living microorganisms or toxins, which cause or may cause disease in humans.

**I. Irritating agents:** Chemical agents such as pepper spray or tear gas that cause respiratory distress and tearing designed to incapacitate.

**J. Nerve agents:** Substances that interfere with the central nervous system. Exposure is through liquid contact with the eyes or skin, and inhalation of the vapor. Three distinct symptoms associated with nerve agents are pinpoint pupils of the eye, headaches, and chest tightness. Examples of nerve agents include sarin, tabun, and VX. Many symptoms are associated with exposure, and initial signs can clinically grade the victim's severity of exposure and condition and symptoms at evaluation and during repeat exams.

**K. Toxins:** Toxic substances of natural origin produced by an animal, plant, or microbe. They differ from chemical substances in that humans do not manufacture them. Toxins may include botulism, ricin, and mycotoxins.

## V. PROCEDURE

A. The objectives of a police response to biological or chemical threats are to:

1. Remove people from harm's way,
2. Assess the situation, and request the presence of a supervisor and the Fire Department if the threat appears to be credible,
3. Be aware of the possible presence of secondary devices deliberately placed to harm first responders or evacuees,
4. Secure the perimeter, set up an area of operations and establish hazard control zones (hot zone, warm zone, and cold zone),
5. Arrange for rescue, establish separate decontamination areas for civilians and public safety personnel, triage, treatment and transportation of victims,
6. Alert hospitals regarding imminent mass casualties; estimate number of casualties,
7. Separate victims with symptoms at triage from those without symptoms,
8. Stabilize the incident and avoid additional contamination,
9. Secure evidence and treat the scene as a crime scene.

B. The first responder should remember the acronym, **AWARE**, and:

1. Approach the scene from upwind and upgrade if possible,
2. Wear any available respiratory protection,
3. Alert other first responders of potentially dangerous conditions,
4. Restrict entry to the area, and
5. Evaluate the signs and symptoms of victims and alert others to them.

- C. Possible indicators of a biological threat agent include unusual dead or dying animals (lack of insects), unusual casualties (multiple victims, serious illness, nausea, trouble breathing, convulsions or definite casualty patterns), sick or dying animals, marine life or people (sickness would not usually occur in the initial stages of an incident due to the incubation period required), unusual liquid, spray, powder or vapor (droplets, oily film, unexplained odors or low clouds or fog unrelated to the weather), spraying or suspicious devices or packages (unusual metal debris, abandoned spray devices, or unexplained munitions).
1. Biological weapons of mass destruction include bacteria such as anthrax or plague, viruses such as smallpox or viral hemorrhagic fevers, and toxins such as ricin or botulism.
  2. Bacteria and viruses are living organisms that enter the body via inhalation, ingestion or breaks in the skin, then grow and reproduce. Some can be contagious and cause an epidemic while others such as anthrax are not believed to be spread from human to human. Toxins enter the body the same as pathogens but are not contagious.
  3. Biological weapons generally require a dispersion device, typically some sort of aerosol generator. They are not volatile and not absorbed through intact skin. They are more toxic by weight than chemical agents and industrial chemicals, they pose an inhalation hazard, are invisible to our senses, and have delayed effects ranging from hours to days or even weeks before symptoms appear.
- D. Possible indicators of a chemical threat include unusual dead or dying animals, persons or animals gasping for air, unusual or pungent odors or gas clouds, or spills of liquid or releases of gases from vehicles or packaging containing hazardous materials warning labels. Chemical threat agents include nerve, blister, blood, choking, or irritating agents, all of which may cause incapacitation, serious injury, or death, dose dependent for each victim. They typically require a dispersion agent or weaponization and can be found as solids, liquids, or gases with chemical effects varying from immediate to hours later.
- E. On-scene supervisors should take into consideration, after consultation with the Fire Department officer in charge, evacuating persons from potential at-risk areas, weather, wind and atmospheric conditions and time of day, traffic conditions, plume direction of any vapor or cloud movement, types of injuries and symptoms, what witnesses saw or heard, access route and staging area, how to isolate the area and deny entry, and the type of agent and exposure suspected.
- F. Anonymous calls indicating a biological agent threat or envelope should be taken as seriously and investigated as carefully as a bomb threat. If a device or suspicious material is present or individuals at the scene are presenting with symptoms of illness, the Fire Department and Health Department should be notified immediately, and the area treated as a crime scene. Personal protective equipment, decontamination or other extraordinary measures should not be required unless hazards or risks are indicated.

1. Information gathering at the scene should include a threat assessment to determine the credibility of the threat, and screening of any suspected package or envelope by the State Police Bomb Squad to ensure that no dispersal device or mechanism is inside, then hazardous materials personnel with personal protective equipment double bagging the envelope and placing it in an airtight container, preserving the chain of custody of evidence, and submitting it for laboratory analysis.
  2. A search should be performed to make sure no secondary device or additional suspicious package or envelope is present.
  3. The building and its ventilation system should be assessed to rule out forced entry or tampering, and attention focused on appliances or devices foreign to the surroundings.
- G. Actual instances of suspicious materials discovered by a reporting party with a threat of a biological agent should be treated as hazardous materials crime scenes, with involvement from the Fire Department, Hazardous Materials units, Bomb Technicians, and Health Department as required.
1. Persons in at-risk areas should be evacuated and evaluated by EMS and health professionals as appropriate.
  2. Have the Fire Department test to the extent possible for presence of chemical or radioactive substances.
  3. If an explosive device is not ruled out, call the State Police Bomb Squad.
  4. Decontamination at the site should only be considered for individuals who came in direct physical contact or inhalation with a suspicious biohazard item or substance. Clothes should be removed and double-bagged and an on-site shower provided. Otherwise, clothing can be removed at home and either separately laundered or double-bagged for evidence purposes.
  5. Immediate transport to a medical facility is usually not necessary if no symptoms are present, but exposed persons should be advised to seek medical advice promptly. All potential victims should be interviewed and their names, addresses, and phone numbers recorded and given to Public Health officials. Consider the mental health of potentially exposed persons and respect their desires to "be safe rather than sorry."
  6. If a radioactive source appears to be present, notify Health Department officials at once and do not allow anyone to handle the object.
  7. The supervisor in charge of the investigation should make sure that the results of any laboratory testing are relayed to exposed victims once available to either initiate

additional medical procedures if the results are positive, or to allay anxieties and fears if they are negative.

8. If explosive devices are ruled out and the evaluation for potential chemical, biological or radioactive source material is negative, then police response should continue as a criminal investigation.

Per order of

Chief Adam Marsh

Master File  
Town Manager  
All Sworn Personnel