

**CHAPTER II OPERATIONS****SUBJECT Bio Hazard Dispatch****TOPIC Chemical, Biological, Radiation, Nuclear, Explosive (CBRNE) RESPONSE**

This standard operating procedure will help determine the creditability of a potential threat. The procedure is based on sound principles developed by the International Association of Fire Chiefs (IAFC), to address potential bio-terrorism events primarily involving suspicious substances, letters, packages, or containers.

Biological agents typically have delayed onset of symptoms that the victims experience. Most biological agents have an incubation period which ranges from one to seven days. Final confirmatory test results will generally be available from the Laboratory Response Network Lab within 72 hours.

**A. OBJECTIVES**

To Provide a model procedure for first-arriving fire service personnel to address potential bio-terrorism events primarily involving suspicious letters, packages or containers.

Protect the health and safety of the public.

Help deal with hoaxes and suspicious materials.

Developing of clear procedures for assessing and managing biological threats is imperative. World events have placed the emergency services at the forefront of homeland security. The fire service must be aware that terrorists, both foreign and domestic, continually test homeland security procedures.

**B. POLICIES**

When dispatched for a Biohazard response (suspicious substance/package) the following criteria will be used to decide the method of disposition and ensure protection of responders. **DO NOT touch, move or open any suspicious package until a risk assessment of the package is performed in coordination with Hazardous Material personnel.**

**Dispatcher**

1. Collect this information from the caller and relay to responding companies:
  - a. What is the threat?
  - b. Is it a letter, package, or device?
  - c. What type of facility type?
  - d. Does the facility have a previous history?
  - e. What are the characteristics of the substance?
  - f. What is the reason for suspicion?
  - g. What is the exact location of the substance inside the building or outside the building?

- h. Are there any odors or fumes?
  - i. What are the signs, symptoms of occupants who came in contact with the substance?
- 2. Instruct the caller with pre-arrival instructions to:
  - a. Cover the package with clear plastic.
  - b. Close door and leave the area immediately.
  - c. Wash their hands and then any other affected area(s).
  - d. Instruct caller to isolate all people suspected to have been directly exposed or contaminated into a separate area from the other occupants.
  - e. Meet emergency responders outside the facility.

### Fire Company

1. Personnel safety is the number one priority in handling any suspected bio-terror event.
2. Evaluate dispatch information and take the safest approach to the scene.
3. Establish a staging area.
4. Meet the caller outside the facility.
5. Prevent personnel from entering the contaminated facility.
6. Gather information from outside the potentially contaminated facility.
7. Establish a perimeter and isolate the area (law enforcement members will secure the perimeter).
8. Ask occupants to remain on the scene.

### District Chief

1. Conduct a scene size-up, including checking for improvised explosive device (IED) and consider secondary devices. **If an explosive threat exists, it will take precedence over any biological threat until rendered safe by Engine 14B. (Photographs of package and relevant information should be documented)**
2. Refer to C.F.D. suspicious package matrix
3. Complete Biohazard Risk assessment criteria form.
4. Complete Biohazard form. (Photograph of package and relevant information documented)
5. Consider additional resources.
  - a. Duty Chief
  - b. Fire WMD Unit
  - c. Fire ECU
  - d. Hazardous Material Unit
  - e. Hazardous Devices Unit (EOD)
  - f. Health Department
  - g. Police
  - h. Ohio Department of Health
  - i. FBI
  - j. Postal Inspector
  - k. Remedial contractor
6. Meet with facility management to:
  - a. Evaluate HVAC status
  - b. Develop list of affected occupants (facility must maintain list for 90 days)
7. Complete an incident report with the initial responding law enforcement agency, which will be forwarded to the local FBI WMD coordinator.

8. Assist local Health Department with patient contact information forms

**Assistant Chief**

1. Evaluate information provided by District Chief
  - a. Biohazard Risk Assessment Criteria Form
  - b. Bio-Hazard Response Form
  - c. Responder Procedure
2. Evaluate using Bio Hazard Risk Assessment Criteria and Responder Procedure: Assessment (both attached).
3. Contact the following the resources:
  - a. Fire WMD Unit
  - b. Fire ECU
  - c. Police
  - d. Health
  - e. Ohio Health Department
  - f. FBI
  - g. Postal Inspector (as appropriate)
4. Confirm arrangements for transport of package to appropriate facility

**Hazardous Materials Unit**

1. Monitor for the following hazards:
  - a. Corrosives
  - b. Flammable /Explosive
  - c. Oxygen
  - d. Toxicity
  - e. Radioactive
2. Ensure that materials are safely packaged. Try to retain enough suspicious material for:
  - a. Laboratory analysis, if necessary.
  - b. Use as criminal evidence, regardless of whether the threat is ultimately determined to be infectious, toxic or a criminal hoax.
3. Transfer custody of evidence to a law enforcement officer as soon as possible. Maintain chain of custody by law enforcement and health department guidelines. Photographs of package should be taken and relevant information documented.
4. Limit field safety screening to ruling out explosive devices, radiological material, corrosive materials and volatile organic compounds. Currently, there are no definitive field tests for identifying biological agents. Additional field-testing can mislead response efforts by providing incorrect or incomplete results, and destroy limited materials critical for definitive laboratory testing required to facilitate any appropriate public health and law enforcement response.

**Hazardous Devices Unit**

1. X-ray and render safe any sealed letter, container, or package.
2. Include copy of x-ray with substance when transported to lab or for evidence by law enforcement personnel. Photographs of package should be taken and relevant information documented.

### C. SAFETY PRIORITIES

1. Do not open any letter, package or device.
2. Do not take any letter, package, or device back to quarters.
3. Do not allow any Emergency Responder to enter a contaminated atmosphere without full personal protective equipment (PPE).
4. Beware of “Smoke Like” powder.
5. Conduct meter analysis on **all** suspicious letters or packages sent to L.R.N. Lab.
6. Wear protective gloves and respirator protective equipment.
7. Always Wear NIOSH-approved respiratory protection (APR) when the risk assessment indicates a respiratory threat.
8. X-ray analysis must be conducted on all sealed letters, or packages, and copies of x-ray must accompany to L.R.N. Lab or evidence.

### D. DEFINITIONS

1. **Biological threat**: Any biological material capable of causing death, disease, or other biological malfunction in a human, an animal, a plant, or another living organism; deterioration of food, water, equipment, supplies or material of any kind, or harmful alteration of the environment. Also, an expression of intention to use any such material for such purposes.
2. **Emergency service**: The industry comprised of fire, law enforcement and emergency medical service providers who respond to an emergency; includes health department, and emergency management.
3. **First responder**: An emergency worker who responds to an incident within a set amount of time. The term is usually specific to fire, law enforcement and EMS’ immediately arriving assets. Those arriving on scene at later intervals may be called a responder, an emergency responder, a secondary responder, a subject matter expert or a special law enforcement assignment.
4. **Hazmat responder**: A trained and certified individual who is a member of a hazardous material response team and qualified to respond to incidents involving toxic industrial chemical, chemical warfare agents and other weapons of mass destruction. A hazmat response specialist will have additional training to respond to specific weapons of mass destruction.
5. **Explosive Ordnance Disposal** (EOD): A trained and certified individual who is qualified to x-ray and determine how to render safe explosives and weapons of mass destruction
6. **Package**: A letter, box, jar, suitcase or any other container that may hold a suspect material.
7. **Weapons of Mass Destruction** (WMD): WMDs may be any nuclear, biological, incendiary, chemical, explosive or radiological weapon that may be used for death or destruction. For the purpose of this document, we will be referring to as chemical biological radiation nuclear explosive agents.

**BIOHAZARD RISK ASSESSMENT CRITERIA Form****Hi Risk Occupancies or events**

1. \_\_\_\_\_ ..... Abortion Clinic
2. \_\_\_\_\_ ..... Church
3. \_\_\_\_\_ ..... Court House
4. \_\_\_\_\_ ..... Government Building  
(Federal, State, Local)
5. \_\_\_\_\_ ..... Media Facility
6. \_\_\_\_\_ ..... Post Office
7. \_\_\_\_\_ ..... School
8. \_\_\_\_\_ ..... Occupancy that has received any  
type of threat
9. \_\_\_\_\_ ..... Local or national day of significance
10. \_\_\_\_\_ ..... Places of assembly; (I.E. sporting events, concerts,  
Street festival, ECT)

**Overt act with the intent to induce panic**

1. \_\_\_\_\_ ..... Note
2. \_\_\_\_\_ ..... Phone call
3. \_\_\_\_\_ ..... Verbal
4. \_\_\_\_\_ ..... Envelope or container with unknown substance that appears  
to have been positioned to induce panic
5. \_\_\_\_\_ ..... Suspect deliberately disperses an unknown substance
6. \_\_\_\_\_ ..... Return addressee (or alleged originator of item) denies  
knowledge of letter, package, container, etc.

**Mailed Letter, Package, or Container**

1. \_\_\_\_\_ ..... No return address
2. \_\_\_\_\_ ..... Return address not consistent with postmark
3. \_\_\_\_\_ ..... Excessive postage
4. \_\_\_\_\_ ..... Wires or metal protruding from letter, package, container, etc.
5. \_\_\_\_\_ ..... Unexplainable powders, liquids, stains, odors, etc.
6. \_\_\_\_\_ ..... Letter, package, container with odd shape, weight, etc.
7. \_\_\_\_\_ ..... Unable to verify letter, package, container, etc return  
addressee.

**Possible Victim Exposure or Contamination**

1. \_\_\_\_\_ ..... People on scene are ill
2. \_\_\_\_\_ ..... People on scene have legitimate fears or concerns
3. \_\_\_\_\_ ..... News reports suggest an upward spike of suspicious incidents

**Substance Found**

1. \_\_\_\_\_ ..... Powdery substance
2. \_\_\_\_\_ ..... Liquid/oily substance
3. \_\_\_\_\_ ..... Unidentifiable substance
4. \_\_\_\_\_ ..... No substance remaining due to inhalation or absorption
5. \_\_\_\_\_ ..... Oily

**BIO-HAZARD RESPONSE DATA FORM**

DATE\_\_\_\_\_ TIME\_\_\_\_\_ INCIDENT #\_\_\_\_\_ ADDRESS\_\_\_\_\_

COMPLAINANT\_\_\_\_\_ ADDRESS\_\_\_\_\_ PHONE\_\_\_\_\_

**OCCUPANCY**    ☐ RESIDENTIAL ☐ OTHER (DESCRIBE) \_\_\_\_\_

NUMBER OF OCCUPANTS AT TIME OF INCIDENT \_\_\_\_\_ IN IMMEDIATE AREA \_\_\_\_\_

**DESCRIPTION OF OBJECT**                      ☐ OPENED    ☐ UNOPENED☐ LETTER   ☐ PACKAGE ☐ OTHER CONTAINER (DESCRIBE) \_\_\_\_\_ ☐ UNCONTAINED

LIST SUSPICIOUS ELEMENTS \_\_\_\_\_

IF SUBSTANCE WAS OBSERVED DESCRIBE \_\_\_\_\_

IF APPLICABLE, LIST RETURN ADDRESS \_\_\_\_\_

**POSSIBLE EXPOSURE?** ☐ NO   ☐ YES IF SO ☐ INHALATION ☐ CUTANEOUS ☐ INGESTION  
☐ Health department forms

HOW MANY? \_\_\_\_\_ DESCRIBE CIRCUMSTANCES \_\_\_\_\_

**DISPOSITION**                      ☐ SENT FOR TESTING                      ☐ LEFT ON SCENE☐ FALSE-NO ACTION WARRANTED                      ☐ FALSE WITH MALICIOUS INTENT☐ POSSIBLE HAZARD                      ☐ CONFIRMED HAZARD☐ AC NOTIFIED    ☐ WMD NOTIFIED    ☐ ECU NOTIFIED    ☐ POLICE NOTIFIED☐ HEALTH DEPT NOTIFIED   ☐ ODH NOTIFIED                      ☐ FBI NOTIFIED   ☐ USPIS NOTIFIED

ADDITIONAL REMARKS \_\_\_\_\_

DISTRICT CHIEF \_\_\_\_\_

## RESPONDER PROCEDURE: ASSESSMENT

1. Assess the hazard by:
  - a. Gathering information from the reporting party, bystanders, witnesses and any other first responders.
  - b. Determining who has physically had contact with the package.
  - c. Conducting an initial evaluation of the package; consider using binoculars while standing a safe distance away from the suspicious package.
2. Determine the answers to the following questions
  - a. Was the package accompanied by a verbal or written threat?  
(See Appendix an on threat considerations)
  - b. Is the package open, leaking, giving off an odor or have any suspicious markings?
  - c. If the package is open, was any substance released from the package?
  - d. Is anyone who touched the package feeling ill?
  - e. Is the package making noise?
  - f. Are there any wires protruding?
3. When possible, the final hazard determination should be a coordinated effort with a hazardous material response team and E. O.D.

### IF THE ANSWER TO ALL ASSESSMENT QUESTIONS IS “NO”

1. If they are not already on the scene, law enforcement should be contacted and apprised of the incident, and a collective determination on the removal or disposal of the package should be agreed upon.
2. The package should be placed in a sealable plastic bag and doublebagged.
3. Anyone who touched the package should thoroughly wash hands or affected area with soap and water. A package that is not hazardous may still be unsanitary.
4. The package will be transported to the storage trailer at the Cincinnati Health Department facility at 3845 Dooley Bypass by the District Chief. Do not take any packages to the fire station for storage!
5. If a reasonable and defensible explanation can be given as to the source of the substance, that there is no articulated threat, and no one is ill, then no further action are necessary.

### IF THE ANSWER TO ANY ASSESSMENT QUESTIONS IS “YES”

1. If not already on the scene, notify local law enforcement. Establish a unified command with the lead emergency service agencies. Ensure all agencies (e.g., federal law enforcement, certified bomb squad, health department, etc.) are included in the unified command structure.
2. Request special assistance (e.g., E.O.D., decontamination units, state and federal authorities, etc.) as soon as a threat requiring their involvement is identified.
3. Control the scene.
  - a. **Establish hot, warm, and cold zones.** The size of the hazard control zones should be based on the assessed threat. Depending on the scenario, the initial hot zone may range from the desktop in an office to an entire building depending on the situation. Use barrier tape to cordon off open areas. **Shut down the building ventilation system if there has been a substance release.**
  - b. **Turn off any mail processing equipment that may have handled the suspicious package.**
  - c. **Isolate those who have been exposed or potentially exposed and consider shelter-in-place. Do not evacuate the building unless an immediate threat is identified.** Individuals, including emergency service personnel, who contacted the package, must be assessed for the need for decontamination. Only under extreme medical emergency conditions should a

contaminated victim be transported prior to decontamination. Contaminated acutely ill or injured victims must be placed in a “**protective envelope**” (e.g., Tyvek® suit) to minimize secondary contamination of the general population and/or environment.

- d. **Consider location and well-being of those unexposed or “The worried well.”**Non-victims may need to be gathered together for law enforcement interviews, or to receive information from public health or other officials to inform and allay fears.
4. Request the assistance of the Chemical Air Monitoring Team (CAM-team) to assist with hazard assessment, sample collection, and other mitigation activities.
5. Appropriate local or state law enforcement agency will notify FBI WMD coordinator.
6. As needed, conduct a threat assessment conference call, via the FBI WMD coordinator, with the FBI Counter-Terrorism Division’s Weapons of Mass Destruction Operations Unit (WMDOU), the FBI Laboratory Division, Hazardous Materials Response Unit (HMRU) and appropriate federal agencies.
7. Contact Cincinnati Health Department (who should in turn notify state authorities and the Center for Disease Control) if casualties are involved or a threat of public health exposure or environmental contamination exists.
8. In coordination with law enforcement, notify the U.S. Postal Inspection Service, whenever it appears that the threat was delivered through the U.S. Postal Service. Assist with ensuring that origin and tracking information is obtained from the package (ideally, photographs of the front and back).
9. Treat the scene as a crime scene. Preserve evidence in coordination with law enforcement. If identified as a federal crime scene, assist the FBI HMRU in identifying and collecting biological evidence.
10. Coordinate transport of public health samples to the closest Laboratory Response Network (LRN) facility with the FBI WMD coordinator.
11. Be prepared to perform meter analysis of the biological sample to rule out corrosives, flammable / explosive, oxygen, toxicity, radioactive, if transported to a LRN Lab a sealed package must be x-rayed
12. Identify and list the names of anyone who may have been exposed to the suspicious substance so they may be contacted when the LRN test results are available or if there is other additional information.
13. In coordination with the FBI, identify a single point-of-contact for follow-up.
14. Contact your PIO.



## Decontamination Guidelines for Personnel Exposed to a Suspicious Package Containing Substance or Accompanied by a Threat

1. **Unopened, no leak or exposure**
  - a. Thoroughly wash hands, and then other affected area, with soap and water.
  - b. Cincinnati Health Department may be notified for further assistance.
2. **Unopened, oily or granular leak, no exposure:**
  - a. Thoroughly wash hands, and then other affected area, with soap and water.
  - b. Have victims shower at home with soap and water.
  - c. Launder clothes separately in hot water with soap.
  - d. Cincinnati Health Department may be contacted for further assistance.
3. **Opened, no exposure**
  - a. Thoroughly wash hands or affected area with soap and water.
  - b. Cincinnati Health Department must be notified.
4. **Opened, oily or granular substance present, with exposure to:**
  - a. **Hands only (minimal contact)**
    - 1) Thoroughly wash hands, then other affected area, with soap and water.
    - 2) Change and place clothes in a sealed plastic bag.
    - 3) Shower at home with soap and water, shampoo hair.
    - 4) Launder clothes separately in hot water with soap.
    - 5) Cincinnati Health Department must be notified.
  - b. **Hands and clothes**
    - 1) Remove clothes and seal in plastic bag onsite.
    - 2) Gross decontamination by emergency service that is based on and justified by the hazard assessment.
    - 3) Consider contacting medical control and health department.
    - 4) Leave contaminated clothes onsite for later pick-up by health department or other appropriate agency.

## Appendices

- A. Identifying Suspicious Packages
- B. Sample Equipment List for First Responders
- C. Additional Information on Biological Weapons
- D. Media Coverage

## **Appendix A. Identifying Suspicious Packages**

**Suspicious packages should be risk assessed for articulated threats.**

### **Examples would include:**

- Actual threat message in or on the package
- Addressee in position of authority, e.g., government employee, political figure, private sector executive
- Addressee in controversial business, e.g., Planned Parenthood, chemical industry, forestry

### **What kind of packages should be considered suspicious?**

*Some characteristics of suspicious packages and envelopes include the following:*

- Inappropriate or unusual labeling
- Excessive postage
- Handwritten or poorly typed addresses
- Misspellings of common words
- Strange return address or no return address
- Incorrect titles or title without a name
- Not addressed to a specific person
- Marked with restrictions, e.g. “Personal,” “Confidential” or “Do not x-ray”
- Marked with any threatening language
- Postmarked from a city or state that does not match the return address
- Appearance
- Powdery substance felt through or appearing on the package
- Oily stains, discolorations or odor
- Lopsided or uneven envelope
- Excessive packaging material such as masking tape, string, etc.
- Other suspicious signs
- Excessive weight
- Ticking sound
- Protruding wires or aluminum foil

**If a package or envelope appears suspicious, NON-EMERGENCY PERSONNEL SHOULD NOT OPEN OR TOUCH IT. Emergency personnel should limit direct contact with the package. Ideally, only those with hazardous material training should proceed to handle the package when necessary.**

## Appendix B: Sample Equipment List

The primary route of entry for the biological agents is inhalation. **Protecting the respiratory system from exposure is the first priority in any incident.** The use of the appropriate level of respiratory protection cannot be overstated. A properly selected, properly fitted full face respirator offers emergency service personnel the highest level of protection.

### Minimum Equipment

- Protective gloves (surgical, vinyl, etc.)
- NIOSH approved respirator
- Self-contained breathing apparatus (SCBA)
- Structural fire fighting ensemble
- Multi-gas detector that detects lower explosive limits
- Photo ionization detector
- Small, glass or plastic, sterile vials with leak-proof caps
- Small sterile, individually-wrapped, disposable spatula or scoop
- Sealable plastic bags
- PH paper
- M8 paper
- Radiological survey meters
- Sterile distilled water

### Recommended Equipment

- NIOSH approved Air purifying respirator (APR)
- Powered air purifying respirator (PAPR)
- Dosimeters to measure individual exposure
- M9 tape
- M256A1 chemical agent detection kit

## Appendix C: Additional Information on Biological Weapons

### Bio: Just One of Many Threats

Many different threats can be sent through the mail. The initial triage, or sorting and allocation of treatment to individuals according to a system of priorities for any threat situation, must consider *all* hazards. A critical element to be performed by the first responder is assessing for the presence of:

- Chemical
- Biological
- Radiation
- Nuclear
- Explosives

### Biological agents:

#### • Bacteria

- o Anthrax
- o Tularemia
- o Plague
- o Brucellosis
- o Cholera
- o Q Fever
- o Glanders
- o Salmonella

#### • Viruses

- o Smallpox
- o Viral hemorrhagic fevers (Ebola, Marburg, Lassa, etc.)
- o Venezuelan Equine Encephalitis (VEE)

#### • Toxins

- o Ricin
- o Botulinum (Botulism)
- o Staphylococcal Enterotoxin B (SEB) (Food Poisoning)
- o Aflatoxin

**Appendix D: Media Coverage**

Bio-terror incidents will generate media interest regardless of the credibility of the threat. Be prepared to face intense media coverage of the incident. It is imperative that the PIO's from first responding agencies coordinate their efforts from the outset of any potential bio-terror event. Media releases not carefully crafted jointly by public safety, public health and law enforcement can cause public panic, high demand on public health resources and a negative impact on the criminal investigation.

1. A public information officer (PIO) should be established to handle media inquiries.
2. Bio-terror incidents usually involve several agencies. There may be several PIOs present, each representing the interests of his/her own agency. It is essential that PIOs use a joint information system with information coordinated among agencies before release.

## Cincinnati Fire Department Suspicious Substance/Package

- Responder Safety
- Heightened Suspicion
- Secondary Devices
- Photograph All Packages

- Isolate
- Perimeter
- Information
- List Occupants

### Potential Agent

- Suspicious
- Substance Present
- Leaking or Stained
- Powder or Liquid
- High Risk Facility

#### Notify:

- Fire – WMD
- Fire – ECU
- Police
- Health
- OH Dept of Health
- FBI
- Postal Inspector

X-Ray and Send to  
ODH Lab for testing

### Malicious False/Hoax

#### Threat/Criminal Activity

#### Notify:

- Fire – WMD
- Fire – ECU
- Police
- Health
- OH Dept of Health
- FBI
- Postal Inspector

#### Police Investigation

X-Ray Analysis  
Meter Analysis  
CPD Evidence Storage

#### Health Effects Remotely Possible

X-Ray Analysis  
Meter Analysis  
CHD Storage Trailer

### No Credible Threat

#### Substance/Package is:

- Not Suspicious
- Not Threatening
- Substance Identified
- No Hazard Found

Return to Complainant  
Offer to Dispose