

# State of Illinois

Illinois Terrorism Task Force



## **Handling Unknown Substance/Package and Biological Testing**

July 2004

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(For Official Use Only)

***Statewide Protocol***

## Recognition

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The Illinois Terrorism Task Force (ITTF) would like to recognize the Chicago Terrorism Work Group consisting of the Chicago Fire Department, Chicago Police Department, Chicago Department of Environment, Chicago Department of Public Health, Chicago Office of Emergency Management, Illinois Department of Public Health, FBI, United States Environmental Protection Agency and the United States Postal Service for their hard work in developing initial protocols.

For further information or comments please feel free to contact the Illinois Terrorism Task Force at (217) 558-1334 or via email at:  
[mchamness@iema.state.il.us](mailto:mchamness@iema.state.il.us) .

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## Introduction

The Illinois Terrorism Task Force (ITTF) recognizes there is potential for unknown substance incidents to escalate. There have been many documents issued to provide guidance for this type of response. While many of these documents can be used or referenced, this document is **Illinois specific** addressing local, state and federal concerns and procedures.

## Purpose

This document provides guidelines for a safe and efficient response for public safety personnel responding to incidents involving unknown substance/package and biological testing. This document meets the needs of a variety of agencies based on Responsibility, Authority and Expertise<sup>1</sup>. The scope of this protocol is limited to those hazards associated with unknown substance/package and biological testing.

## Training Note

This protocol provides direction to first responders on the training levels required to perform the actions described in this document; and as adopted by the Illinois Department of Labor under OSHA 29 CFR 1910.120. The emergency response should be predicated on each person's training, personal protective equipment (PPE) and equipment capabilities.

This document is segregated into levels of training, which are:

- **Awareness Response** – the responder is trained with basic Hazmat Awareness training. It should be noted that, in this protocol, Operations trained personnel are considered no more capable in their response than Awareness trained. These levels are important in how they support Technicians.
- **Technician Response** – responders trained to operate in an offensive fashion.
- **Specialist Response** – persons trained at expert level in a specific discipline.

## Important

The Illinois Department of Public Health (IDPH) laboratories will only accept powder or swabs for testing. Laboratories will no longer take mail, food, key boards, etc. on which a substance is found. **No sample should be collected or taken to the laboratory without first telephonically screening the situation with your local FBI Office.** A hazard assessment shall be conducted on all samples prior to going to the lab to include, but is not limited to, **radiation, corrosivity, flammability and volatility.**

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<sup>1</sup> RAE Concept, Homeland Security Professional, March 2004  
ITTFv7.27.04

## Protocols Handling Unknown Substance(s)/Packages and Biological Testing

Any incident of this nature should be immediately investigated using the following:

### **Awareness Response Procedure**

- 1.0 Upon receiving a call from a citizen regarding an unknown substance/package, a law enforcement officer will be dispatched to investigate the complaint.

#### **DISTANCE INVESTIGATION:**

- 2.0 Utilize all investigative techniques **at a distance** to determine origin and destination of letter, package, bottle, etc. containing the unknown substance. Determine if there are any injuries as a direct result of the unknown substance. **If yes, go to Step 10 (steps 2.1 through 10 should be verified by Technician level personnel, if not already completed).**
- 2.1. If you suspect that this is an explosive device then, prior to entering the area, turn off all cell phones, two-way radios, portable radios, Blackberries, pagers and all other transmitting devices for at least a 500 foot radius. Do not transmit information within this perimeter, please refer to your local response protocols. **STOP, EVACUATE THE AREA FOR AT LEAST A 500 FOOT RADIUS.**
- 2.2. If there are no symptoms or injuries continue to interview all individuals who came in contact with the item. Provide a list of those individuals, including addresses and phone numbers to the lead law enforcement investigator.
- 2.3. Suspicious packages<sup>2</sup> should be risk assessed for articulated threats. Examples include:
- 2.3.1. Addressee in position of authority, e.g. government employee, political figure, private sector executive, etc.
- 2.3.2. Addressee in controversial business, e.g. Planned Parenthood, chemical industry, forestry, etc.

#### **PREPARING TO ENTER AREA:**

- 3.0 If you suspect the package may contain an unknown substance, then wear appropriate Personal Protective Equipment<sup>3</sup> (PPE):
- 3.0.1 Surgical gloves
- 3.0.2 N95 (or equivalent) surgical mask
- 3.0.3 Eye protection
- 3.1 Close all windows and shut off all fans. Evacuate the room and close all doors into the room. Isolate the area from further access. Have the HVAC to the affected room shut off (if possible).

<sup>2</sup> Based on the Centers for Disease Control and Prevention's FAQs regarding anthrax. [www.bt.cdc.gov](http://www.bt.cdc.gov)

<sup>3</sup> PPE is worn for self protection and protection of evidence.

- 3.2 At this point you may approach the area of concern. **Under no circumstances should you touch, tamper or move the unknown substance/package or device in any way.**

ACTUAL VISUALIZATION:

- 4.0 Should the package fit the profile of a possible Improvised Explosive Device (IED), please refer to your local response protocols. **STOP, EVACUATE THE AREA FOR AT LEAST A 500 FOOT RADIUS.**

- 4.1 Note specific writing on document, package, or bottle including postmark, return address, fictitious address, lack of return address, addressee and any other writing that may be indicative of some sort of "threat". For evidence purposes record all the information.

- 4.2 Characteristics of suspicious packages and envelopes include the following:

- Actual threat message in or on the package
- 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
- Restriction marks "Personal," "Confidential", "Do not X-Ray", etc.
- Marked with any threatening language
- Postmarked from a city or state not matching 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

Note: Cornstarches and talcum powders are commonly used in mailers to prevent pages and pictures from sticking together.

By themselves, these characteristics do not make the package suspicious. Your assessment should view the entire circumstances as a whole.

NOT SUSPICIOUS:

- 5.0 If the responding officer **does not deem the package suspicious** and the complainant does not wish to open and/or keep the package, an effort to contact the sender will be made to determine whether or not the mailing is legitimate. Once the mailing has been deemed legitimate, no further action is warranted.
- 5.1 If the complainant insists on having the contents tested, the complainant should seek out a private laboratory on their own and thereafter be responsible for the transportation and cost of the test. Responders should make an effort to contact the sender (if found on return address, etc.) of the package to determine whether or not the mailing is legitimate. If the mailing is identified as legitimate, no further action is warranted.

SUSPICIOUS NOT OPENED:

- 6.0 If the package **has been deemed suspicious and has not already been opened**, the police department will place the package into two clear plastic "Ziplock" bags. **It should be noted that all packages should be screened for radiation prior to transport to the IDPH laboratory.**

**CONTINUE WITH THE PROTOCOL THROUGH STEP 10  
(High quality/grade agents have the ability to leak out of sealed packages)**

SUSPICIOUS OPENED:

- 7.0 If the contents of the package are still suspicious, then a telephonic threat assessment shall be conducted with the FBI Weapons of Mass Destruction Coordinator, prior to further action.

The following **FBI contact numbers** shall be used. Please request the duty person to locate/contact the Weapons of Mass Destruction Coordinator:

North of Interstate 80: **Chicago FBI, (312) 431-1333**

South of Interstate 80: **Springfield FBI, (217) 522-9675**

- 8.0 The immediate area shall be secured until preliminary field screening or IDPH laboratory results are obtained. If the area cannot be secured, further decontamination recommendations may be made by fire, law enforcement and public health officials. Identify all personnel that may have physically contacted or been in the area of the item and instruct them to thoroughly wash areas that have been exposed with soap and water for a period of five minutes. Keep those individuals isolated and present for debriefing.
- 9.0 Once a different agency is involved it is appropriate to implement the Unified Command System. It is the responsibility of the lead local agency to communicate with the public health agency that provides local health coverage.

## **Technician Response Procedure**

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10.0 After the telephonic threat assessment, a certified Hazardous Materials (hazmat) Team (local fire department or State mutual aid team) will be directed to field screen and collect the unknown substance.

10.1 Technician should ensure all steps (2.1 to 10.0) have been accomplished.

10.2 Prior to collection of the package/material, the Hazmat Team must field screen the unknown substance utilizing instruments measuring:

- Radiation Level
- Lower Explosive Limit (LEL)
- pH
- Volatile Organic Compounds

The Illinois Department of Public Health (IDPH) Laboratory will not accept samples until field screened. Law enforcement agencies should not transport unknown substances/suspicious packages until field screened by a state certified hazmat team. If available, the certified hazardous materials team may use additional advanced tactical field tests, such as:

- Protein Test
- Hand-Held Immunochromatographic Assays (HHA Ticket)
- Polymerase Chain Reaction (PCR)
- Fourier Transform InfraRed (FT-IR)

**Only collect from a small area, do not contaminate or dampen the remaining powder in the area. This will help preserve original evidence should this become a crime scene.**

11.0 If possible, the suspicious package or letter should be over-packed separately from the unknown substance/package. If there is an abundance of powder, use sterile scoops or spoons to place the sample into the Falcon tube(s) without using water. Seal the tube with cap and parafilm, if available. Then the Falcon tubes need to be placed into a Ziploc bag. That Ziploc bag is placed into another Ziploc bag. Once over-packed and decontaminated (with a 10% bleach solution), law enforcement shall take possession to maintain a law enforcement chain of custody.

**Submission of the samples to the IDPH laboratory must be approved by and coordinated by the FBI WMD Coordinator.** Law enforcement will transport the samples, with a copy of the police report, to the IDPH laboratory. All suspected biological samples must be tested through the IDPH laboratory; private laboratory testing is not an option.

12.0 The first responders will not take possession of personal items to include clothing, computer key boards, mail, food products, etc., unless a visible written threat is present on the item. All items contaminated with a suspect powder and still deemed suspicious, but with negative test results may be mitigated with bleach to include personal protective equipment used by police and fire personnel and left at the scene for complainant(s) disposal. Please advise the owner of the property that the item(s) to be decontaminated may be destroyed and responders are not responsible for the replacement of that item before bleaching the property. Law enforcement will document the permission to destroy the property in the police report. Proper decontamination with bleach can be performed once permission is obtained.



- 13.0 If positive, utilize the Unified Command System to identify next courses of action. Law enforcement involved in the incident should ensure that the **State Terrorism Intelligence Center (STIC)** is notified.  
Voice: 877.ILL.STIC (877-455-7842)  
Fax: 217-558-7152  
Email: STIC@isp.state.il.us

## **Specialist Response Procedure**

- 14.0 The FBI facilitates sample coordination between the collector and the receiving facility. The IDPH Emergency Officer is contacted concerning the need for analysis. The appropriate laboratory is then chosen based upon current capability, capacity, and proximity. Arrangements are then made between the collector, FBI and laboratory staff for the transport and receipt of samples to the appropriate lab.

Once received, the chain of custody form(s) is completed and the sample logged in. A variety of tests, including real time polymerase chain reaction (RT-PCR), culturing, and time resolved fluorescence (TRF) may be performed according to the sample matrix, the test requested, and the urgency. Turn around time for testing results from time of receipt can be as little as a couple hours (RT-PCR, presumptive) to several days or weeks (culture, confirmatory).

Sample results are reported internally to IDPH and to the FBI case officer. It is the case officer's responsibility to disseminate sample results to those outside the IDPH. The FBI also may determine that it is appropriate to have IDPH report results to the local health departments/police departments directly.

## Illinois Laboratory Guidelines for Biological Sampling

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In an effort to provide consistency in terms of biological sampling of unknown substance for laboratory testing, and to insure simplicity, the following should be followed:

1. Prior to collecting a sample, control blanks should be set aside to insure the integrity of the material you have collected. An unused, unopened synthetic (Dacron) swab and a sterile unopened tube (e.g. Falcon tube) will serve as control blanks for the laboratory. If you plan on using water during your collection process, put a sample of the water into your control blank. Place these in a pre-labeled "control blanks" Ziploc plastic bag with date, location, case number and collector's name.
2. To collect a sample where powder cannot be collected with a scoop, break the seal on a synthetic swab and dampen the swab with distilled water or tap water if that's all that is available. A designated clean person should have a sterile Falcon tube available to place the swab in once a sample has been collected. Once the swab has been dampened, the designated dirty person should collect a sample by placing the swab into the suspect powder. **Only collect from a small area, do not contaminate or dampen the remaining powder in the area. This will help to preserve original evidence should this become a crime scene.** Once a sample has been collected, place the swab into a Falcon tube and seal the tube with cap and parafilm, if available. Collect a second sample using the same method. If there is an abundance of powder, use a scoop or spoon to collect the sample without the use of any water. Place the tubes in a clear plastic Ziploc bag and decontaminate prior to placing the bag and contents into a second Ziploc bag and label appropriately with date, location, case number and name of collector. If you collect your samples from different locations, do not bag together. It will help to label the bag and Falcon tubes prior to collection. **Decontaminate the bag after it has been sealed. Do not staple reports through the bag.**
3. Once the samples have been collected for the laboratory, other field testing can be completed by responding agencies, if the capability exists. Keep in mind a crime scene may exist and evidence may need to be collected for prosecution by the FBI's Hazardous Materials Response Team. Best evidence is original or unchanged evidence.

Please remember that the laboratories will only accept powder or swabs for testing. Laboratories will no longer take mail, food, key boards, etc. on which a substance is found. **No sample should be collected or taken to the laboratory without first telephonically screening the situation with your local FBI Office.** A hazard assessment shall be conducted on all samples prior to going to the lab to include, but is not limited to, **radiation, corrosivity, flammability and volatility.**

*Adopted by the Chicago Terrorism Work Group*

## Definitions

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A complete Glossary of Terms and Acronyms is available from the Illinois Terrorism Task Force at: <http://www100.state.il.us/security/ittf/Glossary.pdf>

### Awareness

Non intervention trained responder.

### Biological Threat

Any biological material capable of causing: death, disease, other biological malfunction in a human, an animal, a plant, or material of any kind; or harmful alteration of the environment. Also, an expression of intention to use any such material for such purposes.

### Emergency Services

The industry comprised of fire, law enforcement and emergency medical service providers who respond to an emergency; includes emergency management.

### 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.

### 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.

### A Package

A letter, box, jar, suitcase or any other container that may hold a suspect material.

### Specialist

Person trained at expert level in specific discipline.

### Technician

Responder trained to operate in a offensive fashion.

### 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 only biological agents.