Case Study I – Suspicious Letter in DeKalb County

Objectives / topics for Case Study I

1. Assessment of threat credibility
2. Specimen handling
3. Information handling, sharing, and communicating
4. Understanding law of bioterrorism
5. Understanding chain of custody
6. Addressing interagency issues

Problem and questions

Facts I: On October 15, 2001, one week after discovery of the first human case of systemic anthrax (i.e., anthrax bacteria in the blood) in the United States, a woman residing in DeKalb County, Georgia, received a letter with an overseas postmark. The woman had immigrated to the United States from another country, where her husband had survived attempts on his life because of his political beliefs. She opened the letter outdoors at about 7:00 p.m. and saw that the letter contained powder. She dropped the letter to the ground and immediately phoned 911.

Question 1: What government organization(s) most appropriately should respond to the woman's call to 911 and who determines if the threat is credible?

Answers / discussion points: A pre-existing local protocol may / should be in place. When a report of suspected bio-terror material comes in to 911, the general ordering of services which are initially dispatched and respond are: first, law enforcement; second, fire services; and third, emergency medical services. Law enforcement usually arrives first and obtains information from the complainants. If, based on this information and observations, additional assessment is needed, then fire, HAZMAT, and/or EMS might be summoned.

Ordinarily, local law enforcement would be dispatched in response to a report of a threat or an attack. The initial assessment of the threat would be performed by the first responding patrol officers or deputies and, in some instances, by a supervisor possibly called to the scene by the first responders. Fire / HAZMAT / EMS would not be dispatched unless it is believed that a hazardous material may be present. Generally, all written threat letters are treated as potentially credible and are packaged, per HAZMAT protocols, for testing by an LRN laboratory identified for use by the local FBI field office. However, in some jurisdictions existing protocols may dictate that fire / HAZMAT / EMS are dispatched at the same time as law enforcement because of their special training and equipment for addressing hazardous materials and WMD events.

This event represents a suspected act of terrorism, which is a federal crime and may be a crime in some states. The FBI is the lead federal agency for crisis

management for all suspected terrorism threats or incidents, which would include response to the scene and threat assessment. The FBI should be notified that an "anthrax letter" (i.e., a threat) has been received. Once notified, the FBI will assist state and local authorities in assessing the threat (through the use of subject matter experts within the FBI and U.S. Government agencies) as well as in collecting and transporting potential evidence for testing. All threats involving a disease-causing organism are federal crimes, regardless of whether the perpetrator actually possesses the agent(s).

In addition to threat assessment, public safety first responders should be concerned with managing the site of the incident. This process would involve isolating and protecting the suspect item / material from further disturbances, and containing the item / material to the location where it is first found. In addition, such responders might establish and enforce a perimeter around the incident area to prevent additional exposures and to provide a clear and secure area for other public safety responders to conduct their threat assessment and information collection. Law enforcement first responders would immediately establish communications with fire / HAZMAT / EMS services for the purpose of coordinating the deployment of additional resources, if deemed necessary. The on-scene commander should also make a "heads up" call to public health.

Question 2: What is meant by the term "case" – specifically, what is its meaning for medical and public health purposes, and what is its meaning for law enforcement purposes?

Answers / discussion points: In medicine and public health, the term "case" refers to one person who meets a set of criteria for a specific disease or injury condition. For example, a case of inhalational (respiratory) anthrax might be defined as a person with recent onset of compatible manifestations (e.g., fever, muscle aches, and severe respiratory impairment) that is laboratory-confirmed by the isolation of the anthrax bacterium from the blood or from other affected tissue. In the setting of an outbreak investigation, a "case definition" which incorporates such specific criteria is used to identify persons likely to have been affected in the outbreak and to set them apart from persons who were uninvolved in the outbreak. In contrast, the use of "case" in the context of law enforcement represents a formal, active criminal investigation.

Facts II: Local fire department personnel and police officers responded to the call. Law enforcement and fire department personnel determined that the letter represented a credible threat.

Question 3: What are criteria and who is responsible for determining the credibility of a threat?

Answers / discussion points: Established protocols will be implemented depending on answers to questions focused on by the assessment process. These include whether: (1) an unattributable substance is present; (2) a threat has been implied or communicated verbally or in writing; and (3) anyone is symptomatic. Other considerations may include, for example, the appearance of the item (e.g., whether unopened or opened, whether material is visible, and what markings might be present); information received from the complainant, witnesses, or other persons regarding the source and/or perpetrators; and other recent incidents that may be similar to the present incident.

The referenced threat assessment process determines the credibility of the threat. If a letter is tested by an LRN lab and determined to include a biological agent, a significant public health response is initiated to identify and treat those potentially exposed. If a letter is tested and determined to be negative, law enforcement may still investigate. Even if the threat is not credible, "hoaxes" are prosecutable offenses.

As in many other public health and safety decisions, officials must consider both the seriousness of the consequences if a true threat is ignored, and the workload imposed upon the investigators and the laboratory if most low-probability threats are fully investigated.

Question 4: How is information regarding a threat assessment handled between law enforcement agencies and, at this stage, who needs to be informed?

Answers / discussion points: Initially, information regarding the threat would be shared directly with all appropriate local public safety agencies as part of the threat assessment and response process. All relevant information should be communicated to the FBI by local and state law enforcement first responders.

If merited, the FBI will initiate an investigation with the assistance of Sstate and local law enforcement partners. Often this is conducted through an established Joint Terrorism Task Force (JTTF). The FBI established JTTFs with representatives from federal, state, and local law enforcement agencies. JTTFs help to facilitate dissemination of terrorism-related information among agencies. In the event of a terrorism-related threat or incident, the case would be worked under the umbrella of the JTTF with other appropriate federal, state, and local agencies.

At this stage, responding agencies (law enforcement and Fire/HAZMAT) know about the situation and make the necessary calls and arrangements for public health to process the specimen. Absent a positive laboratory result, no other notifications will be made.

Question 5: How should specimens be handled and processed?

Answers / discussion points: If the threat is potentially credible, then, in accordance with the provided anthrax response protocols, the item(s) would be handled as hazardous / WMD material and as evidence. Personnel who enter facilities to collect samples should be both trained and equipped to take the necessary precautions and wear appropriate personal protective equipment (PPE) to respond to hazardous materials incidents. In most cases, this will involve the local HAZMAT team and may involve specialized evidence collection teams such as the FBI's Hazardous Materials Response Unit (HMRU) or field office Hazardous Materials Response Team (HMRT).

The collected samples should be processed through an approved LRN facility. Nationally, the LRNs allow for the rapid assessment of any suspected bioterrorism attack through appropriate testing of any clinical or environmental samples obtained from the scene.

If threatening correspondence or material is tested and found to be negative in an LRN lab, the item(s) would still be handled as evidence of a crime with all appropriate measures to preserve evidence on the item (e.g., fingerprints, handwriting / other markings, DNA, and trace evidence such as hair and fiber). Threats to use bioterror agents, regardless of whether credible, are state and federal crimes.

Question 6: At this stage, what are priorities for law enforcement and other first-responder personnel?

Answers / discussion points: In general, first response priorities are to:

- Preserve human life and minimize health risks to responders and the public
- Locate, assess, render safe, control, contain, and collect / recover items, WMD, and other contaminated material
- Rescue, decontaminate, transport and treat victims, and prevent secondary casualties
- Collect relevant information and intelligence
- Effectively release / disseminate information to public safety and public health, and to the public at large, as appropriate
- Identify, apprehend, and prosecute perpetrator(s)
- Restore essential services
- Restore site

Facts III: The DeKalb County Police Department (i.e., local law enforcement authority) now has possession of the specimen (i.e., the letter). After discussions with the FBI's Atlanta field station, the DeKalb Police deemed the threat credibility to be sufficient such that the specimen should be tested. The county police department then called the DeKalb County Board of Health (i.e., local public health authority), and a public health nurse was sent to interview and obtain information from the woman. The public health department determined that the woman had an exposure. Because of the delay in interviewing the woman and uncertainty about how quickly the laboratory would be able to process the specimen, the health department recommended she begin post-exposure antibiotic prophylaxis pending testing for the presence of *B. anthracis* in the suspect vehicle.

Question 7: How do public health authorities determine if there has been an exposure sufficient to merit a presumption of anthrax exposure (until proven otherwise) and who has been exposed?

Answers / discussion points: Local and federal public health personnel may use a variety of techniques to determine who may have been exposed following a suspected *B. anthracis* attack. The assessment will be different depending on whether the exposure was outdoors or indoors, how close the person's face was to the powdery substance, whether the powder became airborne, etc. For an indoor exposure, information will be gathered about building engineering and airflow. Assessment may include environmental sampling (air or surface).

The confirmation of the presence or absence of *B. anthracis* is the indicator for the use of post-exposure prophylaxis (PEP) and possible decontamination. If the threat is considered credible as determined by law enforcement and prior to the laboratory confirmation of the presence of *B. anthracis*, then rudimentary decontamination of those exposed can proceed with soap and water. In addition, clothing can be secured for later washing or destruction, and the names and contact information of all those individuals potentially exposed should be recorded for potential further action if subsequent laboratory analysis reveals the release of aerosolized *B. anthracis*. If (and only if) the presence of *B. anthracis* is confirmed, then anyone in the contiguous air space who may have been exposed to the powder (including law enforcement / first responders) is considered to be potentially exposed. Determining this potential breadth of exposure requires a coordinated effort between building management (engineering) and the public health bioterrorism point of contact. If there is confirmation of the presence or release of *B. anthracis* in a potentially aerosolized form, all those in the contiguous air space can initiate PEP, including vaccination and antibiotics.

Usually it is not necessary to initiate PEP prior to confirmation of a *B. anthracis* release. At times, however, there may be extenuating circumstances – such as delays in conducting the investigation or the unavailability of rapid laboratory testing – that may modify the approach followed.

Until confirmation, the area needs to be secured. If *B. anthracis* is confirmed in a powder or other matrix suggesting an aerosol release, environmental testing may

continue to attempt to narrow the number of suspected exposed personnel for PEP through a more refined evaluation of the extent of spread of *B. anthracis* spores. In addition, if it is determined that there has been an exposure, further public health measures may be needed to prevent additional exposures.

Question 8: Are law enforcement / other 911 responders also in the category of exposed persons and, if so, who decides?

Answers / discussion points: Potentially: public health officials should ultimately determine both the exposure risk and appropriate preventive / treatment measures.

Facts IV: Based on the determination that the threat was credible, the FBI made the decision that the specimen be tested and then transported the specimen to a Laboratory Response Network (LRN) technician for testing. The LRN laboratory received the specimen.

Question 9: What is a "chain of custody" of evidence and, as law enforcement authorities give specimens to a laboratory technician, how is a chain of custody established and maintained (see sample form)?

Answers / discussion points: A chain of custody is a record of the care and keeping of anything as it is transferred from one custodian to another. More specifically, for investigative and prosecutorial purposes, a chain of custody is a documented record of who had custody / control of a particular item from the time it is first collected, to the time it is introduced as evidence in a trial or other court proceeding.

Every custodian in the "chain" should record on the chain of custody form their signature and date / time they took custody or control of the item. Each custodian also should document on the form the reason he or she took custody of the item. In addition, he or she may mark the actual item or the packaging material containing the item for later identification purposes, when appropriate.

Persons who are documented as custodians of the item should be able to testify in court that the item was secure, unaltered, and uncontaminated during the time it was in their custody, and should be able to explain what procedures they used to store, examine, test, and otherwise process the item. In a trial, failure to adequately demonstrate a proper chain of custody for an evidence item could result in exclusion of that item from consideration as evidence by the court / jury and in discrediting of all results of the testing of the item.

A chain of custody is established by protocol. HAZMAT is responsible for packaging. Law enforcement is responsible for an incident report, maintaining a chain of custody, and transporting the specimen to an LRN facility. Once at the facility, the original custody form remains with the evidence throughout the process.

The chain of custody usually consists of an evidence-receipt form that documents the circumstances of the seizure, the collection of evidence / property, and the transfer of the item from one custodian to another. This form should be initiated by the lead law enforcement agency at the scene, and the original form should remain with the item as it is transported from the scene to the appropriate testing laboratory (LRN) or crime laboratory. The original form may or may not remain with the evidence / property item throughout the testing and storage process, or the laboratory may have its own internal chain of custody process.

Whenever a law enforcement agency initiates a criminal investigation, then for each collected item of property and piece of evidence there should be a form which documents accurately and in detail the item's description and information relating to its place and time of seizure and collection. In addition, the form should document the transfer of custody of the item, as well as include signatures of all custodians, dates / times custody was transferred between custodians, and reasons for changes of custody.

Facts V: Approximately 24 hours later, the specimens tested negative for anthrax.

Question 10: How are laboratory test results communicated – to whom and by whom?

Answers / discussion points: Laboratory results usually will be communicated to the law enforcement officer who submitted the specimen, as well as to others who may be designated by the officer at the time of submission. Public health should be notified even if the results are negative in order to convey that information to the letter's recipient. If laboratory testing is positive for biological or chemical agents, public health officials are notified immediately of the results. Their notification functions as the link to national health resources and a coordinated medical / public health response at local levels. Public health officials should ensure that all potentially exposed persons are notified and receive necessary medical treatment. Law enforcement and public health will coordinate messages to the public through a Joint Information Center (JIC). An FBI investigation will be initiated that draws upon the assistance of state and local law enforcement to determine the source of the material and the perpetrator(s) responsible.