This paper describes a bioterrorism incident at a Connecticut elementary school. Flowers sent to a teacher were permeated with anthrax spores that infected the teacher, 12 of her students, 3 office staff members, and an administrator. The teacher subsequently died. The Connecticut Department of Public Health confirmed that the students and staff had been exposed to anthrax. After describing the incident, the paper details the various procedures and plans created conjointly by district and school administrators, teachers, parents, community members, and officials from the local health department, police department, fire department, and medical community. The district looked to the Federal Emergency Management Agency for guidance. The plans included steps to prevent bioterrorism attacks; an update of the school’s and district’s crisis-management plan; a training program for all personnel, including part-time staff, substitute teachers, volunteers, and district office staff; the installation of a crisis team coordinator at each school in the district; and the creation of guidelines for helping children, and the community, cope with the aftereffects of a crisis. (WFA)
The Delivery: A Case Study in Bioterrorism Preparedness.

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March 2003
The Delivery:

A Case Study in Bioterrorism Preparedness

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The Delivery

On Monday morning a large, beautiful arrangement of fresh cut flowers showed up on the desk of the secretary at Sunshine Elementary School. The flowers had a card addressed to Ms. King. The secretary, after showing many of the teachers and office staff the delivery, had a peer take the flowers to Ms. King's room. Upon receiving the flowers, Ms. King opened the card in front of the class and read the message: *Thanks for all your hard work with my child.* She placed the flowers on her desk and continued on with class. By mid-week, three office staff members, an administrator, Ms. King and twelve of Ms. King's students were out ill. No one at the school noticed any pattern to the recent increased absences as the school continued to carry on with the routines of the week.

At the same time, a local emergency room doctor, Dr. Spores, began to question the commonalities of symptoms in both the children and the adults he treated. As he started looking over the cases, he discovered a pattern that was causing him some concern. He realized that the three children and the two adults who had been recently treated exhibited fever, bodily discomfort, chest and abdominal pain, vomiting and chills. Doctor Spores researched the *Journal of the America Medical Association* (1999), online, and his tentative diagnosis concurred with the medical journals and consultations with surrounding doctors. After discovering this, Doctor Spores called the Department of Public Health (DPH) to report these atypical symptoms. The DPH notified the school officials of Sunshine Elementary School and the District office. However, the School District officials were not concerned, as the flu season tends to have this affect on any given school.
As Ms. King's condition worsened, she developed severe breathing difficulty and eventually went into shock. After examining the new symptoms that Ms. King developed, Doctor Spores confirmed his fear that the patients had been exposed to anthrax. At the report of Ms. King's death an increase of children and adults from Sunshine Elementary School had been seen by their doctors and by the local emergency rooms. The DPH sent blood samples to the Centers for Disease Control for analysis. After the test results came back, it was confirmed that the students and staff had been exposed to anthrax. According to the Connecticut Department of Public Health (n.d.), Bioterrorism is the intentional use of infectious biological agents, or germs, to cause illness (p.1). Consequently, the school district was now faced with the reality of establishing a bioterrorism component to be added to their Crisis Management Plan. Additionally, the district determined they should deal with the psychological impact of the recent events on the students, faculty, staff and community.

How Vulnerable Are We As A District? A Preventative Plan

The District office invited selected parents, community members and local officials, including the health department, law enforcement, fire department, and medical experts from the area, to begin evaluating the district's current situation and crisis management plan. The district also invited experts in the field of bioterrorism from the CDC, local university and the Federal Government.

The first order of business was to review and discuss the current procedures for receiving outside packages/deliveries to the schools. This would include any delivery, even those sent by parents and friends for celebrations and special occasions, as well as the delivery of supplies to school. After the events of September 11th and the anthrax
mailings that occurred across the nation, the district implemented a plan to handle all incoming mail. Over time, the need to continue with that plan seemed to be dismissed and was dropped. Therefore all stakeholders involved in the meeting felt the need to develop and implement a comprehensive district wide policy that addressed these issues. The policy had to include a component that ensured that it would be carried out in all schools at all times.

As a result of the committee work, the District School Board decided:

1. The development of a District Level Crisis Management Supervisor would be responsible for the creation and implementation of all policies.
2. Each school should assign and train a Crisis Team Coordinator.
3. The District Level Crisis Management Supervisor along with the each school based coordinator, would be responsible for contacting and coordinating with appropriate agencies.
4. No personal or unauthorized deliveries will be accepted by school personnel.
5. In the event an unauthorized delivery is left at the school, the school lock down code is announced, and the Crisis Team Coordinator at the school will contact local officials to determine the necessary steps/procedures. The coordinator should call the following people:
   a. 911/Local Emergency Officials
   b. District Level Crisis Management Supervisor
6. In the event the package is delivered to a classroom, the teacher should immediately contact the office and the School Crisis Team Coordinator
7. All authorized deliveries will be accepted and logged in by the site bookkeeper. In the absence of the bookkeeper the Principal's secretary, who has been properly trained, will accept and log in deliveries.

8. All deliveries will be housed in the office and delivered to the appropriate staff member after students have been dismissed for the day.

9. Deliveries of all food items must be logged in and accepted by the Food Service Manager ONLY.

10. The Crisis Management Policies and Procedures Manual must be located in a central location that is accessible at all times by the School Crisis Team Coordinator.

Bioterrorism Plan

After consulting the Federal Emergency Management Agency Guide (FEMA), the District Level Crisis Management Supervisor along with the Crisis Team Coordinator from each school mandated the following:

- All school personnel will receive training to become aware of what constitutes a bioterrorism attack.
- The school level crisis plan should include:
  I. Immediate notification to the Crisis Management Supervisor at the District.
  II. Containment directions, which are listed upon the identification of the bioterrorism agent.

The FEMA Guide identified the following basic security measures that became part of the district plan:
A school code shall be determined and announced at the onset of a suspected attack alerting all staff members of the situation and to follow pre-determined procedures.

All staff need to secure the building by closing and locking all doors and windows. Staff will need to ensure that all students are inside a room before securing the building. Staff should also close all filing cabinet and desk drawers lessening the area and/or chance of contamination.

After the area has been secured, furniture should be used to create a temporary barrier.

Each room will be stocked with water, a first-aid kit, masks, duct tape, plastic and containment substances.

The suspected agent will be surrounded with the containment substance to prevent leaking and spreading of the material.

All rooms will be equipped with technology that will allow communication with all appropriate staff and emergency personnel (computers, cell phones, two-way radios, Personal Data Assistants (PDA) with all student information, etc.).

Appropriate training and review sessions will be developed and implemented.

Only trained emergency personnel will be allowed to perform the advanced procedures required to secure the area and treat those exposed.

The teachers, administration and staff will do everything possible to maintain a calm environment so that panic is avoided.

[See FEMA website at www.fema.gov/library/biz2.shtm.]
Training Plan

A training component must be developed, implemented and reviewed on a regularly scheduled basis. Training will be provided for all personnel including full and part time staff, substitute teachers, volunteers, and district office personnel.

Additionally, a parent/community awareness training will be offered. The training will become a required component of the orientation of all new hires. The training could be reviewed on a regular basis at the school level by the School Crisis Team Coordinator and the District Crisis Management Supervisor. It is required that each school rehearse the plan on a regular basis along with the other crisis plans (tornado, bomb, fire etc.).

The training should include:

- Identification of the roles and responsibilities of all staff.
- Information about threats, hazardous material and protective actions.
- Procedures for the notification and warning procedures of all district personnel, emergency officials, public health officials, parents/family members, and the media.
- The identification and location of all special needs students/staff and the plan for the administration of necessary medication.
- The evacuation of all students, staff and others to a predetermined location in the event an evacuation is ordered by the authorities.
- Formal training of all technology designated as part of the crisis plan.
Dealing With The Psychological Affects of an Attack

According to Shaprio's case study (2003), Crisis Management: Case Studies in Bioterrorism Preparedness and Response, Dr. Malecki, the Director of the Palm Beach county Health Department, is quoted: "We had overlooked people demonstrating post traumatic stress syndrome, re-emphasizing the fact that mental health needs must be part of any bioterrorism response (p. 17).

Despite the development of the Bioterrorism Plan, the effects from the anthrax tragedy continued to ripple through the community. Community members were experiencing a wide range of psychological and emotional reactions to the tragedy. The Crisis Team investigated posttraumatic stress syndrome by reading information from the Office for Victims of Crime Handbook for Coping After Terrorism. According to the OVC Handbook (2001), the reactions to a traumatic disaster include a wide range of powerful feelings possibly including shock and numbness, intense emotion, fear, guilt, anger and resentment, depression and loneliness, isolation, physical symptoms of distress, panic, inability to resume normal activity and delayed reaction. Based on this information, a plan was developed utilizing information from the National Center for Post-traumatic Stress Disorder website. The article by Hanblem (n.d.) titled Terrorists Attacks and Children provided guidelines for helping children cope with the effects of bioterrorism.

The District determined that each school should:

- create a safe environment by maintaining a routine that is consistent and familiar
- provide children with reassurance and extra emotional support
be honest with children about what happened

tell children what the government is doing

be aware that children will often take on the anxiety of the adults around them

try to put the attack in perspective

A partnership of outside agencies was developed to coordinate services that would assist in dealing with the trauma. These organizations able to assist locally were found through the American Red Cross, the International Society for Traumatic Stress Studies, the Florida Department of Public Health, the Child Trauma Academy, the Federal Emergency Management Agency (202-566-1600), and the American Psychological Association (1-800-964-2000).

Post-Reflection

In closing, the need for a preventative plan for bioterrorism should be developed and implemented to prevent scenarios like the one portrayed here. Due to differences in school age, building design and school location, each Bioterrorism Crisis Management Plan must have some of the same basic components but must also address the individuality of that school site. The district should be responsible for the development of the plan and the monitoring of the implementation, training, and all reviews. The Federal and State Government must provide assistance in the form of expert advice and money that will enable any district to prepare all of its employees for the increasingly possibility of a bioterrorist attack.
References


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**Author(s):** Judith Cosh, Kim Davis, Angela Fullwood, Maryann Lippek, & Jill Middleton

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