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LESSON LEARNED

Incident Site Safety and Security: Maintaining Access Control and Using Personal Protection Equipment during an Anthrax Incident

SUMMARY

Incident commanders should coordinate with law enforcement agencies to ensure that appropriate personal protective equipment (PPE) is used and continuous incident site security is maintained during an anthrax or other hazardous material (HazMat) response.

DESCRIPTION

On December 24, 2009, Massachusetts General Hospital (MGH) medical personnel diagnosed a 24-year-old female patient with gastrointestinal anthrax. Several weeks prior to the onset of symptoms, the patient had participated in a "drumming circle" in Durham, New Hampshire. Seventy-two people had attended the two-hour drumming event at the University of New Hampshire (UNH) United Campus Ministry (UCM) community center. During the event, participants had played 59 drums and inadvertently caused anthrax spores on some animal-hide drums to aerosolize. The patient then ingested the aerosolized anthrax spores.

Anthrax is an infectious disease caused by *Bacillus anthracis* bacteria. The 2009 New Hampshire incident represented the first gastrointestinal anthrax case recorded in the United States.

Between December 2009 and April 2010, 7 Federal, 19 state, and 23 local agencies participated in the ensuing epidemiological investigation, prophylaxis activities, and remediation and recovery operations. The NH Department of Health and Human Services (NHDHHS) incident management team (IMT) assumed command and control of the incident. In addition, the NH Department of Safety, Division of Homeland Security and Emergency Management; the National Guard 12th Civil Support Team; and the NH Department of Environmental Services, among others, supported response operations.

The anthrax detected on the drums that participants played on December 4, 2009, was a naturally occurring strain that frequently appears in soil. Animals can ingest contaminated soil and pass the anthrax bacteria to people who handle their hides.

NHDHHS personnel identified, contacted, and interviewed approximately 210 people who were at or near UNH UCM at the time of the event. This included 168 UCM visitors, 2 overnight guests, 4 workers, 28 volunteers, and 8 residents. Following this investigation, NHDHHS staff members offered anthrax prophylaxis to 84 potentially exposed people. In addition, NHDHHS Division of Public Health Services, NH Department of Environmental Services, and NH National Guard 12th Civil Support Team personnel conducted environmental sampling at UCM and at the patient's residence. Finally, these personnel tested approximately 30 drums to determine the possible source and level of anthrax

contamination. Two drums and three UCM electrical outlets tested positive and had to be disposed of.

During the extended response operations, the IMT did not effectively coordinate with law enforcement agencies to ensure that these agencies had procedures for enforcing appropriate PPE use and for maintaining continuous incident site security. Consequently, law enforcement agencies could not implement site safety and security procedures consistently and continuously during the response. For example, the Durham Police Department supported sampling activity of the NH National Guard 12th Civil Support Team at the onset of emergency response operations. In addition, UNH Police Department personnel performed daily drive-bys around the incident site. However, these agencies did not maintain a secure perimeter around the UNH UCM building and continuous access control between December 2009 and April 2010. Multiple individuals accessed the UNH UCM building unimpeded and without donning PPE during the extended response operations. The after action report recommends that the IMT coordinate with security agencies to ensure no one entering the incident site does so without appropriate PPE.

Incident commanders should coordinate with law enforcement agencies to ensure that appropriate PPE is used and continuous incident site security is maintained during an anthrax or other HazMat response.

CITATIONS

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