

Interim Guidelines

Ambulatory Care Management of Possible Anthrax Exposure

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Health Services Group, Oregon Dept. of Human Services
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These guidelines are intended to assist clinicians in evaluating and managing patients who present with possible exposure to anthrax. They are based on guidance from the Centers for Disease Control and Prevention and the FBI as of October 17, 2001.

IN A NUTSHELL... The overwhelming majority of anthrax “threats” have proven to be hoaxes rather than credible threats of harm.

- Assessment:** Determine whether risk factors for *credible* threat are present. If so, refer to police to make determination as to credibility.
- Testing:** There is no role for nasal swab testing in clinical decision-making. There is no screening test available for detection of anthrax infection in asymptomatic persons, and a negative nasal swab does not rule out anthrax exposure.
- Notification:** Notify the local health department and law enforcement of all credible threats of exposure.
- Prophylaxis:** Decisions regarding antibiotic prophylaxis for anthrax should be made based upon the risk of exposure, not the results of nasal swab testing. Anthrax vaccine is neither commercially available nor recommended.
- Algorithm:** See the management algorithm on the final page.

BACKGROUND

Since the events of September 11, there has been great public concern about exposure to anthrax and other biologic agents. Each day law-enforcement, public-safety, and public-health agencies are asked to respond to numerous inquires from individuals concerned about anthrax exposure. Most of these cases do **not** involve either exposure to anthrax or credible threats of harm. Instead, they usually turn out to be misinterpretations of normal everyday events, or hoaxes. It is important to remember that the risk of exposure of individuals who present themselves to health care providers and facilities is believed to be remote at this time.

ASSESSMENT AND MANAGEMENT STEPS

1) Assess Exposure

Anthrax infection can be acquired by 1) direct contact of organisms onto abraded skin, 2) ingestion of organisms, and 3) inhalation of aerosolized organisms. Organisms are extremely unlikely to be re-aerosolized/suspended once deposited onto an environmental surface. Anthrax is **not** spread person-to-person.

History-taking should include direct questions regarding the patient’s concerns about anthrax exposure. This should be done with two goals in mind:

- 1) Assessing whether the individual has probably been exposed to anthrax, and should therefore be referred to law-enforcement and public-health officials for further investigation, and
- 2) Offering an opportunity to review with the patient his/her level of risk.

The final determination as to whether an exposure threat is credible is best done through law-enforcement or public-health investigation. **If clinical evaluation reveals the possibility of a credible threat of anthrax exposure, seek immediate consultation with local police or another law-enforcement agency and with the local health department (see algorithm below).**

Some questions that may be useful in taking the history include:

- Has the patient been exposed to a situation where anthrax transmission has been confirmed or is under investigation by law-enforcement or public-health authorities?
- Has the patient had any contact with a substance believed to be contaminated with anthrax?
- When, where, and under what circumstances did the contact occur (e.g., exposure to a package/item of mail, exposure to dust or powder, other exposure)?
- What was the nature of that contact (direct contact, ingestion, inhalation of mist or dust)?
- Does the exposure history suggest that any powder was suspended in the air?
- Did other people come in contact with the substance?
- If the exposure was to a package or item of mail, is the item “suspicious” according to FBI criteria? (See FBI Criteria below)
- If exposed to something other than an envelope/package, why does the person believe that the object/substance was contaminated with anthrax?
- What is the current status of the substance to which the patient was exposed (Does the patient have it in his/her possession? Where is it located? Is it contained in a safe manner e.g., plastic zip-lock bag)?

2) Carry Out Appropriate Laboratory Testing for the Patient

It is understood that factors other than the scientific utility of testing may enter into clinical decisions made in the context of physician-patient interaction. That said, the following are our recommendations regarding laboratory testing for *Bacillus anthracis*.

The investigation in Florida has shown that nasal swabs and serology are *insensitive* methods of detecting exposure to anthrax; the absence of a positive nasal swab or serology for anthrax cannot rule out a significant exposure. On the other hand, finding *B. anthracis* in the nares does not indicate that an inoculum sufficient to cause disease has been inhaled. Therefore, ***decisions regarding prophylaxis must be made based upon risk assessment rather than on testing results.***

Testing of asymptomatic persons for *B. anthracis* (nasal swabs or serologic testing) is indicated only to inform an epidemiologic investigation into a confirmed or highly probable exposure. Whether to test objects or substances to which a patient was exposed is a public-health and law-enforcement decision. Such testing will be performed by the health department laboratory only in the case of a ***credible threat***, as confirmed by law-enforcement personnel. Consult with your local police and health department regarding such testing.

Patients who are ill with suspected anthrax (i.e., those with typical skin lesions, respiratory distress or sepsis with a widened mediastinum on chest x-ray) should be aggressively tested for *B. anthracis*. Tests appropriate in such circumstances include cultures of blood and other body fluids.

3) Notify the Local Health Department of the Exposure

- All *credible threats* of anthrax exposure should be reported to the local health department immediately.
- The purposes of such reporting are 1) to assure that exposure situations receive timely epidemiologic and law-enforcement investigation; and 2) to ensure that objects/substances possibly contaminated with anthrax are appropriately handled and tested.
- Consultations on individual patient care and public-health management are also available from local health departments and from Oregon Health Services (formerly the Oregon Health Division).

4) Antibiotic Prophylaxis

- Antibiotic prophylaxis should be considered only for those patients who have been exposed to *B. anthracis*. Exposure in this situation is defined as having been epidemiologically linked to a confirmed case of anthrax or to an environmental sample that is confirmed to contain anthrax. **Such prophylaxis should be prescribed only after consultation with public-health officials.**
- The use of antibiotic prophylaxis for other patients is strongly discouraged at this time. Inappropriate antibiotic use is associated with the development of antibiotic resistance.

FBI CRITERIA FOR SUSPICIOUS PACKAGES

- Envelope/package marked with or containing explicit or implied threats, or other unusual language (e.g., “surprise”)
- No return address, or a mismatch between return address and postmark
- Marked as personal, private, confidential
- Evidence of origin in a foreign country
- Excessive postage
- Words that are misspelled, handwritten, poorly typed
- Addressed to a person by title only, or showing a mismatch between the name and title of the addressee
- Having protruding wires, or aluminum foil
- Lopsided or uneven envelope/package
- Rigid or bulky envelope/package
- Unusual odors
- Ticking or other noises
- Visually distracting markings
- Stains, unusual coloration, oily or crystalline deposits on the wrapper or envelope
- Excessive string, tape or other sealing materials

ALGORITHM: MANAGEMENT OF POSSIBLE ANTHRAX EXPOSURE

