

**PENNSYLVANIA DEPARTMENT OF HEALTH
HEALTH ALERT #15**

Date: October 19, 2001
Subject: Update: Anthrax Cases and Exposures
To: Health Alert Network
From: Robert S. Zimmerman, Jr., MPH
Secretary of Health

**HOSPITALS: PLEASE SHARE THIS WITH ALL MEDICAL, PEDIATRIC, NURSING,
LABORATORY, RADIOLOGY & PHARMACY STAFF IN YOUR HOSPITAL**

PROFESSIONAL ORGANIZATIONS: DISTRIBUTE TO YOUR MEMBERSHIP

Pennsylvania:

On October 19, 2001, the Pennsylvania Department of Health confirmed a case of cutaneous anthrax in a Bucks County, PA resident who works at a regional mail processing facility in Hamilton Township near Trenton, New Jersey. This facility processed the anthrax-contaminated letter addressed to Senate Majority Leader Daschle in Washington, D.C. on October 9. The patient presented to a local hospital with malaise, myalgias and a vesicular lesion on his neck which subsequently ulcerated. Preliminary examination of a biopsy specimen of the skin lesion and cultures from the skin lesion did not yield evidence of anthrax, but a blood culture was positive for *B. anthracis*. The patient is on antibiotic treatment and remains in the hospital in stable condition and is expected to make a full recovery. This reemphasizes the need to **perform blood cultures on all suspected cutaneous anthrax cases. A high index of suspicion for anthrax should be maintained among other workers at this facility.**

New Jersey:

The New Jersey Department of Health and Senior Services reports one confirmed and one suspect case of cutaneous anthrax in two other employees of the same mail processing center as the Pennsylvania case. The dates of onset of the two New Jersey cases were approximately two weeks ago, shortly after this facility processed the anthrax-contaminated letter delivered to Tom Brokaw at NBC News in New York City. The NJDHSS, PADOH, CDC, FBI, and U.S. Postal Service Inspection Service are conducting an investigation of this facility and the associated anthrax cases. The facility has been closed for decontamination. **The NJDHSS is offering chemoprophylaxis with seven days of ciprofloxacin or doxycycline to the ~1000 employees of this facility. They are not conducting any testing on these individuals at the present time.**

Washington, D.C.:

On October 15, 2001, Senate Majority Leader Tom Daschle's office in the Hart Senate Office Building received a letter containing a powdery substance which tested positive for anthrax. Approximately 30 Senate staffers have tested positive for anthrax exposure. The Centers for Disease Control and Prevention has recommended **60 days of prophylaxis with ciprofloxacin or doxycycline (or amoxicillin for pregnant women) for anyone who spent time on the fifth or sixth floors of the southeast corner of the Hart Senate Office Building on Monday, October 15, 2001, between 9 am and 7 pm.** The only senators with office space in that part of the building are Sens. Daschle (D-SD) and Sen. Russell Feingold (D-WI). **Nasopharyngeal swabs and blood testing are NOT recommended. People in other parts of the building or the Capitol complex, or who were not there during this time frame do NOT require any prophylaxis or testing.** Please inform the Pennsylvania Department of Health at 877-PA-HEALTH if you see any patient who was in this part of the building on October 15.

Revised CDC Surveillance Case Definitions for Anthrax:

Confirmed:

A clinically compatible case of anthrax with either:

- Isolation of *B. anthracis* by culture OR
- At least two positive supportive non-culture laboratory tests for anthrax:
 - Immunohistochemistry,
 - Polymerase chain reaction,
 - Single elevated antibody titer OR
 - Seroconversion on acute and convalescent samples

Suspect:

A clinically compatible case of anthrax with:

- One positive supportive non-culture laboratory test for anthrax:
 - Immunohistochemistry,
 - Polymerase chain reaction,
 - Single elevated antibody titer OR
 - Seroconversion on acute and convalescent samples AND
- Epidemiologically linked to a confirmed anthrax exposure.

Signs and Symptoms of Anthrax Infection:

Inhalational anthrax: A brief prodrome resembling a viral respiratory illness followed by development of hypoxia and dyspnea, with radiographic evidence of mediastinal widening. This, the most lethal, form of anthrax results from inspiration of 8,000-40,000 spores of *B. anthracis*. The incubation of inhalational anthrax among humans is unclear, but it is reported to range between 1 and 7 days possibly ranging up to 60 days. Host factors, dose of exposure and chemoprophylaxis may play a role. Initial symptoms include sore throat, mild fever, muscle aches and malaise. These may progress to respiratory failure and shock. Meningitis frequently develops. Case-fatality estimates for inhalational anthrax are based on incomplete information regarding exposed populations and infected populations in the few case series and studies that have been published. However, case-fatality is extremely high, even with all possible supportive care including appropriate antibiotics. Records of industrially acquired inhalational anthrax in the United Kingdom before antibiotics were available reveal that 97% of cases were fatal. With antibiotic treatment the fatality rate is estimated to be at least 75%. Estimates of the impact of the delay in post-exposure prophylaxis or treatment on survival are not known.

Gastrointestinal anthrax: Severe abdominal distress followed by fever and signs of septicemia. This form of anthrax usually follows the consumption of raw or undercooked contaminated meat and is considered to have an incubation period of 1-7 days. An oropharyngeal and an abdominal form of the disease have been described in this category. Involvement of the pharynx is usually characterized by lesions at the base of the tongue, sore throat, dysphagia, fever, and regional lymphadenopathy. Lower bowel inflammation usually causes nausea, loss of appetite, vomiting and fever, followed by abdominal pain, vomiting blood, and bloody diarrhea. The case-fatality rate is estimated to be 25-60%, the effect of early antibiotic treatment on that case-fatality rate is not defined.

Cutaneous anthrax: A skin lesion evolving from a papule, through a vesicular stage, to a depressed black eschar. This is the most common naturally occurring type of infection (>95%) and usually occurs after skin contact with contaminated meat, wool, hides, or leather from infected animals. Incubation period ranges from 1-12 days. Skin infection begins as a small papule, progresses to a vesicle in 1-2 days followed by a necrotic ulcer. The lesion is usually painless, but patients also may have fever, malaise, headache and regional lymphadenopathy. The case fatality rate for cutaneous anthrax is 20% without, and less than 1% with, antibiotic treatment.

Any suspected cases of anthrax should be reported IMMEDIATELY to the Pennsylvania Department of Health at 877-PA-HEALTH and your local health department, if any.

This information is current as of 2 pm, October 19, 2001, but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject as well as the latest information on our preparedness efforts.