

## ! Anthrax

Merlin reporting code = 02200  
Case report form (CRF): N/A  
**CONTACT BUREAU OF EPIDEMIOLOGY**

### Clinical description

An illness with acute onset characterized by several distinct clinical forms, including the following:

- Cutaneous: A painless skin lesion usually evolving during a period of 2–6 days from a papule, through a vesicular stage, to a depressed black eschar with surrounding edema. Fever, malaise, and lymphadenopathy may accompany the lesion.
- Inhalation: A brief prodrome resembling a viral respiratory illness, followed by development of hypoxia and dyspnea or acute respiratory distress with resulting cyanosis and shock, often with radiographic evidence of mediastinal widening or pleural effusion.
- Gastrointestinal: Severe abdominal pain and tenderness, nausea, vomiting, hematemesis, bloody diarrhea, anorexia, fever, abdominal swelling and septicemia.
- Oropharyngeal: A painless mucosal lesion in the oral cavity or oropharynx, cervical adenopathy and edema, pharyngitis, fever and possibly septicemia.
- Meningeal: Fever, convulsions, coma, or meningeal signs. Signs of another form will likely be evident as this syndrome is usually secondary to the above syndromes.

### Laboratory criteria for case classification

#### Confirmatory:

- Isolation of *Bacillus anthracis* from a clinical specimen by the Laboratory Response Network (LRN);  
OR
- Demonstration of *B. anthracis* antigens in tissues by immunohistochemical staining using both *B. anthracis* cell wall and capsule monoclonal antibodies;  
OR
- Evidence of a four-fold rise in antibodies to protective antigen between acute and convalescent sera or a fourfold change in antibodies to protective antigen in paired convalescent sera using Centers for Disease Control and Prevention (CDC) quantitative anti-PA IgG ELISA testing;  
OR
- Documented anthrax environmental exposure AND evidence of *B. anthracis* DNA (for example, by LRN-validated polymerase chain reaction) in clinical specimens collected from a normally sterile site (such as blood or CSF) or lesion of other affected tissue (skin, pulmonary, reticuloendothelial, or gastrointestinal).

#### Presumptive:

- Evidence of *B. anthracis* DNA (for example, by LRN-validated polymerase chain reaction) in clinical specimens collected from a normally sterile site (such as blood or CSF) or lesion of other affected tissue (skin, pulmonary, reticuloendothelial, or gastrointestinal);  
OR
- Positive result on testing of clinical serum specimens using the Quick ELISA Anthrax-PA kit;  
OR
- Detection of Lethal Factor (LF) in clinical serum specimens by LF mass spectrometry;  
OR
- Positive result on testing of culture from clinical specimens with the RedLine Alert test.

### Case classification

Confirmed: A clinically compatible illness in a person with confirmatory laboratory evidence.

Probable: A clinically compatible illness in a person that does not meet the confirmed case definition AND with one of the following:

- Epidemiological link to a documented anthrax environmental exposure

OR

- Presumptive laboratory evidence.

Suspect: An illness suggestive of one of the known anthrax clinical forms in a person with no confirmatory or presumptive laboratory evidence AND no epidemiologic evidence relating it to anthrax.

### **Comments**

 **Any isolates from cases or suspected cases must be sent to the Bureau of Public Health Laboratories. Detection of a suspected case is a PUBLIC HEALTH EMERGENCY and requires immediate reporting to the Bureau of Epidemiology at 850-245-4401. This condition has been identified as a potential bioterrorism agent by the CDC.**

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