

Anthrax

Agent: *Bacillus anthracis* (spore-forming bacteria)

Mode of Transmission: By direct contact with contaminated animal products; ingestion of contaminated, undercooked meat; and inhalation of spores during risky industrial practices (e.g., processing wool or hides) or through an intentional bioterrorism release.

Signs/Symptoms: There are three recognized forms of anthrax. The form that develops depends on the route of exposure. Cutaneous anthrax occurs when the bacteria enter a cut or abrasion on the skin and presents as a skin lesion that often develops a black scab. Intestinal anthrax occurs after the ingestion of contaminated meat and presents as abdominal distress (e.g., nausea, vomiting, diarrhea, fever). Inhalation anthrax occurs when the bacteria are inhaled; the symptoms are initially nonspecific, (e.g., fever, cough, chest pain), but progress to respiratory distress and death if untreated.

Prevention: Contact with infected animals and animal products should be minimal. A vaccine is available to immunize high-risk individuals, such as laboratorians who work with *B. anthracis* or military personnel.

Other Important Information: Person-to-person transmission is very rare. The incubation period, or time from exposure to onset of symptoms, ranges from 1 to 60 days. Anthrax is classified as a potential bioweapon because it can cause serious public health problems, be spread across a large area, and require extensive planning to protect the public's health.

No cases of anthrax have been reported in Virginia since 2001. In 2001, two Virginia residents were reported with inhalation anthrax from an intentional release of *Bacillus anthracis* spores through a letter received by the U.S. Postal Service. Both individuals were exposed at their workplace and both survived. Those were the first reported cases of anthrax in Virginia since 1970.