

ANTHRAX

Anthrax is an acute infectious disease caused by the spore-forming bacterium *Bacillus anthracis*. Anthrax most commonly occurs in warm-blooded animals, but can also infect humans.

TRANSMISSION:

It can be spread by handling animal products from infected animals or by inhaling anthrax spores from contaminated animal products. Eating undercooked meat from infected animals can also spread anthrax. Person to person transmission is very rare.

INCUBATION PERIOD

The incubation period is usually 1 to 7 days. Symptoms of the disease vary depending on how the disease was contracted.

SYMPTOMS

Anthrax infection can occur in three forms: Skin (cutaneous), Lungs (inhalation), and Intestinal (gastrointestinal).

Skin (Cutaneous) anthrax: This form of infections occurs when the bacterium enters a cut or an abrasion on the skin, in such situations as when handling contaminated wool, hides, leather, or hair products of infected animals. Skin infection begins as a raised itchy bump that resembles an insect bite, but develops into a vesicle within 1-2 days and then, a painless ulcer usually 1-3 cm in diameter, with a characteristic black necrotic (dead tissue) area in the center. Lymph glands in the adjacent area may swell. About 20% of untreated cases will result in death, but a few with effective antibiotic therapy.

Lungs (Inhalation) anthrax: Initial symptoms may resemble a common cold. After several days, the symptoms may progress to severe breathing problems, malaise, mild cough and/or chest pain and shock in 3-5 days. If untreated, it usually results in death 1-2 days after onset of acute symptoms.

Digestive (Intestinal) anthrax: The intestinal disease form of anthrax may follow the consumption of contaminated meat and is characterized by an acute inflammation of the intestinal tract. Initial signs of nausea, loss of appetite, vomiting, and fever are followed by abdominal pain, vomiting of blood, and severe diarrhea. Intestinal anthrax results in death in 25 to 60% of cases.

WHO IS AT RISK?

An occupational hazard of those engaged in processing of hides, hair (esp. from goats), bones, bone products and wool, and veterinarians, Anthrax is more often found in agricultural countries and those with less developed and effective public health programs. Areas designated as high risk include South and Central America, Southern and Eastern Europe, Asia, Africa, the Caribbean, and the Middle East.

TREATMENT

Penicillin is preferred, but erythromycin, tetracycline, or chloramphenicol can also be used. To be effective, treatment should be initiated early. If left untreated, the disease can be fatal.

PRECAUTIONS

Standard precautions include wearing gloves when handling items or surfaces potentially soiled with blood or body fluids, and non-intact skin. Wear masks if coughing, and gowns if there is a potential splash or splattering of fluids.