

Anthrax Fact Sheet

Anthrax is an infection caused by the spore-forming bacterium *Bacillus anthracis*

There are three types of anthrax infection: cutaneous (skin), inhalational (lungs), and gastrointestinal (stomach/intestines). Symptoms and consequences of anthrax infection vary greatly depending on the type of infection. Anthrax most commonly infects warm-blooded animals including sheep, cows, horses, and goats, but can also infect humans. Anthrax infection of animals and humans is extremely rare in the U.S.

Cutaneous anthrax occurs when the germ enters the skin

- The bacterium usually enters a cut or abrasion on the skin when handling contaminated wool, hides, leather, or hair products of infected animals.
- Symptoms begin as a raised itchy bump that resembles an insect bite, which progresses to a vesicle (blister), and then a painless ulcer (1 to 3 cm) with a black, dying area in the center.
- It may cause swelling of lymph glands close to the ulcer.
- Approximately 20% of untreated cases will die from the infection.

Inhalational anthrax occurs when a person breathes in anthrax spores

- Anthrax is not spread from person to person.
- Spores are very tough forms of the anthrax germ. Spores are capable of surviving for years in soil or water. The spores are often able to survive sunlight, heat, and disinfectants.
- If the spores are breathed into the lungs, the spores will grow and spread to other body parts.
- About 1 to 2 days after breathing the spores, a person may have flu-like symptoms (low fever, cough, headache, and weakness).
 - After the first 1 to 2 days, the person may feel better for a day or two.
 - The disease usually worsens very quickly and kills the infected person 3 to 5 days after inhalation of spores unless antibiotics are given promptly.
 - Anthrax spores could be used as weapons of war.

Gastrointestinal anthrax occurs when a person eats contaminated meat

- Infection results in inflammation of the stomach and intestines.
- Symptoms include nausea, loss of appetite, vomiting, and fever followed by stomach pain, vomiting blood, and severe diarrhea.
- 25% to 60% of untreated gastrointestinal anthrax infections result in death.

Anthrax infections can be prevented

- Many antibiotics can fight anthrax if given soon enough, usually 2 to 3 days after exposure to anthrax bacteria and before serious symptoms have occurred.
- For persons in high-risk jobs, such as the Armed Forces and those handling animal skins, vaccination may be beneficial.

Even a single case of human anthrax must be investigated immediately

The health department, law enforcement agencies (like the FBI and police), and other agencies will investigate any human anthrax case. Doctors and other medical personnel are required by law to call the health department to report any human anthrax infections immediately.

If you have reason to think that you or someone else has been exposed to anthrax spores, call 911. The sooner anthrax is investigated and treated, the more lives will be saved.