

What is anthrax?

Anthrax is a serious disease caused by *Bacillus anthracis*, a bacterium that forms spores. A bacterium is a very small organism made up of one cell. A spore is a cell that is dormant (asleep), but may come to life with the right conditions. There are three main types of anthrax: skin (cutaneous), respiratory (inhalation), and digestive (gastrointestinal).

How do people get anthrax?

Anthrax is not known to spread from one person to another. Anthrax can be spread naturally by exposure to contaminated soil or animals or intentionally when used as a weapon.

- **Anthrax from animals.** Humans can become infected with anthrax by handling products from infected animals or by breathing in anthrax spores from infected animal products (like wool, for example). People also can become infected with gastrointestinal anthrax by eating undercooked meat from infected animals.
- **Anthrax as a weapon.** Anthrax was used as a weapon in the United States in 2001. It was deliberately spread through the postal system by sending letters with powder containing anthrax. This caused 22 cases of anthrax infection.

What are the symptoms?

The symptoms (warning signs) of anthrax are different depending on the type of the disease:

- **Skin:** The first symptom is a small sore that develops into a blister. The blister then develops into a skin ulcer with a black area in the center. This is typically not painful in the beginning stages.
- **Digestive:** Symptoms include nausea, loss of appetite, bloody diarrhea, and fever, followed by bad stomach pain.
- **Lungs:** The first symptoms of inhalation anthrax are like cold or flu symptoms and can include a sore throat, mild fever and muscle aches. Later symptoms include cough, chest discomfort, shortness of breath, tiredness and muscle aches. (Caution: Do not assume that just because a person has cold or flu symptoms that they have inhalation anthrax.)

How soon do infected people get sick?

Symptoms usually appear within 7 days of exposure to the bacterium for all three types of anthrax.

How is anthrax treated?

Antibiotics are used to treat all three types of anthrax. Early identification and treatment are important.

What is the prevention after exposure?

Treatment is different for a person who is exposed to anthrax, but is not yet sick. Healthcare providers will use antibiotics (such as ciprofloxacin, doxycycline, or penicillin). The anthrax vaccine may be given along with these antibiotics to prevent anthrax infection.

Can anthrax be prevented?

There is a vaccine to prevent anthrax, but it is not yet available for the general public. Anyone who may be exposed to anthrax, including certain members of the U.S. armed forces, laboratory workers, and workers who may enter or re-enter contaminated areas, may get the vaccine. Also, in the event of an attack using anthrax as a weapon, people exposed may get the vaccine.