

Anthrax



What is anthrax?

Anthrax is a serious disease caused by *Bacillus anthracis*, a bacterium (germ) that forms spores. A spore is a cell that is dormant (asleep) but may come to life under the right conditions. Anthrax can infect the skin if the bacteria are touched, the digestive system if the bacteria are swallowed, and the lungs if the bacteria are inhaled.

What are the symptoms?

The symptoms of anthrax vary depending on how the bacteria enter the body. If anthrax bacteria are inhaled and infect the lungs, the first symptoms are like a cold or the flu, and can include a sore throat, mild fever and muscle aches. Later symptoms include cough, chest discomfort, shortness of breath, tiredness and muscle aches.

If anthrax bacteria are swallowed and infect the digestive system, the first symptoms are nausea, loss of appetite, bloody diarrhea, and fever, followed by bad stomach pain.

If anthrax bacteria are touched, 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. The sore, blister and ulcer do not hurt.

If a person infected with anthrax is an injection drug user, they can spread the anthrax spores to another person if they share needles. This can result in anthrax spores infecting the skin at the site of the injection, or in the bloodstream causing symptoms such as fever, chills, group of blisters and/or swelling around the injection site, or an abscess deep under the skin. Injection anthrax can also lead to meningitis and shock.

How soon do infected people get sick?

Symptoms can appear within seven days of coming in contact with the spores for all types of anthrax. However, if the anthrax bacteria are inhaled, symptoms can appear within a week or can take up to 60 days to appear.

Is anthrax contagious?

Anthrax is not known to spread from one person to another, except for injection anthrax when an infected person shares a needle contaminated with anthrax spores. People can become naturally infected with anthrax by handling products from infected animals (such as items made from animal skins) or by breathing in anthrax spores that are released from infected animal products like raw, untreated wool. People also can become infected by eating undercooked meat from infected animals.

How is anthrax treated?

Antibiotics treat all three types of anthrax. Early identification and treatment are important. Success depends on the type of anthrax and how soon treatment begins. It is important to note that for anthrax infections in the lungs, antibiotics will need to be taken for 60 days to ensure dormant spores do not create an infection.

Can anthrax be prevented?

There is a vaccine to prevent anthrax, but it is not currently available for the general public. However, in the event of an anthrax attack, healthcare providers will provide antibiotics and/or administer the vaccine to people who may have been exposed to anthrax bacteria, but are not sick.

What should I do if I think I have anthrax?

If you are showing symptoms of anthrax infection, call your healthcare provider right away.

Can anthrax be used as a biological weapon?

Anthrax can occur naturally through exposure to the bacteria. This usually happens when people come in contact with infected animals, or products or meat from infected animals. Anthrax has also been spread intentionally as a weapon. This happened in the United States in 2001 in New Jersey and elsewhere. Anthrax was deliberately spread through the postal system by sending letters with powder containing anthrax. This caused 22 cases of anthrax infection. Five cases occurred in New Jersey, with no deaths.

How dangerous is anthrax?

The Centers for Disease Control and Prevention (CDC) classifies bacteria and viruses (agents) with the potential to be used for bioterrorism into three categories: A, B and C. Anthrax is a Category A agent.

Category A agents:

- pose the greatest possible threat to the public's health
- may spread across a large area
- require advance planning to protect the public's health

In most cases, early treatment with antibiotics can cure anthrax skin infections. Even if untreated, 80 percent of people with anthrax skin infections do not die. Anthrax in the digestive system is more serious with 25 to 50 percent of cases resulting in death. The most severe form of anthrax infection is in the lungs. In 2001, about half of the cases of inhalation anthrax in the United States died. About one third of the people with injection anthrax die even if they are treated with antibiotics.

What is New Jersey doing to prepare for a possible anthrax attack?

New Jersey is working with the CDC to prepare for an anthrax attack. Activities include:

- Developing plans and procedures to respond to an anthrax attack
- Training and equipping emergency response teams, gathering samples and performing tests to help state and local governments control infection
- Educating healthcare providers, the media, and the general public about what to do in the event of an attack
- Working closely with local health departments, veterinarians and laboratorians to watch for suspected cases of anthrax
- Working with hospitals, laboratories, emergency response teams, and healthcare providers to make sure they have the supplies they need in case of an attack

Where can I get more information?

- Your healthcare provider
- Your local department of health
- The New Jersey Department of Health
 - Website – www.nj.gov/health
 - Communicable Disease Service at (609) 826-5964
- CDC
 - <https://www.cdc.gov/anthrax/>
 - 1-800-CDC-INFO (4636) for assistance in English and Spanish
 - TTY 1-888-232-6348
 - E-mail: cdcinfo@cdc.gov