

Anthrax

What is Anthrax?

Anthrax is a serious infectious disease caused by gram-positive, rod-shaped bacteria known as *Bacillus anthracis*. Anthrax can be found naturally in soil and commonly affects domestic and wild animals around the world. Although it is rare, people can get sick with anthrax if they come in contact with infected animals or contaminated animal products.

Contact with anthrax can cause severe illness in both humans and animals. Anthrax is not contagious, which means you can't catch it like the cold or flu.

How Do Humans Come in Contact?

People get infected with anthrax when spores get into the body. When anthrax spores get inside the body, they can be "activated." When they become active, the bacteria can multiply, spread out in the body, produce toxins (poisons), and cause severe illness.

This can happen when people breathe in spores, eat food or drink water that is contaminated with spores, or get spores in a cut or scrape in the skin. It is very uncommon for people in the United States to get infected with anthrax.

Certain activities can also increase a person's chances of getting infected.

Where is anthrax found?

Anthrax is most common in agricultural regions of Central and South America, sub-Saharan Africa, central and southwestern Asia, southern and eastern Europe, and the Caribbean.

Anthrax is rare in the United States, but sporadic outbreaks do occur in wild and domestic grazing animals such as cattle or deer. Anthrax is more common in developing countries and countries that do not have veterinary public health programs that routinely vaccinate animals against anthrax. In the United States, yearly vaccination of livestock is recommended in areas where animals have had anthrax in the past.

How Do People Become Infected?

People get infected with anthrax when spores get into the body. When this happens, the spores can be activated and become anthrax bacteria. Then the bacteria can multiply, spread out in the body, produce toxins (poisons), and cause severe illness. This can happen when people breathe in spores, eat food or drink water that is contaminated with spores, or get spores in a cut or scrape in the skin. Certain activities (described below) can increase a person's chances of getting infected.

Eating raw or undercooked meat from infected animals

People who eat raw or undercooked meat from infected animals may get sick with gastrointestinal anthrax. This usually occurs in countries where livestock are not routinely vaccinated against anthrax and food animals are not inspected prior to slaughter. In the United States, gastrointestinal anthrax has rarely been reported. This is because yearly vaccination of livestock is recommended in areas of the United States where animals have had anthrax in the past, and because of the examination of all food animals, which ensures that they are healthy at the time of slaughter.

Injecting heroin

If you have any questions, please contact Allen County Public Health at 419-228-4457. Health Department staff members are available to answer your questions Monday to Friday from 8:00a.m. to 4:30 p.m. You can also visit www.allencountypublichealth.org, the Centers for Disease Control and Prevention's website at www.cdc.gov, and the World Health Organization at www.who.int for additional information.

Anthrax Cont.

A newly discovered type of anthrax is <u>injection anthrax</u>. This type of anthrax has been seen in northern Europe in people injecting heroin. So far, no cases of injection anthrax have been reported in the United States.

Is Anthrax Contagious?

No. You cannot catch anthrax from another person the way you might catch a cold or the flu. In rare cases, person-to-person transmission has been reported with cutaneous anthrax, where discharges from skin lesions might be infectious.

What are Symptoms of Anthrax?

The symptoms of anthrax depend on the type of infection and can take anywhere from 1 day to more than 2 months to appear. All types of anthrax have the potential, if untreated, to spread throughout the body and cause severe illness and even death.

Cutaneous Anthrax symptoms:

- A group of small blisters or bumps that may itch
- A painless skin sore (ulcer) with a black center that appears after the small blister or bumps
 - Most often the sore will be on the face, neck, arms, or hands.
 - Swelling can occur around the sore

Gastrointestinal anthrax symptoms:

- Fever and chills
- Swelling of neck or neck glands
- Sore throat
- Painful swallowing
- Hoarseness
- Nausea and vomiting, especially bloody vomiting
- Diarrhea or bloody diarrhea
- Headache
- Flushing (red face) and red eyes
- Stomach pain
- Fainting
- Swelling of abdomen (stomach)

Inhalation Anthrax symptoms:

- Fever and chills
- Chest discomfort
- Shortness of breath
- Confusion or dizziness
- Cough
- Nausea, vomiting, or stomach pains
- Headache
- Sweats (often drenching)
- Extreme tiredness
- Body aches

Injection anthrax symptoms:

- Fever and chills
- A group of small blisters or bumps that may itch, appearing where the drug was injected
- A painless skin sore with a black center that appears after the blisters or bumps
- Swelling around the sore
- Abscesses deep under the skin or in the muscle where the drug was injected
- Keep in mind
 - Symptoms are similar to those of cutaneous anthrax, but injection anthrax can spread throughout the body faster and be harder to recognize and treat than cutaneous anthrax.
 - Skin and injection site infections associated with injection drug use are common and do not necessarily mean the person has anthrax.

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