

# Anthrax

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## What is anthrax?

Anthrax is an infectious disease caused by bacteria, *Bacillus anthracis*. There are 3 forms of anthrax: cutaneous (the most common form – about 95% of cases), intestinal (the least common form), and inhalation (the most deadly form). Anthrax most commonly occurs in hoofed mammals, but can also infect humans.

## Who can get anthrax?

Exposure to anthrax can occur through handling products from infected animals, or inhaling anthrax spores from contaminated bone meal used in home gardening. Exposure can also occur through a bioterrorist event.

## What are the symptoms of anthrax?

Symptoms of disease vary depending on how the disease was contracted, but usually occur within seven days of exposure.

Inhalation (lung): Initial symptoms of infection may resemble a cold or flu – sore throat, mild fever, and muscle aches. After several days, the symptoms may progress to severe breathing problems and shock. Inhalation anthrax is often fatal.

Intestinal: Initial signs may include nausea, loss of appetite, vomiting and fever, followed by severe abdominal pain, vomiting of blood, and severe, bloody diarrhea. Intestinal anthrax results in death in 25% to 60% of cases.

Cutaneous (skin): The first sign is a pimple that could contain fluid, progressing to a depressed black ulcer. The area is red, swollen, and often painless. Lymph glands in the adjacent area may swell. About 20% of untreated cases of cutaneous anthrax will result in death. Deaths are rare with appropriate treatment.

## How is anthrax spread?

Inhalation anthrax results from inhaling spores of the anthrax bacteria. The anthrax bacteria can be found in industrial processes such as tanning hides and processing wool or bone.

Intestinal anthrax comes from ingesting contaminated undercooked meat. There is no evidence that milk from infected animals transmits anthrax.

Cutaneous (skin) anthrax is caused by contact with tissues of animals dying of the disease; or by contact with hair, wool, hides, or products made from them. Contact with soil associated with infected animals or contaminated bone meal used in gardening is also a source of infection.

Direct person-to-person spread of anthrax is extremely unlikely, if it occurs at all. Therefore, there is no need to treat contacts of people ill with anthrax, such as household contacts, friends, or coworkers, unless they also were exposed to the same source of infection.

### **How common is anthrax?**

Anthrax is extremely rare in humans, and is mostly found in animals in agricultural regions of the world. Between 1988 and 2001 there were only 6 cases of animal to human transmission in the United States.

### **What is the treatment for anthrax?**

In people exposed to anthrax, illness can be prevented with antibiotic treatment. Early antibiotic treatment of anthrax is important. Waiting to be treated lessens your chances of survival.

### **Are there complications from anthrax?**

If untreated, anthrax in all forms can lead to septicemia and death.

### **How can anthrax be prevented?**

An anthrax vaccine can prevent infection and is used by the military. However it is not available for the general public at this time.

### **How do I get more information on anthrax?**

Calhoun County Public Health Department  
Phone: (269) 969-6383

Centers for Disease Control and Prevention  
Web Site: <http://emergency.cdc.gov/agent/anthrax/>  
Phone: 800-CDC-INFO (800-232-4636)

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This fact sheet is meant to provide general health information and is not intended to be medical advice or otherwise take the place of your doctor's orders or to diagnose your specific health problems. Check with your doctor if you have any questions or concerns about your health.

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