

ANTHRAX Q&A

What is anthrax?

Anthrax is an acute bacterial disease caused by the spore-forming bacterium *Bacillus anthracis*. Anthrax can infect all warm-blooded animals, including humans.

Who gets anthrax?

Anthrax in animals rarely occurs in the United States. When anthrax infects humans, it is primarily a result of occupational exposure in persons who work with infected animals and their by-products, such as wool and hair.

How is anthrax spread?

Humans may become infected by handling the contaminated hair, wool, hides, flesh, blood and feces of animals, by inhaling contaminated soil particles, or by eating undercooked meat from diseased animals. The spores of the bacterium that causes anthrax can survive in soil for many years.

What are the symptoms of anthrax?

The symptoms vary depending upon the type of exposure.

- With ***skin exposure***, a pustular lesion appears which eventually forms a black center. A swelling of the lymph glands in the adjacent area may occur. This form is called cutaneous anthrax. With appropriate antibiotics, deaths are rare. If left untreated, up to 20% of cases will result in death.
- With ***respiratory exposure***, symptoms may resemble the common cold at first and then progress to severe breathing problems and shock. This form, called inhalation anthrax, usually results in death one to two days after onset of respiratory distress.
- With ***exposure from ingestion***, the intestinal tract becomes inflamed. Early signs might include nausea, loss of appetite, vomiting and fever followed by abdominal pain, vomiting blood, and diarrhea. Intestinal anthrax results in death in 25%-60% of cases.

How soon do symptoms appear?

Usually within one to seven days after infection, although incubation periods up to 60 days are possible.

When and for how long is a person able to spread anthrax?

There are no reports of the disease spreading from human to human. It is unlikely that this can occur.

What is the treatment for anthrax?

Penicillin is the drug of choice for cutaneous anthrax, but ciprofloxacin, tetracycline, erythromycin, or chloramphenicol can also be used. Early antibiotic therapy is very important, since the disease can be fatal if left untreated. For inhalation anthrax, parenteral ciprofloxacin or doxycycline is recommended (can be changed to oral treatment once symptoms have markedly improved), and treatment may be needed for up to 60 days or more.

What can be done to prevent anthrax in humans?

Handle dead animals suspected of having anthrax carefully, and provide good ventilation and protective clothing when processing hides, fur, hair, or wool.

A vaccine is available through the Department of Defense for people in high-risk occupations, such as wool mill workers, veterinarians, laboratory workers, and livestock handlers. Because anthrax is considered a potential biological warfare agent, the Department of Defense is vaccinating all U.S. military personnel. The anthrax vaccine uses dead bacteria rather than live bacteria.

Where can I get additional information on anthrax?

Contact your local or state health department. You can call the Georgia Poison Center hotline in Atlanta at (404)-616-9000 or outside Atlanta at (800)-282-5846. The following websites may also be useful:

- Georgia Division of Public Health Bioterrorism Website – <http://health.state.ga.us/programs/emergprep/bioterrorism.shtml>
- CDC Anthrax FAQ – http://www.cdc.gov/ncidod/dbmd/diseaseinfo/anthrax_g.htm
- Department of Defense: Arm Yourself Against Anthrax – <http://www.anthrax.osd.mil/>
- Center for Civilian Biodefense Studies – <http://www.hopkins-biodefense.org/index.html>

