

ANTHRAX

What is anthrax?

Anthrax is a serious disease caused by a bacterium, *Bacillus anthracis*. A bacterium is a very small organism made up of one cell. This bacterium forms spores. A spore is a cell that is dormant (asleep) but may come to life in certain conditions.

Anthrax can cause three forms of disease: 1) cutaneous (skin); 2) gastrointestinal (digestive system); and 3) inhalational anthrax (lungs)

How can someone come into contact with anthrax?

Anthrax is not known to spread from person to person.

- **Cutaneous anthrax:** Humans can come into contact with anthrax by handling products from infected animals (e.g., touching an infected animal's hair).
- **Gastrointestinal anthrax:** Humans can come into contact with anthrax by eating undercooked meat from infected animals.
- **Inhalational anthrax:** Humans can come into contact with anthrax by breathing in anthrax spores from infected animal products (like wool, for example).

Anthrax as a weapon: Anthrax also can be used as a weapon. In 2001, anthrax was deliberately spread through the United States postal system. Letters containing powder with anthrax caused 22 cases of anthrax infection; 11 of these cases were cutaneous anthrax and 11 were inhalational anthrax.

Please note: Just because you come into contact with anthrax does not mean you will get sick from it.

What happens if someone gets sick from anthrax?

- **Cutaneous anthrax**
 - Usually begins with itching.
 - A small sore develops about seven days after a person has been infected with anthrax. This sore can look like an insect or spider bite.
 - The sore will turn into a blister within one to two days.
 - The blister then becomes a skin ulcer with a black area in the center. (The sore, blister and ulcer do not hurt.)
 - Patients also may have fever, malaise and headaches.
- **Gastrointestinal anthrax**
 - The first symptoms are nausea, loss of appetite, bloody diarrhea and fever.
 - Bad stomach pain follows.
- **Inhalational anthrax**
 - The first symptoms are like cold or flu symptoms. They can include a sore throat, mild fever and muscle aches. (**Caution:** Do not assume that just because a person has cold or flu symptoms that he or she has inhalational anthrax.)

(Anthrax continued)

- Later symptoms include cough, chest discomfort, shortness of breath, lack of energy and muscle aches.
- Babies will exhibit poor feeding/sucking habits.

How likely is someone to die from anthrax?

- **Cutaneous anthrax:** In most cases (almost 100 percent), early treatment with antibiotics can cure cutaneous anthrax. Even if untreated, 80 percent of people who become infected with cutaneous anthrax do not die.
- **Gastrointestinal anthrax:** Gastrointestinal anthrax is serious. Between 25 percent to more than 50 percent of cases lead to death.
- **Inhalational anthrax:** Inhalational anthrax is very severe. In 2001, about half of the people with inhalational anthrax died.

What is the treatment for anthrax?

Antibiotics are used to treat anthrax. Early identification and treatment are important. Treatment is different for a person who comes into contact with anthrax, but is not yet displaying symptoms (fever, sweating, low blood pressure, dizziness).

- **Prevention of illness after contact:** Health care providers can give out antibiotics that can be taken at home.
- **Treatment of illness:** If a person is showing signs of anthrax infection (fever, sweating, low blood pressure, dizziness, swelling or redness of the infected area), the person needs to go to the hospital. Treatment is usually a 60-day course of antibiotics.

People who are sick from anthrax do not need to be isolated.

Is there a vaccine for anthrax?

Yes, a vaccine has been developed for anthrax. It is not meant for the general public at this time. It is primarily given to military personnel. The vaccine is recommended only for those at high risk, such as workers in research labs who handle anthrax bacteria.

What should be done if someone comes into contact with anthrax?

If you think that you or someone you know may have come into contact with any type of anthrax, contact the local county health department right away. (Visit www.idph.state.il.us//local/alpha.htm for a listing of all county health departments in Illinois or check your local phone book.) This includes handling or being around a suspicious package or envelope that contains powder (see fact sheet on "Suspicious Packages").

If you or someone you know is showing symptoms of anthrax infection, call your health care provider or the Illinois Poison Center right away. The toll-free number for the poison center is 1-800-222-1222.

Where can one get more information about anthrax?

- U.S. Centers for Disease Control and Prevention www.bt.cdc.gov/agent/anthrax/index.asp
- Illinois Department of Public Health www.idph.state.il.us
- Illinois Poison Center www.IllinoisPoisonCenter.org