



Anthrax Fact Sheet

What Is Anthrax?

Anthrax is a serious infectious disease caused by a bacterium (*Bacillus anthracis*) that forms spores.

There are three types of Anthrax:

1. **Cutaneous (skin) infection** is the most common form of the disease. It occurs when the spores come in contact with an area of skin that is broken, such as a cut or a sore. Cutaneous anthrax is marked by an itchy, blister-like lesion that eventually forms a boil with a black center. The boils respond well if treated with antibiotics right away.
2. **Inhalation (lung) infection** is less common. Inhalation anthrax occurs when a large number of spores are inhaled into the lungs. The early stage symptoms of inhalation anthrax illness include fever, muscle aches, fatigue and cough. Do not assume that just because a person has cold or flu symptoms that they have inhalation anthrax. The illness may progress to more serious symptoms including shortness of breath, respiratory (lung) failure, meningitis (infection of the spinal fluid), or death.
3. **Digestive (gastrointestinal) infection** is rare. The first symptoms are nausea, loss of appetite, bloody diarrhea, and fever, followed by bad stomach pain.

It is important that patients with inhalation and gastrointestinal anthrax be treated with antibiotics and intensive care in a hospital.

How do you get Anthrax?

Humans can become infected with anthrax by handling products from infected animals or by breathing in anthrax spores from infected animal products. Anthrax is not known to spread from one person to another. People can become infected with gastrointestinal anthrax by eating undercooked meat from infected animals.

Is anthrax contagious from person to person?

Anthrax does not spread from person to person by casual contact or by coughing or sneezing. Inhalation (lung) anthrax does not spread person to person, even if you develop symptoms. With cutaneous (skin) anthrax, the liquid from an open sore has a low risk of infecting others.

How will I know if I was exposed to the germ?

It will depend on how the germ is released, where it was released, and where you were in relation to the infected site. The farther away you were from the infected site, the less likely it will be that you were exposed.

How soon will the symptoms of infection develop?

Symptoms may develop one to six days after exposure to the germ. Since the anthrax germ can live for a long time in the environment, symptoms may not start for up to 60 or more days after the germ has released into the air.



What are the symptoms of infection?

The symptoms of anthrax are different depending on the type of the infection.

- If the germ gets into your lungs, you will have a cold or flu symptoms and can include a sore throat, mild fever, muscle aches and severe shortness of breath.
- If the germ gets into your skin, your skin will have small sore that will become a blister. The blister then develops into a boil with a black area in the center.
- If the germ gets into your food and is eaten, you may develop a stomachache, vomiting and bloody diarrhea.

What should I do if I don't have symptoms?

If you do not have symptoms of the infection, you should continue with your daily activities. You should still watch for the following symptoms for at least 7-10 days:

- High fever
- Flu-like symptoms (cough, fatigue, muscle aches), nausea, vomiting or diarrhea
- A sore, especially on your face, arms or hands

What should I do if I think I have anthrax infection? Call your health-care provider right away.

What should I do if I think I have been *exposed* to Anthrax?

Contact local law enforcement immediately if you think that you may have been exposed to anthrax. This includes being exposed to a strange package or envelope that contains powder.

How is the infection treated?

Antibiotics are used to treat all three types of Anthrax. Early identification and treatment are important. Contact your doctor right away to receive antibiotics.

How is the infection prevented?

If your health care provider determines that you were exposed to the germ, you will be given an antibiotic. Even if you take the antibiotic, you may develop the infection. If you develop symptoms such as fever or shortness of breath while you are taking the antibiotic, you should go to the nearest emergency department or hospital immediately for care.

How dangerous is anthrax?

The Centers for Disease Control and Prevention (CDC) classify agents with known bioterrorism potential into three priority areas (A, B and C). Anthrax is ranked as a Category A agent. Category A agents are those that:

- pose the greatest threat to public health
- may spread across a large area or need public awareness



- need a great deal of planning to protect the public's health

In most cases, early treatment with antibiotics can cure cutaneous anthrax. Even if not treated, 80 percent of people who become infected with cutaneous anthrax do not die. Gastrointestinal anthrax is more serious; between one-fourth and more than half of cases lead to death. Inhalation anthrax is the most severe form. In 2001, about half of the cases of inhalation anthrax ended in death.

How soon do infected people get sick?

Symptoms can appear within 7 days of contact with the bacterium for all three types of anthrax. For inhalation anthrax, symptoms can appear within a week or can take up to 42 days to appear.

How is Anthrax treated?

Antibiotics are used to treat all three types of anthrax. Early identification and treatment are important.

- **Prevention after exposure:** Treatment is different for a person who is exposed to anthrax but is not yet sick. Health-care providers will use antibiotics combined with the anthrax vaccine to prevent anthrax infection.
- **Treatment after symptoms occur:** Treatment is usually a 60-day course of antibiotics. Success depends on the type of anthrax and how soon treatment begins.

Can Anthrax be prevented?

Yes, with a vaccine. However, the vaccine is not yet available for the general public. Anyone who may be exposed to anthrax (including certain members of the U.S. armed forces, laboratory workers, and workers who may enter or re-enter areas exposed to anthrax) may get the vaccine. Also, in the event of an attack using anthrax as a weapon, people exposed would get the vaccine.

Identifying Suspicious Packages and Envelopes

In 2001, letters with anthrax in powder form were sent through the mail in a few places in the U.S.. In some cases, anthrax exposures occurred, with several people getting infected. To prevent the exposures and the infections that follow, learn how to spot a strange package or envelope and take the steps to protect yourself and others.

Some features of strange packages and envelopes include the following:

Inappropriate or odd labels

- Excess postage
- Handwritten or poorly typed address
- Misspellings of common words
- Strange return address or no return address
- Wrong titles or title without a name
- Not addressed to a specific person
- Marked with comments, such as "Personal," "Confidential," or "Do not x-ray"



- Marked with any hostile language
- Postmarked from a city or state that does not match the return address

Appearance

- Powders felt through or seen on the package or envelope
- Oily stains, discoloration, or odor
- Lopsided or uneven envelope
- Lots of material such as masking tape, string, etc.

Other strange signs

- Excess weight
- Ticking sound
- Wires or aluminum foil sticking out

If a package or envelope appears suspicious, DO NOT OPEN IT.

Handling of suspicious packages or envelopes:

- Do not shake or empty the contents of any odd package or envelope.
- Do not carry the package or envelope, show it to others, or allow others to inspect it.
- Put the package or envelope down on a stable surface; do not sniff, touch, taste, or look closely at it or at any contents which may have spilled.
- Alert others in the area about the package or envelope. Leave the area, close any doors, and prevent others from entering the area. If you can, shut off the ventilation system.
- WASH hands with soap and water to prevent spreading the material to face or skin. Seek further instructions for exposed or potentially exposed persons.
- If at work, notify a supervisor, a security officer, or a law enforcement official. If at home, contact the local law enforcement agency.
- If possible, create a list of persons who were in the room or area when this letter or package was seen and a list of persons who also may have handled this package or letter. Give this list to both the local public health authorities and law enforcement officials.

Where can I get more information?

Your local health department will make frequent announcements about who should receive the antibiotic, how to take the antibiotic, and where you can get the antibiotic. It is important that you listen to the radio or television for more information.

For more information:

- Alameda County Public Health Department: <http://www.acphd.org/>
 - Division of Communicable Disease & Control Prevention: 510-267-3200
- Center for Disease Control: <http://www.bt.cdc.gov>

Source: CDC Website: <http://www.bt.cdc.gov/agent/agentlist.asp>