Anthrax

What is anthrax?
Anthrax is a disease caused by a kind of bacteria. It can make you ill in several different ways, depending on how you’re exposed to it. It can cause a skin infection, or a severe digestive illness that resembles “food poisoning.” Another form of the disease – “inhalation” anthrax – results when you breathe in the bacteria. Symptoms usually show up within seven days (typically two to five days) after you’re exposed. Symptoms depend on the form the disease takes:

- **Cutaneous (skin) anthrax** begins as a raised bump on the skin. Within one or two days, it becomes a blister, and then a painless ulcer, with a black area in the center. Lymph glands near the wound may become swollen. Skin anthrax is easily treated with antibiotics.

- **Intestinal anthrax** is very rare. It begins with nausea, loss of appetite, vomiting, and fever. Those symptoms are followed by abdominal pain, vomiting of blood, and severe diarrhea. Early antibiotic treatment is important if you have intestinal anthrax.

- **Inhalation anthrax** begins with flu-like symptoms (cough, fever, muscle aches). These symptoms may last two to three days, and then appear to go away for one or two days. Then the illness can come back, resulting in severe lung problems, difficulty breathing, and shock. Unless it’s treated, inhalation anthrax can be very dangerous – it’s fatal in up to 90 percent of cases. With treatment, during the anthrax attacks of 2001, the death rate was about 40 percent.

How do you get anthrax?
When it’s outside the body, anthrax bacteria form a hard, protective coating called a spore. In its spore form, anthrax is hard to kill. Spores are naturally present in soil, where they can survive for many years. Animals like cattle, sheep, horses and goats can get the illness if they come in contact with anthrax in the soil.

Humans can get anthrax through contact with infected animals, by handling wool and other products from infected animals, or by eating meat from an infected animal. Naturally-occurring cases of human anthrax are rare in the U.S.

During the anthrax attacks of 2001, people got both inhalation and skin anthrax from handling deliberately contaminated mail. There is also concern that the bacteria could be released into the air in a place where a large number of people are present. The result could be many cases of inhalation anthrax.

Can you get it from other people?
**NO!** You can only get it by inhaling the spores, eating contaminated meat, or having the spores come in contact with your skin. People with anthrax are not capable of infecting others.

Why is it considered a possible terror weapon?
Anthrax has already been used as a weapon in the attacks of October 2001, which used contaminated mail to spread anthrax spores. Twenty-two persons were diagnosed with anthrax and five persons died.

It is also known that both the U.S. and the former Soviet Union have explored the use of
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anthrax as a weapon. It is believed that other countries may now be continuing those efforts.

Anthrax has several of the traits that the U.S. Centers for Disease Control and Prevention (CDC) uses to identify possible bioterrorism weapons:

- Even though it can’t be passed from person to person, it’s still easy to spread.
- It could have a large impact on human health, including a high death rate.
- It could cause widespread panic and social disruption.
- Special measures are necessary to prepare for a possible anthrax attack.

Can anthrax be treated?
All forms of anthrax can be treated with antibiotics. It’s important to start treatment as soon as possible. It may be possible to prevent the disease if exposed people begin treatment soon enough.

Can anthrax be prevented?
Early treatment with antibiotics, for people who may have been exposed to anthrax, is the best preventive measure.

There is also a vaccine for anthrax, which is used by the military. It takes six shots to provide protection, followed by a yearly booster. However, supplies of the vaccine are limited, and it isn’t available to civilian doctors. Like any vaccine, it carries some risks. There is also no way to know when or where limited supplies of the vaccine might be needed to respond to an attack. For those reasons, vaccination of the general public is not currently recommended.

Should I keep some antibiotics on hand – just in case?
NO! Giving yourself antibiotics can be harmful. Antibiotics can have serious side effects – especially for pregnant women, children, and people with antibiotic allergies. Overuse of antibiotics can also help to breed “super bugs” – bacteria that can no longer be treated with antibiotics.

Public health agencies, hospitals, and clinics throughout Minnesota are constantly on the alert for any kind of unusual disease activity – including a possible anthrax attack. If an anthrax attack were ever detected, the Minnesota Department of Health and local health departments would move quickly. They would take steps to identify people who may have been exposed – and make sure they get antibiotics.

Is there a test for anthrax – or anthrax exposure?
Inhalation anthrax is usually detected by looking for anthrax bacteria in the blood, or in fluid from the lungs or breathing passages. Skin anthrax is diagnosed by testing or looking at the skin.

There is no test that can tell you if you’ve been exposed to anthrax.

What should I do if I think I may have been exposed to anthrax?
If you have concerns about suspicious activity, contact your local law enforcement officials. There’s no way to know for sure if you’ve been exposed to anthrax. But if you believe you may have been exposed – or you have any other health concerns – talk to your doctor. And if you are simply feeling very depressed or anxious about the possibility of a bioterrorism attack, think about talking to a mental health professional.