



ANTHRAX

What is anthrax?

Anthrax is a serious disease caused by the spore-forming bacterium *Bacillus anthracis*. The spores are too small to be seen by the naked eye and do not have a characteristic appearance, smell or taste, but they can be mixed with powder.

Anthrax most commonly occurs in hooved mammals and can also infect humans. It is considered an occupational disease among veterinarians, taxidermists and others who regularly come into contact with livestock. There are three forms of human anthrax:

- skin (cutaneous)
- lung (inhalation)
- digestive (gastrointestinal)

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

- pose the greatest possible threat to the public's health
- can spread across a large area and result in a large outbreak
- are easily converted into biological weapons

What are the symptoms?

Cutaneous anthrax, the most common infection, occurs when a break in the skin makes contact with anthrax spores. A small sore develops into a blister. The blister then develops into a skin ulcer with a black area in the center. The sore, blister and ulcer are not painful. Symptoms occur within 1- 12 days. Adjacent lymph glands also may swell.

Inhalation anthrax's initial symptoms may resemble a flu-like illness, with sore throat, mild fever and muscle aches. Later symptoms may progress to severe breathing problems, respiratory failure, shock and meningitis. Fatality rates can be as high as 75 percent. Both cutaneous and inhalation anthrax illnesses were associated with spores encountered through the mail in 2001.

Gastrointestinal anthrax's first symptoms are nausea, loss of appetite, bloody diarrhea, and fever, followed by intense stomach pain. Symptoms begin within 1 - 7 days. Fatality rate for this form of anthrax, if untreated, ranges from 25 percent to 60 percent.

How is it spread?

Anthrax exposure occurs when the spores come into contact with the skin, or the spores are inhaled or ingested. A person can be exposed to anthrax, but not become infected. An infected person will show signs of illness, such as a skin lesion from cutaneous anthrax. Direct person-to-person spread of anthrax does not occur. There is no need to immunize or treat contacts of persons ill with anthrax, such as household contacts, friends or coworkers, unless they also were exposed to the same source of anthrax spores.

How is it prevented?

If exposed to anthrax spores, disease can be prevented with antibiotics. Early detection and treatment are important to prevent illness from occurring. There is an anthrax vaccine, but it is available only for people at high risk for exposure, such as military personnel and laboratory workers handling anthrax spores.

What should I do if I think I have been exposed to anthrax?

It may be considered for people who have been exposed to anthrax spores to prevent illness.

What is Tarrant County doing about it?

If you are exhibiting symptoms of anthrax seek medical attention as soon as possible. Anthrax, like many other human illnesses, begins with flu-like symptoms such as fever and muscle aches **but does not** present like a common cold with upper respiratory symptoms such as a runny nose. Early antibiotic treatment is essential.

What can I do to protect myself and my family?

Tarrant County Public Health (TCPH) staff work quickly to identify any biological agent in question. They investigate the particulars involving those who have become infected. TCPH also employs surveillance systems tied into national networks.

Where can I get more information?

If you think you've been exposed to anthrax spores, seek medical attention immediately. Anthrax illnesses can be prevented with early antibiotic treatment.

You can visit us online (<http://health.tarrantcounty.com>); call our Epidemiology and Health Information office at 817-321-5350; contact the CDC at 1-888-246-2675 (www.bt.cdc.gov).