

What is anthrax?

Anthrax is an infection caused by the bacteria *Bacillus anthracis*. The disease may affect your skin, digestive system or lungs. If untreated, the infection can be fatal. The disease occurs naturally in sheep, cattle, and horses, but can be transmitted to humans who come into contact with infected animals or their products. In most cases involving humans, the bacteria enter the body through skin wounds and infect the skin. In other cases, the bacteria may be ingested (eaten) or inhaled. Anthrax can be treated with antibiotics, but treatment must be started early to be effective.

Bioterrorism. Anthrax bacteria are well suited for use by bioterrorists. One reason is that the bacteria readily convert to a form called a "spore" that can survive for a long period of time, even under harsh conditions in the environment. Second, terrorists can use various means to suspend the spores in the air that will then infect persons who breathe that air.

How would I be exposed to anthrax and how likely is it?

The most likely *natural* means of contact with anthrax is through exposure to animals infected with the anthrax bacteria. Anthrax is not contagious among humans. It does not spread from one person to another.

Anthrax could be deliberately spread in a terrorist act. There are several methods that a terrorist might use.

- Point source distribution. This is the easiest and most likely method a terrorist would use. In this method the anthrax spores are released from a single location over a brief period of time. The recent distribution of anthrax-contaminated letters is an example of this type. Usually, only a few persons are exposed.
- Bomblet/bomb delivery. This is a type of point source distribution in which anthrax spores are delivered through an explosive device, usually delivered by aircraft or missiles.

- Line source distribution. In this method, the delivery may be covert and difficult to identify. As an example, a terrorist could use an aircraft with crop-dusting equipment to spray bacteria across a large area. Because crop-dusting equipment has been modified in recent years to prevent creation of particles small enough to enter the lungs, attempts using this method may not work.

How would I know if I've been exposed?

There are two situations in which you may suspect that you have anthrax infection.

- The first is if you develop symptoms that could result from infection.
- The second is if you suspect that you have been exposed as part of a terrorist act.

Knowledge about the symptoms of anthrax infection may prompt individuals to seek care from their health care provider. Health care providers can determine if the symptoms are caused by something other than anthrax and provide treatment against anthrax, if necessary. Here is a brief description of the symptoms that the various forms of anthrax can cause.

Anthrax bacteria that enter through the skin (usually through a cut or abrasion) will cause a painless sore to appear within a few days. At first, the sore may be a raised, itchy bump that resembles an insect bite. Over time the sore changes in appearance and eventually forms a dark scab, that dries up and falls off after one or two weeks.

If an individual is infected with the inhalation form of anthrax, symptoms usually occur within a few days and resemble the "flu":

- Fever
- Feeling ill
- Tiredness
- Body aches
- Mild cough

Later symptoms of inhalation anthrax include:

- Shortness of breath
- Difficulty breathing
- Chest pain
- Excessive sweating
- Seizures

When an individual suspects that he or she has been involved in a terrorist attack, local police (i.e., military police) must be notified immediately. An investigation will determine whether the exposure is "credible" and, if so, who may require preventive treatment. As part of the investigation, testing will be performed on suspicious material in the environment. Clinical specimens taken from persons at the scene will also be evaluated. Collectively, all of these tests will determine whether or not anthrax is present. Exposed individuals should see their health care provider to receive proper evaluation and treatment, if necessary.

Nasal swabs are currently used to determine if an individual has been *exposed* to anthrax. If this test is negative, however, it does not necessarily mean that a person has not been exposed. This test also cannot determine if a person is infected with anthrax. For these reasons, nasal swab tests are not used to make clinical decisions. There are no blood tests available that can determine if a person has been exposed. If you think you have possibly been exposed, the proper course of action is to notify your supervisor and the police, and seek medical evaluation from your health care provider.

What should I do if I receive a suspicious letter in the mail?

Characteristics of suspicious letters or packages include oily stains, discolorations, excessive postage, a handwritten or poorly typed address, incorrect titles, a title without a name, misspellings, no return address, excessive weight, lopsided or uneven envelope, protruding wires or aluminum foil, excessive tape, string, etc. If you receive a suspicious package, do not attempt to open it. Notify the military police. In the event that you have already opened a letter or package, follow the steps on the back side of this trifold.

What To Do If You Have Opened A Suspicious Letter Or Package

REMAIN CALM.

Opened package/letter. Do not try to clean up the spill. Cover the spill with anything (clothing, trash can, etc.), and do not remove the cover. Leave the room, alert anyone else in the room to leave, and close the door. Thoroughly wash your hands with soap and water to prevent spreading powder to your face. Do not use bleach or other disinfectant on your skin. Remove contaminated clothing as soon as possible and place in a plastic bag or a container that can be sealed. Give this bag to emergency responders.

Unopened package/letter. If the suspicious letter or package is unopened, place it in a plastic bag or cover the object with anything (clothing, trash can, etc.), and do not remove the cover. Leave the room, alert anyone else in the room to leave, and close the door. Wash your hands with soap and water. Report the incident to the police, and notify your building security manager if you are at work.

If possible, make a list of everyone in the room -- particularly anyone who had contact with the suspicious letter/package.

What treatment is available?

The Centers for Disease Control and Prevention has provided guidance to hospitals, clinics, and individual health care providers on proper treatment of persons with signs and symptoms of anthrax infection and individuals who are well but may potentially be exposed. The primary medications used are ciprofloxacin or doxycycline. If indicated, one of these medications is normally taken twice a day for 60 days. If you believe that you may require treatment, see your health care provider.

How can I protect myself?

The most effective prevention against any infection is to maintain a strong immune system through proper diet, adequate hydration and regular exercise. Be sure your vaccinations are current, especially the influenza vaccine.

Take all medications as directed by your health care provider. Do not take antibiotics unless directed to do so. Overuse of antibiotics can result in antibiotic resistance and decrease your ability to fight infection.

Where can I get more information about anthrax?

For more information, you can visit these websites:

- Centers for Disease Control and Prevention:
<http://www.bt.cdc.gov/Agent/Anthrax/Anthrax.asp>
 - Department of Defense Website for the Anthrax Vaccine Immunization Program:
<http://www.anthrax.osd.mil>
 - U.S. Army Medical Research Institute of Infectious Diseases:
<http://www.usamriid.army.mil/>
 - Johns Hopkins University School of Medicine and Public Health:
<http://www.hopkins-biodefense.org/>
 - U.S. Army Center for Health Promotion and Preventive Medicine
<http://chppm-www.apgea.army.mil/>
- You can also call:
- Centers for Disease Control and Prevention:
1-800-311-3435
 - Department of Defense Anthrax Vaccination and Immunization Program (AVIP):
1-877-GETVACC
 - Your local Preventive Medicine Office or health department

What YOU Should Know About ANTHRAX



U.S. Army Center for Health Promotion and Preventive Medicine
(800) 222-9698/DSN 584-4375/(410) 436-4375
<http://chppm-www.apgea.army.mil>

