



Just the Facts... Anthrax Vaccine - What You Need to Know

What is anthrax?

Anthrax is an infection that is most commonly found in sheep, cattle, and horses, but can be transmitted to humans who come into contact with infected animals or their products. The germs are bacteria called *Bacillus anthracis* that form spores and survive in the environment for a long period of time.

How do you get anthrax?

Contrary to popular belief, there are three ways that humans can come into contact with anthrax. They include the skin, inhalation, and gastrointestinal. Humans can become infected with anthrax by handling contaminated products or eating undercooked meat from infected animals. On rare occasions, infection can occur by inhaling anthrax spores. Intentional release by terrorist groups, a form of biological terrorism would most likely occur through the air, because the spore form is quite stable and could be easily produced. Human-to-human transmission is extremely rare. Symptoms depend on how a person acquires the disease and can occur between 1-6 days after exposure. They include:

<p>Skin:</p> <ul style="list-style-type: none">• Raised itchy bump resembling insect bite with a characteristic black area in the center. <p>Inhalation (initial stage):</p> <ul style="list-style-type: none">• Fever• Muscle aches• Extreme fatigue• Headache• Sore throat	<p>Inhalation (later stage):</p> <ul style="list-style-type: none">• Severe breathing problems• Shock
<p>Intestinal (initial stage):</p> <ul style="list-style-type: none">• Nausea• Loss of appetite• Vomiting	<p>Intestinal (later stage):</p> <ul style="list-style-type: none">• Severe abdominal pain• Vomiting of blood• Severe diarrhea

What does the military require?

Because anthrax is considered to be a potential agent for use in biological warfare, the Department of Defense (DOD) has begun mandatory vaccination of all active duty military personnel who might be involved in conflict. It is recommended that servicemen and women contact their chain of command on questions about the vaccine and its distribution.

Who should get the vaccine and how is it given?

The anthrax vaccine is recommended for people who are in close or frequent contact with infected animals and for military personnel deployed to areas known to be at high risk for the presence of the organism. Studies have shown the vaccine to be very effective in protecting against anthrax. Health care providers will give the vaccine through an injection. The immunization consists of three skin injections given 2 weeks apart followed by three additional skin injections given at 6, 12, and 18 months after the first injection. Annual booster injections of the vaccine are recommended thereafter. It is very important to complete the series in order to be fully protected.

Are there any side effects?

A burning sensation can occur immediately and usually lasts a minute. In addition, a lump (nodule) commonly forms at the injected site and may last for a few weeks. Like the flu shot and other vaccines, the anthrax vaccine can cause soreness, redness, itching, and swelling at the injection site. Women are more likely than men to report local reactions, but reactions in most people usually last for only a few days. Severe allergic reactions are extremely rare.

Is there any reason not to get the anthrax vaccine?

- People with serious reactions to a prior dose of the anthrax vaccine should discuss this with their health care provider
- Individuals who are HIV positive or otherwise immunosuppressed.
- People who have recovered from cutaneous (skin) anthrax

What if I'm pregnant or breast-feeding?

- Numerous studies show that the vaccine should not be given unless clearly needed. Talk about the risks and benefits with your local health care provider.
- The anthrax vaccine does not affect the safety of breast-feeding for mothers or infants.

What if I'm exposed to anthrax?

- Post-exposure treatment should start with antibiotic treatment followed by three doses of the anthrax vaccine for the most effective treatment
- Two antibiotics recommended for treating anthrax are ciprofloxacin or doxycycline

Be sure the treatment is recorded in your medical record

Where can I get more information?

- Health care provider at your military treatment facility
- Military immunizations web page: <http://www.tricare.osd.mil/immunization/vaccines.html>
- CDC Specific Disease web site: www.cdc.gov/health/diseases.htm
- Anthrax vaccine immunization program: <http://www.anthrax.mil>