

Anthrax Vaccine:

What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis

Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

1 Why get vaccinated?

Anthrax is a serious disease that can affect both animals and humans. It is caused by bacteria called *Bacillus anthracis*. People can get anthrax from contact with infected animals, wool, meat, or hides. Anthrax could also be used as a biological weapon.

It is not spread from person to person. It can enter the body in four ways:

- Through breaks in the skin.
Cutaneous Anthrax causes skin ulcers, fever and fatigue. Up to 20% of these cases are fatal if untreated.
- From eating raw or undercooked infected meat.
Gastrointestinal Anthrax can cause fever, nausea, vomiting, sore throat, abdominal pain and swelling, and swollen lymph glands. It can lead to blood poisoning, shock, and death.
- From inhaling *B. anthracis*.
Inhalation Anthrax is very serious. The first symptoms can include a sore throat, mild fever and muscle aches. Within several days these symptoms are followed by severe breathing problems, shock, and often meningitis (inflammation of the brain and spinal cord covering), requiring hospitalization and aggressive treatment. It is often fatal.
- From injecting heroin.
Injection Anthrax has been seen in northern Europe in people injecting heroin. So far, no cases of injection anthrax have been reported in the United States.

Anthrax vaccine can prevent anthrax disease.

2 Anthrax vaccine

The anthrax vaccine used in the United States does not contain any bacteria, either live or killed. It cannot cause anthrax disease.

The vaccine is recommended for adults 18 through 65 years of age **who are at risk of exposure to anthrax bacteria**, including:

- certain laboratory workers who work with *B. anthracis*
- people who handle potentially infected animals
- some military personnel (determined by the Department of Defense)

These people should get 3 doses of vaccine: the first dose when risk of a potential exposure is identified, and the remaining doses at 1 and 6 months after the first dose. After the 6 month dose, the vaccine recipient is considered protected and can work in areas where there is a risk of exposure to anthrax. Boosters at 12 and 18 months, and annually thereafter, are recommended for ongoing protection.

Anthrax vaccine is also recommended for **unvaccinated people of all ages who have been exposed to anthrax**. The vaccine has not been studied or used in children less than 18 years of age and its use in exposed children must be under an Investigational New Drug (IND) program and requires informed consent from a parent or legal guardian. These people should get 3 doses of vaccine together with recommended antimicrobial drugs: the first vaccine dose as soon after exposure as possible, and the remaining doses 2 and 4 weeks after the first.

3 Some people should not get this vaccine

Tell your vaccine provider if you:

- **Have any severe, life-threatening allergies.** A person who has ever had a life-threatening allergic reaction after a dose of anthrax vaccine, or has a severe allergy to any part of this vaccine, may be advised not to be vaccinated. Ask your health care provider to explain the components of the vaccine.
- **Are pregnant, or think you might be pregnant.** Vaccination is not routinely recommended for pregnant women, but may be recommended for pregnant women who have been exposed to anthrax.
- **Are not feeling well.** If you are receiving the vaccine because **you are at risk of exposure to anthrax bacteria** and have a mild illness, such as a cold, you can probably get the vaccine today. If you are moderately or severely ill, you should probably wait until you recover. Your doctor can advise.



If you are receiving the vaccine because **you have been exposed to anthrax** and are not feeling well, you **should seek medical care immediately**.

4 Risks of a vaccine reaction

Anthrax is a very serious disease, and the risk of serious harm from the anthrax vaccine is extremely small. With any medicine, including vaccines, there is a chance of reactions. These are usually mild and go away on their own.

Minor events:

- Reactions on the arm where the shot was given:
 - Tenderness
 - Redness
 - Itching
 - Lump
 - Bruise
- Muscle aches or temporary limitation of arm movement
- Headaches
- Fatigue

Other things that could happen after this vaccine:

- People sometimes faint after medical procedures, including vaccination. Sitting or lying down for about 15 minutes can help prevent fainting and injuries caused by a fall. Tell your provider if you feel dizzy, or have vision changes or ringing in the ears.
- Some people get shoulder pain that can be more severe and longer-lasting than routine soreness that can follow injections. This happens very rarely.
- Any medication can cause a severe allergic reaction. Such reactions to a vaccine are estimated at about 1 in a million doses, and would happen within a few minutes to a few hours after the vaccination.

As with any medicine, there is a very remote chance of a vaccine causing a serious injury or death.

The safety of vaccines is always being monitored. For more information, visit: www.cdc.gov/vaccinesafety/

5 What if there is a serious problem?

What should I look for?

- Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or unusual behavior.

Signs of a **severe allergic reaction** can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would usually start a few minutes to a few hours after the vaccination.

What should I do?

- If you think it is a **severe allergic reaction** or other emergency that can't wait, call 9-1-1 or get to the nearest hospital. Otherwise, call your health care provider.

Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor should file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS does not give medical advice.

6 Injury Compensation

A Federal program, the Countermeasures Injury Compensation Program, has been created under the PREP Act to help pay for medical care and other specific expenses of certain individuals who have a serious reaction to this vaccine.

If you have a reaction to the vaccine your ability to sue may be limited by law. For more information, visit the program's website at www.hrsa.gov/cicp/, or call 1-855-266-2427.

7 How can I learn more?

- Ask your health care provider. He or she can give you the vaccine package insert or suggest other sources of information.
- Contact the Centers for Disease Control and Prevention (CDC):
 - Call 1-800-232-4636 (1-800-CDC-INFO) or
 - Visit CDC's website at www.cdc.gov/anthrax

Vaccine Information Statement Anthrax Vaccine

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