Rabies Vaccine: What You Need to Know

1 Why get vaccinated?

Rabies vaccine can prevent rabies.

Rabies is mainly a disease of animals. Humans get rabies when they are bitten or scratched by infected animals.

- Human rabies is rare in the United States.
  Wild animals like bats, raccoons, skunks, and foxes are the most common source of human rabies infection in the United States.
- Rabies is more common in other parts of the world where dogs still carry rabies. Most rabies deaths in people around the world are caused by bites from unvaccinated dogs.

Rabies infects the central nervous system. After infection with rabies, at first there might not be any symptoms. Weeks or even months after a bite, rabies can cause general weakness or discomfort, fever, or headache. As the disease progresses, the person may experience delirium, abnormal behavior, hallucinations, hydrophobia (fear of water), and insomnia.

If a person does not receive appropriate medical care after an exposure, human rabies is almost always fatal.

Rabies can be prevented by vaccinating pets, staying away from wildlife, and seeking medical care after potential exposures and before symptoms start.

2 Rabies vaccine

Rabies vaccine is given to people at high risk of rabies to protect them if they are exposed. People at high risk of exposure to rabies should be offered pre-exposure rabies vaccination, including:

- Veterinarians, animal handlers, and veterinary students
- Rabies laboratory workers
- Spelunkers (people who explore caves), and
- Persons who work with live vaccine to produce rabies vaccine and rabies immune globulin.

Pre-exposure rabies vaccination should also be considered for:

- People whose activities bring them into frequent contact with rabies virus or with possibly rabid animals.
- International travelers who are likely to come in contact with animals in parts of the world where rabies is common and immediate access to appropriate care is limited.

For pre-exposure protection, 3 doses of rabies vaccine are recommended. People who may be repeatedly exposed to rabies virus should receive periodic testing for immunity, and booster doses might be necessary. Your health care provider can give you more details.

Rabies vaccine can prevent rabies if given to a person after they have had an exposure. Anyone who has been bitten by an animal suspected to have rabies, or who otherwise may have been exposed to rabies, should clean the wound and see a health care provider immediately regardless of vaccination status. The health care provider can help determine if the person should receive post-exposure rabies vaccination.
For post-exposure protection:

- A person who is exposed and has never been vaccinated against rabies should get 4 doses of rabies vaccine. The person should also get another shot called rabies immune globulin (RIG).
- A person who has been previously vaccinated should get 2 doses of rabies vaccine and does not need Rabies Immune Globulin.

Your health care provider can give you more information.

3 Talk with your health care provider

Tell your vaccine provider if the person getting the vaccine:

- Has had an allergic reaction after a previous dose of rabies vaccine, or has any severe, life-threatening allergies.
- Has a weakened immune system.

In some cases, your health care provider may decide to postpone a routine (non-exposure) dose of rabies vaccination to a future visit.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting a routine (non-exposure) dose of rabies vaccine. If you have been exposed to rabies virus, you should get vaccinated regardless of concurrent illnesses, pregnancy, or breastfeeding.

Your health care provider can give you more information.

4 Risks of a vaccine reaction

- Soreness, redness, swelling, or itching at the site of the injection, and headache, nausea, abdominal pain, muscle aches, or dizziness can happen after rabies vaccine.
- Hives, pain in the joints, or fever sometimes happen after booster doses.
- Very rarely, nervous system disorders such as Guillain-Barré syndrome (GBS) have been reported after rabies vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

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

5 What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call 9-1-1 and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at www.vaers.hhs.gov or call 1-800-822-7967. VAERS is only for reporting reactions, and VAERS staff do not give medical advice.

6 How can I learn more?

- Ask your health care provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC’s rabies website at www.cdc.gov/rabies