RABIES VACCINE

WHAT YOU NEED TO KNOW

1 What is rabies?

Rabies is a serious disease. It is caused by a virus.

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

At first there might not be any symptoms. But weeks, or even years after a bite, rabies can cause pain, fatigue, headaches, fever, and irritability. These are followed by seizures, hallucinations, and paralysis. Rabies is almost always fatal.

Wild animals - especially bats - are the most common source of human rabies

infection in the United States. Skunks, raccoons, dogs, and cats can also transmit the disease.

Human rabies is rare in the United States. There have been only 39 cases diagnosed since 1990. However, between 16,000 and 39,000 people are treated each year for possible exposure to rabies after animal bites. Also, rabies is far more common in other parts of the world, with about 40,000 - 70,000 rabies-related deaths each year. Bites from unvaccinated dogs cause most of these cases.

Rabies vaccine can prevent rabies.

2 Rabies vaccine

Rabies vaccine is given to people at high risk of rabies to protect them if they are exposed. It can also prevent the disease if it is given to a person *after* they have been exposed.

Rabies vaccine is made from killed rabies virus. It cannot cause rabies.

3 Who should get rabies vaccine and when?

Preventive Vaccination (No Exposure)

- People at high risk of exposure to rabies, such as veterinarians, animal handlers, rabies laboratory workers, spelunkers, and rabies biologics production workers should be offered rabies vaccine.
- The vaccine 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.

The pre-exposure schedule for rabies vaccination is **3 doses**, given at the following times:

Dose 1: As appropriate
Dose 2: 7 days after Dose 1
Dose 3: 21 days ***or*** 28 days after Dose 1

For laboratory workers and others who may be repeatedly exposed to rabies virus, periodic testing for immunity is recommended, and booster doses should be given as needed. (Testing or booster doses are not recommended for travelers.) Ask your doctor for details.

Vaccination After an Exposure

Anyone who has been bitten by an animal, or who otherwise may have been exposed to rabies, should see a doctor immediately.

- A person who is exposed and has never been vaccinated against rabies should get **5 doses** of rabies vaccine - one dose right away, and additional doses on the 3rd, 7th, 14th, and 28th days. They should also get a shot of *Rabies Immune Globulin* at the same time as the first dose. This gives immediate protection.
- A person who **has** been previously vaccinated should get **2 doses** of rabies vaccine - one right away and another on the 3rd day. Rabies Immune Globulin is not needed.

4 Tell your doctor if . . .

Talk with a doctor before getting rabies vaccine if you:

1) ever had a serious (life-threatening) allergic reaction to a previous dose of rabies vaccine, or to any component of the vaccine,
2) have a weakened immune system because of:
   - HIV/AIDS or another disease that affects the immune system,
   - treatment with drugs that affect the immune system, such as steroids,
   - cancer, or cancer treatment with radiation or drugs.

If you have a minor illness, such as a cold, you can be vaccinated. If you are moderately or severely ill, you should probably wait until you recover before getting a routine (non-exposure) dose of rabies vaccine.

If you have been exposed to rabies virus, you should get the vaccine regardless of any other illnesses you may have.

5 What are the risks from rabies vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of a vaccine causing serious harm, or death, is extremely small. Serious problems from rabies vaccine are very rare.

Mild problems:
- soreness, redness, swelling, or itching where the shot was given (30% - 74%)
- headache, nausea, abdominal pain, muscle aches, dizziness (5% - 40%)

Moderate problems:
- hives, pain in the joints, fever (about 6% of booster doses)
- illness resembling Guillain-Barré Syndrome (GBS), with complete recovery (very rare)

Other nervous system disorders have been reported after rabies vaccine, but this happens so rarely that it is not known whether they are related to the vaccine.

NOTE: Several brands of rabies vaccine are available in the United States, and reactions may vary between brands. Your provider can give you more information about a particular brand.

6 What if there is a moderate or severe reaction?

What should I look for?
- Any unusual condition, such as a high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

What should I do?
- **Call** a doctor, or get the person to a doctor right away.
- **Tell** your doctor what happened, the date and time it happened, and when the vaccination was given.
- **Ask** your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.

  Or you can file this report through the VAERS website at **www.vaers.hhs.gov**, or by calling **1-800-822-7967**.

  VAERS does not provide medical advice.

7 How can I learn more?

- Ask your doctor or nurse. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Visit CDC's rabies website at **www.cdc.gov/ncidod/dvrd/rabies**

To allow medical care provider(s) accurate immunization status information, an immunization assessment, and a recommended schedule for future immunizations, information will be sent to the Michigan Care Improvement Registry. Individuals have the right to request that their medical care provider not forward immunization information to the Registry.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL IMMUNIZATION PROGRAM

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