

Questions and Answers: Rabies and Oral Rabies Vaccination

Q. What is rabies?

A. Rabies is an invariably fatal disease caused by a virus that affects the central nervous system in mammals. Rabies can be prevented with vaccines that are available to protect people and pets.

Q. How do you contract rabies?

A. The rabies virus is almost always spread through contact with an infected animal's saliva when an infected animal bites through the skin of an uninfected animal or person.

Q. Why should I be worried about rabies in wildlife?

A. Rabies is a serious public health concern because if left untreated it is always fatal. The costs associated with detection, prevention, and control of rabies exceed \$300 million annually. According to the Centers for Disease Control and Prevention, about 90 percent of reported rabies cases are in wildlife. As human populations expand into suburban and rural areas there is more interaction with wildlife, increasing the risk of rabies exposure.

Q. How can I tell if an animal has rabies?

A. To determine if an animal has rabies, it must be euthanized and a brain tissue sample tested. The visible signs of rabies may include any of the following: aggressive behavior, lethargy, confusion, attacking for no reason, or walking in a circle. Wildlife should never be approached at any time. If you have questions about wildlife, please contact the U.S. Department of Agriculture's (USDA) Wildlife Services at 1-866-4-USDA-WS (1-866-487-3297).

Q. What should I do if I am bitten by an animal?

A. Wash the wounds thoroughly with soap and water right away. Contact your doctor, local health department, or hospital emergency room. If it is a domestic

animal, get the name and address of the animal's owner. If it is a wild animal, contact your local health department, animal control, or professional wildlife trapper for assistance. If the animal is dead, wear gloves or use a shovel to move the animal. Put the carcass into a heavy plastic bag and place it in a cold area away from people and other animals. The area can be cleaned with one part bleach to ten parts water. Call your local health department for further instructions.

Q. What can I do to prevent rabies?

A. Avoid all contact with all wild animals. Make sure your pets are vaccinated in accordance with State and local laws. Report any animal acting suspiciously to USDA's Wildlife Services at 1-866-4-USDA-WS (1-866-487-3297). Do not relocate wildlife.

Q. What is an oral rabies vaccination (ORV) bait and what does it look like?

A. WS and its cooperators distribute the ORV baits in targeted areas to vaccinate wildlife species—such as coyotes, foxes, and raccoons—to prevent the spread of rabies. An ORV bait consists of a sachet, or plastic packet containing Raboral V-RG® rabies vaccine. To make the baits attractive to wildlife, the baits are either waxed to the inside of a fishmeal or dogmeal outer shell or covered with fishmeal crumbs.

Q. Can I get rabies from contact with the vaccine?

A. No. The vaccine does not contain the live rabies virus. It contains only a single gene that is passcoded with the outer coating of the rabies virus. The virus that carries this single gene may cause a local pox-type infection in people who are pregnant or immunosuppressed. If you come into contact with the vaccine, wash the exposed area thoroughly with soap and water and contact your local public health officials at 1-877-RABORAL (1-877-722-6725).

Q. What if I find an oral rabies vaccination (ORV) bait near my home?

A. It is best to leave a bait where you find it unless it is on your lawn, driveway, or other area where it is not likely to attract a raccoon, fox, or coyote. While wearing a glove or other protective covering (i.e., plastic bag, paper towel), you can move bait to a wooded area where a wild animal will be more likely to find it. Wash your hands thoroughly with soap and water after any contact with a bait.

Q. Why do I need to wear a glove when handling an ORV bait?

A. An intact bait will not harm you, but the smell, which is objectionable to people, may get on your skin. If the sachet is broken, pink liquid (vaccine) may be visible. While wearing gloves, you may place the bait in a bag and dispose of it with your regular trash. Wash your hands thoroughly with soap and water after any contact with a bait. If you suspect you may have been exposed to the vaccine please contact your local public health officials at 1-877-RABORAL (1-877-722-6725).

Q. What if I do not have a glove?

A. You can use a plastic bag or paper towel to prevent you from coming into direct contact with the bait and vaccine. Be sure to dispose of it after use.

Q. What if my child finds an ORV bait?

A. The smell of the bait generally prevents children from playing with them or tasting them. If your child were to bring you an intact bait, you may place the bait into an area of thick cover. If your child brings you a broken bait, wash the exposed skin and contact your local public health officials at 1-877-RABORAL (1-877-722-6725), for further instructions and referral. Wash your hands thoroughly with soap and water after any contact with a bait.

Q. What if my dog or cat eats an ORV bait?

A. This vaccine has been shown to be safe in more than 60 different species of animals, including domestic dogs and cats. Eating a large number of baits may cause a temporarily upset stomach in your pet, but it does not pose a long-term health risk. Do not attempt to remove a bait from your pet; doing so may cause you to be bitten and could lead to vaccine exposure. If your pet becomes ill from bait consumption, please contact your veterinarian for more information.

Q. How long do ORV baits last in the environment?

A. Studies have shown that most baits are eaten within 4 days, and almost all baits are gone in 1 week. If baits are not found and eaten, they will dissolve exposing the vaccine packet. Sunlight and exposure to air inactivates the vaccine.

Q. Can I use the ORV bait to vaccinate my dog or cat?

A. No. This vaccine is only approved for use in wildlife. Your pet should be vaccinated by a veterinarian in accordance with State and local laws.

Q. How does a raccoon/coyote/gray fox get vaccinated by eating the ORV bait?

A. The vaccine is contained inside a plastic packet, which is waxed to the inside of the bait's fishmeal outer shell or covered with fishmeal crumbs. When an animal eats through the coating, the vaccine packet inside is punctured allowing the animal to swallow the vaccine. The animal's immune system is then tricked into thinking it has been exposed to the rabies virus, and it makes antibodies to fight the disease. The blueprint on how to make these antibodies is stored in the animal's immune system allowing it to respond quickly if it is later exposed to a rabid animal.

Q. How long does the vaccine last?

A. Research suggests this vaccine should be effective for more than a year; however, it is difficult to determine how immune systems in individual animals will respond to the vaccine.

Q. How do you distribute ORV baits in cities and suburban areas?

A. Working with employees from cooperating agencies, WS distributes baits in urban and suburban areas by hand. This is the most effective approach for distributing the bait and minimizing human contact with them.

Q. How else does WS distribute ORV baits?

A. In rural or open areas, WS distributes baits using aircraft. Depending on the distribution area and availability of aircraft, a helicopter or fixed wing aircraft may be used.

Q. How can I find out more information about this program?

A. You can dial 1-866-4-USDA-WS (1-866-487-3297) to speak with staff from Wildlife Services or visit www.aphis.usda.gov/ws/rabies.

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RABIES

What is rabies?

Rabies is a viral disease which affects the nervous system. It can affect all mammals, including man. Rabies is a fatal disease once symptoms appear.

How is rabies spread?

Rabies is spread most often through the bite of a rabid animal. It can also be spread through a scratch that breaks the skin or through exposure of an open wound or mucous membrane (eye, nose, or mouth) to saliva from a rabid animal. In Pennsylvania, rabies has been found in raccoons, bats, skunks, foxes, cats, dogs, and other animal species.

What are the symptoms of rabies?

Early symptoms in humans include irritability, headache, fever, and sometimes itching or pain at the site of the exposure. The disease progresses to paralysis, spasms of the throat muscles, convulsions, delirium, and death. By the time any symptoms appear, rabies cannot be successfully treated. Therefore, infection must be prevented by administration of the rabies vaccine immediately after exposure.

The symptoms of rabies in animals may vary from a quiet, depressed state to a furious, erratic behavior pattern.

How soon after exposure do symptoms appear?

The time between exposure and the onset of symptoms is variable but is normally two to eight weeks in humans. Incubation periods as short as five days or over one year have been reported.

The incubation period for animals also varies. It may range from 2 days to a year after exposure, but is most common within 30-60 days.

What should you do if you are bitten by any animal?

The first step in rabies prevention is to promptly wash the wound with plenty of soap and warm water. See your doctor immediately for medical treatment. In circumstances of the exposure warrant, the rabies vaccine may be given. The vaccine is a series of five shots given in the arm (or thigh for small children) on days 0, 3, 7, 14, and 28 upon seeking medical care. Rabies immune globulin is also given along with the day 0 vaccine. Day 0 is the day the first vaccination of the series of five is given. A physician should be consulted knowing any exposure to a bat in the home when it is not certain if a bite has occurred and this animal cannot be properly tested.

What should be done with the biting animal?

If acting normally, dogs, cats, and ferrets may be observed for 10 days from the day of the bite. If these animals stay healthy after 10 days, they were not infectious at the time of the bite. Observation for 10 days is not an option for animals other than normally acting domestic dogs, cats, and ferrets. A veterinarian and local health authority can also be consulted to advise further action. Wild animals should be humanely killed and the head taken to a laboratory for rabies testing. If an animal must be killed to prevent its escape, care should be taken not to damage the brain.

What can communities do to control rabies?

All animals should be restrained and leashed when in public.

Stray and ownerless dogs should be impounded.

All dogs and cats should be registered, licensed, and vaccinated.

Mass rabies vaccination clinics should be developed and supported.

Wild animals should not be handled or kept as pets.

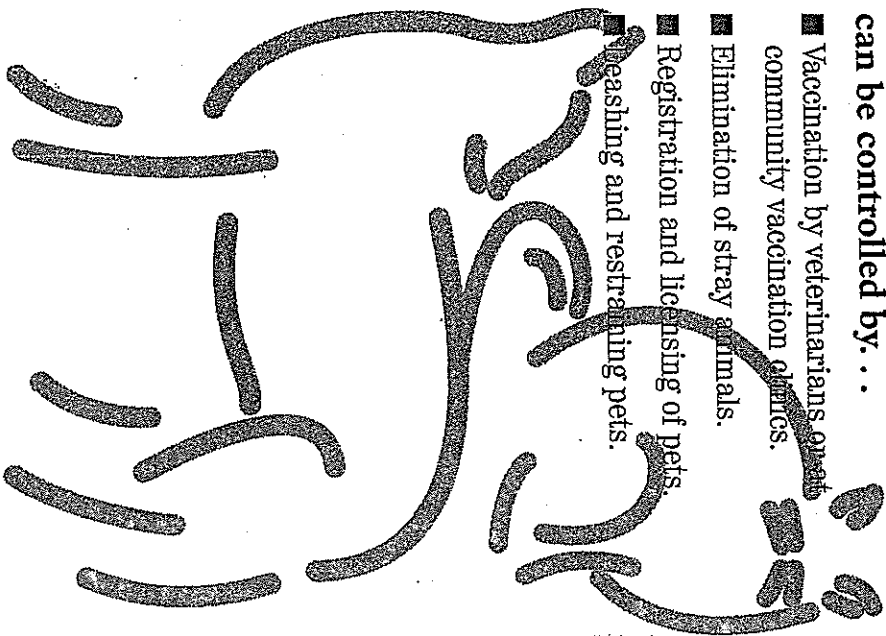
IN SUMMARY

Following possible human exposure to rabies...

- Clean the wound completely with plenty of soap and warm water.
- Contact your doctor right away.
- Capture and confine the biting animal when safely possible.
- If the animal must be killed, avoid head damage and keep the animal cool.

Rabies in dogs, cats, and ferrets can be controlled by...

- Vaccination by veterinarians of *quadrant* community vaccination *offices*.
- Elimination of stray animals.
- Registration and licensing of pets.
- Leashing and restraining pets.



DEPARTMENT OF HEALTH

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For more information
1-877-PA-HEALTH
www.health.state.pa.us

The Pennsylvania Department of Health is an equal opportunity provider of grants, contracts, services, and employment.

This publication is supported by the Preventive Health and Health Services Block Grant from the Centers for Disease Control and Prevention (CDC).

HD0004 (Rev. 4/04)

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