Wildlife Services

August 2009

Questions and Answers: Rabies and Oral Rabies Vaccination

Q. What is rables?

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 rables?

A. The rables 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 rables 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 rables?

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 rables?

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) balt 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 rables from contact with the vaccine?

A. No. The vaccine does not contain the live rables virus. It contains only a single gene that is passcoded with the outer coating of the rables virus. The virus that carries this single gene may cause a local poxtype 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 rables vaccination (ORV) balt 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 balt?

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 balt?

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 balts 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 balts 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 balt 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 balt?

A. The vaccine is contained inside a plastic packet, which is waxed to the inside of the balt'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 blue-print 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 balts in cities and suburban areas?

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

Q. How else does WS distribute ORV balts?

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 through exposure of an open wound runcous membrane (eye, nose, or routh) to saliva from a rabid animal. In Pernsylvania, rabies has been found in raccook, 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, spasm 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?

of symptons is variable but is normally two to eight weeks in framans. Incubation periods as short as five days or over one year axy to eight reported.

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

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

production is to product and wash the wound with plenty of and wash the wound with plenty of some and wash water. See your doctor cumstances of the exposure was ant, the rabies vaccine may be given. The vaccine is a series of five shots given in the arm (or thigh for small children) on day, 0, 3, 7, 14, and 28 upon seeking medical can Rabic 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 conserted any exposure to a bat in the hom 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 to days, they were not infectious at the time of the bite. Observation for 10 days is not an optical for animals other than normally acting domestic dogs, cats, and ferrets. A veternation also be consulted to advise further action. Wild animals should be humanely killed and head taken to a laboratory for rabies the ting. If an animal must be killed to prevent its escape, care should be taken not to demage the brain.

What can communities do to control rabies?

All animals should be restrained and least when in public.

Stray and ownerless ages sharts be impounded.

All dogs and cats should be registered, licensel, and vaccinated

Mass abie vaccination dinics should be develop d an supported.

W. d 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.

Calvin B. Johnson, M.D., M.P.H., Secretary of Health

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

- Vaccination by veterinarians or community vaccination of arcs.
- Elimination of stray a rimals.
- Registration and licensing of pets eashing and restraining pets.



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

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Suspect Animal Form

County:	Township:	
Address:	,	
City:	Zip:	
Comments:		
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	Suspect Animal Forr	n
Date:	Suspect Animal Forn	n
Date:	Suspect Animal Forn	
LOCATION	Suspect Animal Forn	
LOCATION County:	Suspect Animal Fort	



Have you seen these?

and has been shown to be safe these baits cannot cause rabies raccoons against the virus that causes rabies. The vaccine in cies of animals, including cats ground personnel to vaccinate in more than 60 different spetion baits. They are being dis-These are oral rabies vaccinawing aircraft, helicopters, and tributed in your area by fixedand dogs.

leave it alone unless it is on your can move the bait to an area of coon. While wearing a glove or thicker cover, where a raccoon other protective covering (e.g., lawn, driveway, or some other plastic bag, paper towel), you area not likely to attract a rac-If you find a bait, please will be more likely to find it.

dog's mouth). Doing that might If you should pick up a bait without wearing a glove, wash handle partially eaten or damattempt to remove a bait from placed in a bag and disposed soap and water. Also, do not of with normal trash. Do not your hands thoroughly with aged baits with bare hands. a pet's mouth (especially a Damaged baits should be cause you to be bitten.

Management Program Web site please visit the National Rabies or call the U.S. Department of If you have any questions, at http://www.aphis.usda.gov/ Agriculture's Wildlife Services ws/rabies/index.html toll-free number:

1-866-4-USDA-WS.



If you see a wild animal:

- Stay away and keep children away.
 - Keep pets indoors.

If you are bitten by an animal, domestic or wild:

- Immediately wash the wound with lots of soap and running water.
- Call your doctor or local health department.
 If it's a domestic animal, get
- the name and address of the animal's owner.

 If it's a wild animal, contact a professional trapper to confine the animal. It's best not to try to trap the animal

yourself to prevent further

injuries.

• If the animal is dead and needs to be picked up for testing, wear gloves or use a shovel to place the carcass into a heavy plastic bag and put it in a cold place away from people and other animals.

To prevent wildlife encounters:

- Don't feed, touch, or adopt wild animals or stray dogs or cats.
 - Vaccinate your dogs, cats, and ferrets against rabies.
- Keep garbage secure in an enclosed trashcan.
 Feed pets indoors or immediately remove all food when they are done eating
- outdoors.
 Teach children to appreciate wildlife from a distance.

Proto credits. The raccoon image was taken by APHIS photographer R. Anson Eaglin. The shots of the sachets and polymer bats were taken by Wildlife Services employee John Forbes.

ORAL RABIES VACCINATION AREA

NOTICE

Cooperating Federal, State, and county agencies are conducting an oral raccoon rabies baiting project in western Pennsylvania. A vaccine packet is coated or placed inside a fishmeal block, which is very tasty to raccoons. The baits are dropped from low-flying airplanes or helicopters, or by local teams on foot or in vehicles.

This year's operation will run:



Western Pennsylvania: The area to be baited is



What if I find rabies baits?

Baits should be left alone – but intact baits can be moved if they are found where children and pets play. Damaged baits should be bagged and disposed in the trash.

- Wear gloves or use a plastic bag when picking up the baits.
- Toss intact baits into a fencerow, woodlot, ditch, or other raccoon habitat areas.
- Wash your hands after any skin contact with a damaged bait.

What if my pet eats a bait?

- A few baits are not harmful, although eating a lot may cause vomiting or diarrhea.
- Do not risk getting bitten by taking a bait away from your pet.
- Confine your pet for a couple of days, and check the area for more baits.
- If your pet eats a bait, avoid your pet's saliva for 24 hours, and wash skin or wounds that may have been licked.

For information about the oral rabies baiting program, contact:

USDA Wildlife Services: 1-866-487-3297

Pennsylvania Department of Agriculture: 1-717-783-9550

Pennsylvania Department of Health Information Line: 1-877-PA Health

Erie County Department of Health: 1-814-451-6700

Allegheny County Department of Health: 1-412-687-2243

For information concerning accidental contact with baits, call 1-877-722-6725.