

Bats are beneficial to people and the environment, but they can carry and transmit rabies, a fatal disease. Learn how to reduce the risk of rabies to people and pets.



# **Understanding Rabies**

#### What is rabies?

Rabies is a deadly virus that affects the central nervous system. Any warm-blooded mammal, including humans, can get rabies; however, bats are the only animal in Washington known to be a carrier of rabies. While rabid raccoons, skunks, foxes or coyotes have not been identified in Washington, the virus can be transmitted from bats to these and other mammals, including dogs, cats and ferrets.

### How is rabies spread?

The rabies virus is found in the saliva of a rabid animal. It is usually spread to humans by animal bites, and can potentially be spread if the virus comes in contact with the eyes, nose, mouth, open cuts, or wounds. Person-to-person transmission of rabies has occurred only through surgical transplant of human tissue.

### How common is rabies in Washington?

The primary carrier of rabies in the Northwest is bats. Rabid bats have been found in every county in Washington, including Spokane County. Between 3-10% of bats submitted for testing are found to be rabid, while rabies occurs in less than 1% of the whole bat population. In 2016, of 297 bats tested for rabies in the state, 20 rabid bats were identified, including 3 in Spokane County.

Bats can also spread rabies to pets and other animals. In Washington, the last rabies cases reported in cats and dogs were in 2015 and 2002 (cats) and 1987 (a dog). Rabies was also reported in a llama in 1994 and in a horse in 1992. When animals other than bats have tested positive for rabies in Washington, it has been rabies from a bat.

# When was the last human case of rabies in Washington?

The last reported cases of people infected with rabies in Washington were in 1995 and 1997. In 1995, a four-year-old child died of rabies four weeks after a bat was found in her bedroom; and in 1997, a 64-year-old man was diagnosed with rabies. These two Washington residents were infected with bat rabies virus.

# What are the symptoms of rabies and when do they appear?

Rabies is deadly to people if untreated. While early symptoms include headache, fever, and sometimes pain at the site of the bite, the disease changes quickly into a severe nervous system (neurological) illness. Symptoms may include agitation, confusion, paralysis, and difficulty swallowing. Once someone with rabies infection starts having these symptoms, that person usually does not survive. Symptoms normally appear two to eight weeks after exposure, but the incubation period may vary.

# Why are people treated after exposure to rabies and what is the treatment?

Rabies is deadly to people if untreated. If exposed to rabies, people can be treated with a series of rabies treatment shots, called post-exposure prophylaxis (PEP). The shots can stop rabies if given soon after someone is exposed to the virus and before the onset of symptoms. These shots include one dose of human rabies immunoglobulin (HRIG) and four doses of rabies

vaccine given on a specific schedule over a 14-day period. People with weak immune systems will also need a fifth dose of vaccine and a blood test to check that the vaccine worked.

Treatment can be arranged through a health care provider in consultation with the Communicable Disease Epidemiology program at Spokane Regional Health District. Each year, hundreds of individuals in Washington state receive this treatment. In 2015, 244 people in Washington received the shots.

# Can humans be vaccinated against rabies?

Pre-exposure vaccination is recommended for any person whose occupation involves frequent risk of rabies exposure. In Washington, this includes anyone who handles bats, veterinarians, employees in veterinary clinics, and laboratory workers where rabies test specimens are handled.

Travelers going to an area of the world where dog rabies is common should also consider pre-exposure rabies vaccinations. This is recommended if a person is planning an extended trip (e.g., more than 30 days) or if activities will take the person into remote areas where medical care may be difficult to obtain in a timely manner. A health care provider can provide more information.

# What is the best way to protect pets against rabies?

It is not uncommon for pets like cats and dogs to come into contact with bats, particularly if they are outside at night. Since cats are predatory hunters, they are especially likely to catch a bat. To help prevent rabies transmission, it is a law in Washington state that all cats, dogs, and ferrets be vaccinated against rabies.

# VACCINATE PETS AGAINST RABIES

It's required for dogs, cats and ferrets in Washington state.

WAC 246-100-197 states: an owner of a dog, cat, or ferret shall have it vaccinated against rabies and re-vaccinated following veterinary and vaccine manufacturer instructions. An "owner" is any person legally responsible for the care and actions of a pet animal.

Note: Rabies vaccines are also available for some livestock, including horses and cattle.



# **Understanding Bats**

Bats are mammals that feed on large quantities of night-flying insects and are important in reducing mosquito populations. Bats also benefit the environment by pollinating plants and trees, and transporting seeds. Washington State Department of Fish and Wildlife (WDFW) classifies bats as a protected species. They cannot be hunted, trapped or killed. As an exception, WDFW does allow bats that are close to a human dwelling to be relocated to reduce the chance of contact.

There are fifteen different species of bats that live in Washington. One of the most commonly encountered bat species in Spokane County is the Little Brown Bat.

Most bats hunt during flight or they hang from a perch and wait for an insect to fly or walk within range. Bats will fly .5 miles to 6 miles from their roost to a feeding site, using temporary roost sites there until returning to their main roost.

For more information on the behavior and safe exclusion of bats from homes, WDFW offers this fact sheet:

Living with Wildlife – Bats: wdfw.wa.gov/publications/00605/wdfw00605.pdf

# Is it normal to see bats active during daylight hours?

Bats are typically active at night as they hunt for night-flying insects. During daylight hours they can be found sleeping under eaves and other roosting locations. During very hot weather, however, in order to catch enough food to maintain an increased metabolism, they may be seen hunting during the day for food. Although not usual behavior, bats awake and active during the day are not necessarily sick with rabies.

# *Is it normal to see bats on the ground?*

When bats are infected with rabies they may become paralyzed and fall to the ground. Bats may also be on the ground if they are learning to fly, have hit a window and are stunned, or if they are cold. If you see a bat on the ground, do not touch it.

# Is it normal to see a bat in a pond or swimming pool?

If a bat is flying low over a pond or pool, it may just be getting a drink, which bats do by scooping up water in their mouths while in mid-flight. If a bat has landed in a pool and does not leave, it may be sick. Do not touch it. Contact Spokane Regional Health District at (509) 324-1560, ext. 7, for guidance about removing the bat and disinfecting the pool.

### Can humans safely provide a habitat for bats?

Some species of bats roost in bat houses. People interested in installing a bat house should place it away from houses and other outbuildings. For instructions on how to build a bat house, visit <a href="http://wdfw.wa.gov/living/bats.html">http://wdfw.wa.gov/living/bats.html</a>

# Do people get sick from bat guano (droppings)?

In Washington state, there are no recorded cases of rabies or other diseases (e.g., histoplasmosis) being transmitted through bat guano. If a person needs to remove large quantities of bat guano, they should contact a fire and water damage restoration company or an environmental services company.

## When a Bat Gets Inside the Home

#### Potential Contact with Humans

If a bat enters the home, there could be potential contact with humans. Bats have small teeth and claws so any bite or scratch marks may be difficult to see. Contact Spokane Regional Health District at 509-324-1560, ext. 7 to determine if the bat needs to be caught and tested for rabies.

Contact a health care provider, under the following circumstances, even in the absence of an obvious bite or scratch:

- A bat is found in a room or had access to a room with a sleeping person (e.g. bedroom door open to a hallway).
- A bat is found in a room with an unattended child.
- A bat is found in a room with a person under the influence of alcohol or drugs, or who has another sensory or mental impairment.
- A bat is found near a child outside.

If the health district requires the bat to be collected for rabies testing, follow the instructions below to safely capture the bat. **Never handle a bat with bare hands.** 

## **BAT FACTS**

- Bats hibernate in the winter, typically until April or early May.
- Young bats (called pups) sometimes fall to the ground when learning to fly.
- Bats may be more active during daylight hours, in hot summer weather, because they need to eat more.

# Sick or Dead Bats

If a dead bat is found and there has not been contact with a person or animal, then it should be disposed of to prevent contact with children, pets or other animals. Follow the collection and disposal directions below, taking care not to directly handle the bat.

If a sick bat is in a yard or area where a child or pet could contact the bat, then measures should be taken to remove children and pets from the area until the bat leaves or dies. A certified nuisance Wildlife Control Operator can be hired to relocate the bat. For guidance on hiring an operator and to search a list of certified operators by area, see the link below under Resources.

# White-Nose Syndrome

It is important to note that sick or dead bats may have been exposed to a disease other than rabies, such as the emerging disease white-nose syndrome (WNS). This is a devastating fungal disease, not transmittable to humans, that has killed more than 6 million bats since 2006, predominately in eastern North America. The Washington Department of Fish and Wildlife (WDFW) is monitoring bat populations and bats submitted to DOH for rabies testing for the WNS disease. To date, two bats from Washington state have tested positive for this disease.

To survey the possible spread of WNS disease in Washington, WDFW is requesting that citizens report sick/ dead bats and groups of bats. For a fact sheet and link to the reporting form, see the link below under Resources.

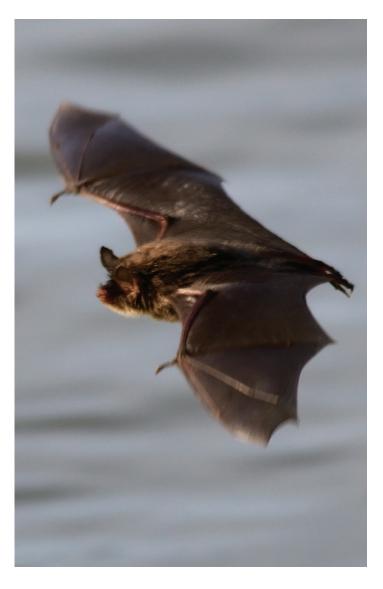
# **Safely Capturing Bats**

Only capture bats that have had direct contact with a person or pet, or if the bat was found in a room where it may have come in contact with a person or a pet (e.g., while they were sleeping) or if direct contact cannot be ruled out. Do not release a live bat or throw out a dead bat unless Spokane Regional Health District staff determine that it is not necessary to test the bat. Testing the bat may be important to decide whether the exposed person(s) will require treatment to prevent rabies. To safely capture a bat, follow these steps:

- 1. Never handle a bat with bare hands. Wear leather or thick rubber work gloves.
- If the bat is still flying, gently strike it with a broom or tennis racket to knock it down, or capture it with a net or cover it with a towel. If a bat is in a pet's mouth, try using tongs to remove it. The brain needs to be in good condition for testing, so do not smash the bat's head.
- 3. Wait until the bat has landed, then place an empty can, small box, or food storage dish over the bat. Slide cardboard under the container to contain the bat.
- 4. Carefully replace the cardboard with the container's lid to securely keep the bat contained, or tape the cardboard over the top. Make sure the top is firmly attached to the container so the bat will not escape. Punch small air holes in the lid of the container (about 2-3 mm) using a nail or small screwdriver.
- 5. Place the container in a quiet area away from heavy human or animal activity. Do not refrigerate, freeze, or kill a live bat.
- 6. If the bat is dead or injured and not flying, pick it up with a shovel or dust pan and place it in a container.
- 7. Thoroughly wash hands with soap and water.
- 8. Contact Spokane Regional Health District at (509) 324-1560, ext. 7, to answer questions about contact between the bat and people or pets.
- 9. Always keep the bat in the container until the health district decides whether the bat needs to be tested for rabies.
  - If the bat needs to be tested for rabies, the health district will make the necessary arrangements and provide instructions.
  - If the health district determines there is no need to test the bat, then the bat may be carefully released outdoors.

# **Disposing of a Dead Bat that Does Not Need Testing**

- Wear heavy protective gloves.
- Pick the bat up with a shovel, or other cleanable or disposable implement.
- Place the bat in a plastic bag and tie closed or place in a disposable plastic container and close the lid.
- Double-bag the contained/bagged bat in another plastic bag.
- Place in a tightly secured garbage container that children and pets cannot access.
- Disinfect the collection implement with a 10% bleach solution (1/4 cup of 5.25% household bleach in 2 ¼ cups of water).
- Thoroughly wash hands with soap and water.
- Wash or dispose of the gloves.



### **Contact Us**

Spokane Regional Health District Zoonotic Disease Program: 509.324.1560, ext.7

**Additional Handouts:** BatSmart - People Safe, BatSmart - Home Safe, BatSmart - Pet Safe

### **Resources:**

Spokane County Regional Animal Protection
Service

#### To report animal bites 509.477.2533

https://www.spokanecounty.org/567/SCRAPS---Regional-Animal-Protection

Washington State Department of Health

### Bats and rabies, capturing a bat, etc.

doh.wa.gov/YouandYourFamily/IllnessandDisease/ Rabies

Washington Department of Fish and Wildlife

# Bat information and bat-proofing house

wdfw.wa.gov/publications/00605/wdfw00605.pdf

### Fact sheet on white-nose syndrome in bats

https://wdfw.wa.gov/species-habitats/diseases/batwhite-nose

#### Report dead or sick bats

https://wdfw.wa.gov/get-involved/report-observations

#### Find a Certified Wildlife Control Operator

https://wdfw.wa.gov/species-habitats/living/nuisance-wildlife/wildlife-control-operators

**Bats Northwest** 

# FAQs, information on white-nose syndrome

batsnorthwest.org/

Centers for Disease Control and Prevention

#### Bats and rabies, bat-proofing your home, etc.

cdc.gov/rabies/bats/index.html

#### Bat Conservation International

batcon.org/

Adapted from Washington State Department of Health rabies website and Washington State Department of Fish and Wildlife Living with Wildlife website