

BATS AND RABIES

A public health guide



What is rabies and how do people get it?

Rabies is an infectious viral disease that affects the nervous system of humans and other mammals. People get rabies from the bite of an animal with rabies (a rabid animal). Any wild mammal, like a raccoon, skunk, fox, or bat, can have rabies and transmit it to people. It is also possible, but quite rare, that people may get rabies if infectious material from a rabid animal, such as saliva, gets directly into their eyes, nose, mouth, or a wound.

Because rabies is a fatal disease, the goal of public health is, first, to prevent human exposure to rabies by education and, second, to prevent the disease by anti-rabies immunization if exposure occurs. Tens of thousands of people are successfully vaccinated each year after being bitten by an animal that may have rabies. However, a few people die of rabies each year in the United States, usually because they do not recognize the risk of rabies from the bite of a wild animal and do not seek medical advice.

Why should I learn about bats and rabies?

Most of the recent human rabies cases have been caused by rabies viruses associated with bats. Awareness of the facts about bats and rabies can help people protect themselves, their families, and their pets. This information may also help clear up misunderstandings about bats.

There are many rumors and legends about bats which are not true. Bats are not blind. They are neither rodents nor birds. Only three species in Latin America feed on blood after inflicting small bite wounds – and most bats do not have rabies. Bats play key roles in ecosystems around the globe, from rain forests to deserts, especially by eating insects, including agricultural pests. The best protection we can offer these unique mammals is to learn more about their habits and recognize the value of living safely with them.

Cover photo: Eastern red bats, like this mother and her pups roost in trees across most of eastern North America. Most bats bear only one pup each, but red bats often give birth to twins and have as many as five offspring. Adults usually roost alone.



Mexican free-tailed bats roost in caves, mines and under bridges, forming colonies that can number in the millions. They eat enormous amounts of insects, including many costly agricultural pests.

How can I tell if a bat has rabies?

Rabies can be confirmed only in a laboratory. However, any bat that is active by day, found in a place where bats are not usually seen (for example, in a room in your home or on the lawn), or unable to fly, is far more likely than others to be rabid. Such bats are often the most approachable. Because there is no guarantee that a rabid bat will behave any differently than a normal one, it is best never to handle any bat.

What should I do if I come in contact with a bat?

If you are bitten by a bat – or if infectious material (such as saliva) from a bat gets into your eyes, nose, mouth, or a fresh wound – wash the affected area thoroughly with soap and water and get medical advice immediately. Whenever possible, the bat should be captured and sent to a laboratory for rabies testing (see “How can I safely capture a bat in my home?”).

People usually know when they have been bitten by a bat. However, because bats have small teeth which may leave marks that are not easily seen, there are situations in which you should seek medical advice even in the absence of an obvious bite wound. For example, if you are a deep sleeper or

using sleep medications and find a bat in your room or if you see a bat in the room of an unattended child or near a mentally impaired or intoxicated person, seek medical advice and have the bat tested.

People cannot get rabies just from seeing a bat in an attic, in a cave, or at a distance. In addition, people cannot get rabies from having contact with bat guano (feces), blood, or urine, or from touching a bat on its fur (even though bats should never be handled!).

What should I do if my pet is exposed to a bat?

If you think your pet or domestic animal has been bitten by a bat, immediately contact a veterinarian or your health department for assistance and have the bat tested for rabies. Remember to keep vaccinations current for cats, dogs, and other animals.



Big brown bats usually live under the bark or in cavities of trees, as well as in various buildings. They feed mostly on beetles, but also hunt an assortment of night-flying insects.

How can I keep bats out of my home?

Some bats live in buildings, and there may be no reason to evict them if there is little chance for contact with people. However, bats should always be prevented from entering rooms of your home. For assistance with “bat-proofing” your home, contact an animal-control or wildlife conservation agency. If you choose to do the “bat-proofing” yourself, here are some suggestions. Carefully examine your home for holes

that might allow bats entry into your living quarters. Any openings larger than a quarter-inch by a half-inch should be caulked. Use window screens, chimney caps, and draft-guards beneath doors to attics, fill electrical and plumbing holes with steel wool or caulking, and ensure that all doors to the outside close tightly.

Additional “bat-proofing” can prevent bats from roosting in attics or buildings by covering outside entry points. Observe where the bats exit at dusk and exclude them by loosely hanging clear plastic sheeting or bird netting over these areas. Bats can crawl out and leave, but cannot reenter. After the bats have been excluded, the openings can be permanently sealed. For more information about “bat-proofing” your home, visit Bat Conservation International’s website (see end of brochure).

Things to remember when “bat-proofing”

- During summer, many young bats are unable to fly. If you exclude adult bats during this time, the young may be trapped inside. Thus, if possible, avoid exclusion from May through August.
- Most bats leave in the fall or winter to hibernate, so these are the best times to “bat-proof” your home.

Common Bat Entry Points



How can I safely capture a bat in my home?

If a bat is present in your home and you cannot rule out the possibility of exposure, leave the bat alone and contact an animal-control or public health agency for assistance. If professional help is unavailable, use precautions to capture the bat safely, as described below.

What you will need:

- leather work gloves (put them on)
- small box or coffee can
- piece of cardboard
- tape

When the bat lands, approach it slowly, while wearing the gloves, and place the box or coffee can over it. Slide the cardboard under the container to trap the bat inside. Tape the cardboard to the container securely, and punch small holes in the cardboard, allowing the bat to breathe. Contact your health department or animal-control authority to make arrangements for rabies testing.

If you see a bat in your home and you are sure no human or pet exposure has occurred, confine the bat to a room by closing all doors and windows leading out of the room except those to the outside. The bat will probably leave soon. If not, it can be caught, as described, and released outdoors away from people and pets.



Silver-haired bats often roost in hollows and cavities of old-growth trees. Their unique coloration makes them difficult to spot.



How can rabies be prevented?

- Teach children never to handle unfamiliar animals, wild or domestic, even if they appear friendly. "Love your own, leave other animals alone" is a good principle for children to learn.
- Wash any wound from an animal thoroughly with soap and water and seek medical attention immediately.
- Have all dead, sick, or easily captured bats tested for rabies if exposure to people or pets occurs.
- Prevent bats from entering living quarters or occupied spaces in homes, churches, schools, and other similar areas where they might contact people and pets.
- Be a responsible pet owner by keeping vaccinations current for all dogs, cats, and ferrets. Keep your cats and ferrets inside and your dogs under direct supervision, call animal control to remove stray animals from your neighborhood, and consider having your pets spayed or neutered.

Case Study

During October 2008, a 55-year old man and his family noticed a bat that roosted in the rafters of their porch for several days before it flew into their house. The man captured the bat and allowed it to crawl up his arm and neck where it bit him on the ear. At the time, the man mentioned the possibility of rabies to his family, but did not report the incidence to public health authorities or seek medical advice. The man left the bat unrestrained in the house for two days before releasing the bat after concluding that it was not sick. Four to six weeks later, the man became sick and died of rabies. Diagnostic testing confirmed a rabies virus variant associated with bats.

This case demonstrates several points:

- Unlike cats, dogs, and ferrets there is no observation period that can safely rule out the possibility of rabies transmission from a bat or other wild animal exposures.
- Persons should never handle wild animals. If contact with the bat had been avoided the bite most likely would not have occurred. If a wild animal is easily approachable, rabies should be suspected.
- If the bat had been submitted for rabies testing instead of released, a positive test could have led to life-saving rabies vaccination.

Remember, in situations in which a bat is physically present and you cannot reasonably rule out having been bitten, safely capture the bat for rabies testing and seek medical attention immediately.

The little brown bat is one of America's most abundant and widespread species. It is often found roosting in attics or barns.



Hoary bats have long, white-tinged fur that gives them a frosted appearance. They eat moths and a wide range of other insects.

To learn more about endangered bats and the Endangered Species Act, contact the U S Fish and Wildlife Service:

U S Fish and Wildlife Service
Division of Endangered Species
4401 N. Fairfax Drive, Room 452
Arlington, Virginia 22203
www.fws.gov

Where can I learn more about rabies?

Contact your state or local health department or the Centers for Disease Control and Prevention:
Centers for Disease Control and Prevention
Rabies Section MS G-
1600 Clifton Road
Atlanta, Georgia 30333
www.cdc.gov/rabies
1-800-CDC-INFO

Zoonotic Disease Program
Bureau of Infectious Diseases
Ohio Department of Health
246 North High Street
Columbus, Ohio 43215
(614) 752-1029, option 2
<http://www.odh.ohio.gov/rabies>



Are bats beneficial?

Yes. Worldwide, bats are a major predator of night-flying insects, including pests that cost farmers billions of dollars annually. Throughout the tropics, seed dispersal and pollination activities by bats are vital to rainforest survival. In addition, studies of bats have contributed to medical advances, including the development of navigational aids for the blind. Unfortunately, many local populations of bats have been destroyed and many species are now endangered.

Where can I learn more about bats?

Contact your state or local wildlife conservation agency or Bat Conservation International:

Bat Conservation International, Inc.
PO Box 162603 Austin, Texas 78716
www.batcon.org

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