## 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 when a rabid animal bites them. Any wild mammal, like a raccoon, skunk, fox, coyote, or bat, can transmit rabies to people. It is also possible, but quite rare, for people to get rabies if infectious material such as saliva from a rabid animal gets directly into the 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 treatment if exposure occurs. Tens of thousands of people are successfully treated each year after being bitten by an animal that may have rabies. 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 human rabies cases in the U.S. were caused by

rabies virus from 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. When people think about bats, they often imagine things that are untrue. Bats are not blind. They are not rodents or birds. They will not suck your blood, and most 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

#### How can I tell if a bat has rabies?

them.

Rabies can be confirmed only in a laboratory. However, any bat that is active by day, is found in a place where bats are not usually seen (for example, in a room in your home or on the lawn), or is unable to fly, is more likely than others to be rabid. Such bats are often the most easily approached. Therefore, it is best never to handle any bat.

#### What 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 wound — wash the affected area thoroughly and get medical advice immediately. Whenever possible, the bat should be captured and sent to a laboratory for rabies testing.

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

## What if my pet is exposed to a bat?

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

## What is rabies exposure?

#### **Exposure:**

- A bite from a rabid bat
- Saliva or brain tissue from a rabid bat gets into a scratch, wound, or mucous membrane
- Potential for exposure:
  - » A bat in the room with a sleeping person or an unattended child
  - » A bat near a mentally impaired or intoxicated person
  - » A bat in firewood hand-carried into the house

#### Not an exposure:

- A bat flying nearby
- Bat guano (feces), blood, or urine
- A bat (or bats) seen in your attic or in a cave
- Touching a stick or object that a bat had contacted
- Touching a bat on its fur

Whenever a person has an exposure or reasonable probability of exposure to a bat, the bat should be captured and tested. If a bat is not available for testing, immediate medical consultation is advised.

## **Case Study**

In February 1995, the aunt of a 4-year-old girl was awakened by the sounds of a bat in the room where the child was sleeping. The child did not wake up until the bat was captured, killed, and discarded. The girl reported no bite, and no evidence of a bite wound was found when she was examined. One month later the child became sick and died of rabies. The dead bat was recovered from the yard and tested — it had rabies.

#### This case demonstrates several points:

- This child's infection with rabies was most likely the result of a bat bite. Children sleep heavily and may not awaken from the presence of a small bat.
   A bat bite can be superficial and not easily noticed.
- The bat was behaving abnormally. Instead of hiding, the bat was making unusual noises and was having difficulty flying. This strange behavior should have led to a strong suspicion of rabies.
- If the bat had been submitted for rabies testing,

a positive test would have led to life-saving antirabies treatment.

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.

## 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:

- 1. Down chimney
- 2. Openings around chimney
- 3. Under loose shingles
- 4. Through vents
- unscreened windows
- 7. Under siding

6. Through open,

8. Under or through open doors



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 stainless steel wool or caulking, and ensure that all doors to the outside close tightly.

Additional bat-proofing can prevent bats from roosting in attics of 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, contact Bat Conservation International, listed on the back of this 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 and die or make their way into living guarters. 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.

## What if you find a bat in your home?

If there is any chance that a person or pet had contact with the bat, the bat should be captured safely, without touching it, and tested for rabies.

## You will need the following supplies:

- Leather work gloves
- Container such as a small box, coffee can. or bowl
- Tape

 Piece of cardboard that covers the container; with a pen, punch about a dozen airholes in the cardboard



## Follow these steps:

- 1. Close all doors and windows.
- 2. Put on leather work gloves.
- 3. When the bat lands, approach it slowly and without touching it, place the container over it then slide the cardboard under the container to trap the bat inside. Tape the cardboard to the container, securing the bat inside.
- 4. If you, a member of your family, or a pet had skinto-skin contact with the bat call your local health department or animal control authority to arrange for testing.

5. If you are certain there was no contact between the bat and any people or pets in your home, carefully hold the cardboard over the container and take the bat outdoors and release it away from people and

If you cannot safely contain a bat, call your local animal control authority to remove the bat for you.

## 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; keeping your cats and ferrets inside and your dogs under direct supervision; and calling animal control to remove stray animals from your neighborhood. Consider having your pets spayed or neutered.



# Did you know bats are beneficial?

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 rain forest 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?

# **Wisconsin Department of Natural Resources**

Bureau of Endangered Resources 608-266-7012

www.dnr.state.wi.us/org/land/er/mammals/bat/ myths.htm

#### **Bat Conservation International, Inc.**

www.batcon.org

#### **U.S. Fish and Wildlife Service**

Division of Endangered Species https://www.fws.gov/endangered/index.html

#### Where can I learn more about rabies?

# Wisconsin Department of Agriculture, Trade and **Consumer Protection**

Division of Animal Health 608-224-4888

https://datcp.wi.gov/Pages/Programs\_Services/ Rabies.aspx

# **Wisconsin Department of Health Services** www.dhs.wi.gov/rabies

#### **Centers for Disease Control and Prevention**

National Center for Infectious Diseases Rabies Section www.cdc.gov/rabies

## **Your local health department:**

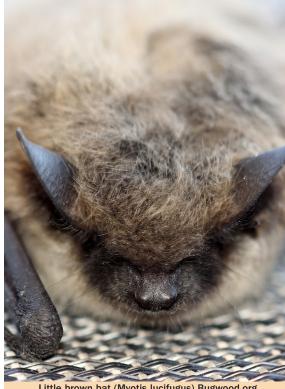
This brochure is adapted from "Bats and Rabies, A public health guide." Published 1998 by Centers for Disease Control and Prevention and revised in 2000 by the Ohio Department of Health.



**Wisconsin Department** of Agriculture, Trade and **Consumer Protection** Division of Animal Health datcp.wi.gov

# **Bats and Rabies**

A Public Health Guide



Little brown bat (Myotis lucifugus) Bugwood.org



Big brown bat (Eptesicus fuscus) Bugwood.org



Common pipistrelle (Pipistrellus pipistrellus) Bugwood.org

Wisconsin Department of Agriculture, Trade and Consumer Protection