

# ENVIRONMENTAL HEALTH

# **FACT SHEET**



# **Bat Encounters**

Bats are small, flying mammals, most weighing less than one ounce. All Illinois bats eat insects. They are active in the warmer months and roost (rest) in trees, caves, under bridges, and in attics while raising their pups. As cool weather sets in, Illinois bats must either migrate to warmer areas or hibernate.

## WHAT BATS ARE PRESENT IN ILLINOIS?

There are 13 bat species commonly found in Illinois, but the big brown bat, little brown bat, eastern red bat, and silver-haired bat are the most commonly encountered species by people.

## WHAT BATS ARE PROTECTED IN ILLINOIS?

All Illinois bats are protected under the Wildlife Code (520 ILCS 5/1.1). Bats may not be shot, trapped, transported, or held in confinement except when a bat is found in an area where they may have contact with humans or domestic pets.



Big Brown Bat

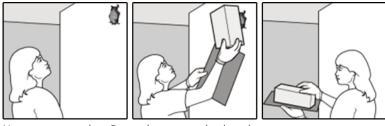
# HOW MIGHT I BE EXPOSED TO BATS?

Bats are nocturnal (active at night) and roost during the day in small cracks and crevices in trees or in caves. However, due to habitat destruction, more bats are having to look for alternative roosting locations. Sometimes the alternate locations put them in contact with humans. Bats may find attics and abandoned buildings with openings greater than ¼ inch as suitable roosting locations for raising their pups.

Bats can accidentally enter a home through an open window, door, chimney, or gaps around pipes. They do not want to remain in the living space of your house and will fly around looking for an exit.

#### WHAT SHOULD I DO IF I HAVE A BAT IN MY HOUSE?

All contact with bats should be avoided. However, if a bat enters your house or work area, it will need to be captured. To capture the bat, try to confine the bat to a room. If you are not able to contain the bat in a room, you can trap the bat in a box and slide cardboard underneath it or capture it in a blanket. Wear leather gloves to handle the bat. Do not touch the bat with your bare hands! If you do not feel comfortable capturing the bat or cannot do it safely, contact the city or county animal control to assist. Once the bat is captured, you need to call your city or county health department so they can evaluate the exposure. Do not release the bat until you have spoken to the local health department.



How to capture a bat. Remember to wear leather gloves. Credit: J. Scott Altenbach/ Bat Conservation International

If a bat colony is present in a part of the house you do not actively live in (e.g. attic), you should seal off any gaps to the space greater than ¼ inch and let the colony stay until their pups are grown. More information can be found under "How do I exclude bats from my house and keep them from coming back?" below.

#### HOW CAN BATS AFFECT MY HEALTH?

Bats can affect human health in multiple ways, including spreading rabies and histoplasmosis.

Rabies is a viral disease causing encephalitis (brain inflammation) in humans and animals. People are usually exposed to the rabies virus when an infected animal, such as a bat, bites them. Exposure may occur if the animal's saliva enters an open cut or mucous membrane (nose, mouth, eyes). The presence of a bat in a home, or any contact with a bat, represents a possible hazard for rabies and should be reported to your city or county health department so that the circumstances can be evaluated. The last human case of rabies in Illinois was reported in 1954. See our Rabies Fact Sheet for more information.

Histoplasmosis is an infection caused by the fungus, Histoplasma capsulatum. The majority of people infected have no symptoms. When symptoms occur, they vary widely, depending on the form of disease. This fungus is most commonly found in bat droppings, and in soil enriched by bird or bat droppings. In people, this uncommon disease affects the lungs, and may occasionally invade other parts of the body. Anyone can get histoplasmosis, but the most severe cases are generally seen in immunosuppressed individuals. See our Histoplasmosis Fact Sheet for more information.

Of less concern are parasites associated with bats. Fleas, lice, mites, and bat bugs can infest bats. Some may transmit diseases to humans. If the host animals are killed or leave their roosts, the parasites look for alternate hosts and may wander into the living spaces of structures. They may bite people and domestic animals, but most parasites cannot survive away from their preferred hosts.

#### WHAT DO I DO IF I HAD CONTACT WITH A BAT?

If you had physical contact with a bat, the affected area should be washed thoroughly with soap and water. If possible, the bat should be captured and tested for rabies. Your city or county health department, animal control office, or veterinarian can assist you with capturing and submitting the bat to a laboratory for rabies testing. If the bat tests positive for rabies and your contact could have resulted in transmission of the virus, it will be recommended you receive rabies prophylaxis vaccination. If the bat tests negative for rabies, no further action is required. If the bat cannot be captured, the city or county local health department will evaluate the exposure and determine if rabies prophylaxis is recommended.

## HOW DO I EXCLUDE BATS FROM MY HOUSE AND KEEP THEM FROM COMING BACK?

Exclusion remains the best way to prevent and control bats in a structure. However, it can only be performed at certain times of the year (please see "When can I perform exclusion?" below). Bats can be excluded by sealing exterior openings larger than ¼ inch by using caulk, expandable foam, plywood, mortar, metal flashing,

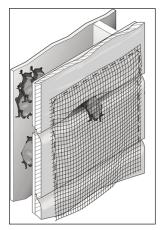
steel wool or ¼ inch mesh screen or netting. Make sure doors, windows, and vents have screens and are securely framed, chimneys are capped, and gaps around utility lines are plugged.

Some skill is required to identify all potential entry points and to apply exclusion materials to openings. Openings through which bats are entering and exiting a structure may be identified from inside the structure by entering the roosting area, an attic for example, on a sunny day when light can be seen through the openings. Another method is to turn on a bright light in the attic at night and look for light escaping through the openings on the building's exterior. Dark stains may be seen around and beneath openings used by bats.



Potential bat entry points. Credit: Washington Department of Fish & Wildlife

These result from bat guano and from "rub marks" where oils and dirt accumulate as bats pass through the openings. Another method of finding bat entry points is to watch for bats leaving the structure at dusk to make their evening feeding flights.



Example of a one-way valve. Credit: Washington Department of Fish & Wildlife and Bat Conservation International

When all openings are identified, a "one-way valve" can be applied to each opening. One-way devices are those that allow bats to leave the structure and prevent them from reentering. These can be as simple as a sheet of plastic or plastic bag attached above the opening and allowed to hang flush against the building's exterior. The plastic should be wider than the opening and long enough to hang at least one foot below it. The sides (but not the bottom) of the plastic can be attached to the building by staples or duct tape to prevent wind from lifting the flap. At dusk, the bats will find their way out beneath the plastic flap but will not be able to lift the flap to reenter the structure.

Similar devices can be constructed from screening or polypropylene netting of ¼ inch mesh, or a short length of PVC pipe can be positioned in the opening. A tube sock should be fitted around the outside end of the pipe and allowed to hang down with the toe cut out. Bats will exit the pipe and crawl through the sock to get out but will not be able to reenter through the collapsed opening in the toe of the sock.

Once all resident bats have exited the structure, the one-way devices can be removed and the openings immediately sealed as described above.

## WHEN CAN I PERFORM EXCLUSION?

You can remove a bat from your living space any time of the year. A living space is any room in your house that you actively use. If a bat or bat colony is in a non-living space, such as an attic, permanent eviction can only occur from March 15 to May 15 when outdoor temperatures exceed 50° F at dusk, and August 5 through October 30 when outdoor temperatures exceed 50° F at dusk. This guideline is in place to protect pups while they are still unable to fly.

#### WHO CAN PERFORM BAT EXCLUSION?

You can try to perform the exclusion yourself. However, if all openings are not found and sealed, bat problems will continue. The University of Illinois Extension Office's Living with Wildlife in Illinois page maintains a list of bat exclusion contractors.

#### WHERE CAN I GET MORE INFORMATION?

For immediate assistance in removing a bat, please contact your city/county local animal control. For assistance determining if bat exposure has occurred and more information on human or animal bat exposure and rabies prophylaxis, please contact your city/county local health department.

For more information on bat exclusion, contact the Illinois Department of Public Health, Division of Environmental Health, 525 W. Jefferson St., Springfield, IL 62761 217-782-5830; TTY (hearing-impaired use only) 800-547-0466.

