

Rabies: Early Treatment is Essential

What is rabies?

Rabies is nearly always a fatal disease caused by a virus. The disease affects the nervous system. Symptoms include headache, fever, difficulty swallowing, drooling, muscle spasm or weakness, and strange behaviour. If not treated in time, rabies kills almost all of its victims.

How is it spread?

Wild animals, domestic pets and farm animals have all been known to carry the disease. Rabies is spread from an infected animal only when the virus in the animal's saliva gets into bite wounds, cuts in skin, or the lining of the nose, throat, or eyes. Contact with blood, urine, or feces of a rabid animal is not a reason for treatment.

In B.C., the only animal species that carries rabies is bats. Rabid bats have been found in all parts of the province, so you should suspect any bat of being a potential source of rabies.

How common is rabies?

B.C. has had two cases of human rabies since 1985, and over 200 people a year are treated for suspected exposure to the virus. All bat-associated bites, scratches and physical contacts are considered dangerous. It is rare in B.C. to catch the rabies virus through bites from other animals, but keep in mind that unusual behaviour in pets and other animals may mean they have rabies.

Animals with rabies often act very strangely. They may attack humans without reason. Symptoms of rabies in animals include paralysis, especially of the hind limbs and throat muscles. Some mammals may become aggressive. Rabid bats may appear normal except for a gradual weakness and loss of flying ability. Avoid contact with any wild or unfamiliar animal.

Have you been exposed to rabies?

Contact your local health unit or family doctor if you have been bitten or scratched by an animal that is behaving strangely or seems to be sick.

As bats have tiny sharp teeth, bite or scratch marks usually go unnoticed. For this reason, if a person has contact with a bat and cannot rule out the possibility that they have been bitten, scratched or licked, they should be treated. Examples of this type of contact

are a child alone in a room with a bat, or waking up and finding a bat in a room or tent.

Squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats, mice, rabbits and hares have not been known to give rabies to people. Their bites rarely call for treatment against rabies.

It is crucial to begin treatment for possible rabies as soon as possible. It typically takes from three to eight weeks before rabies symptoms start. If you wait until the symptoms begin to appear, it is usually too late to start effective medical treatment. If there is *any* chance that you may have been exposed to the rabies virus, contact your local health unit or family doctor. They will be able to decide if you need rabies treatment.

What is the treatment for rabies?

If you are bitten or scratched by an animal that you think may have rabies, you should:

1. Wash the wound well with soap and warm water for at least five minutes. This lessens the chance of any infection.
2. Seek medical attention right away.

If treated in time, rabies in humans can be prevented.

If you require treatment, two products are used:

- Rabies immune globulin; and
- Rabies vaccine

Rabies Immune Globulin (RIG):

- RIG is a sterile solution of naturally produced antibodies taken from donated human blood. All donated blood is tested for hepatitis B, hepatitis C and HIV, and any blood testing positive is destroyed. As well, RIG is treated with a solvent/detergent and then heated to high temperatures for several hours, killing any viruses or bacteria that may still have been present.

- RIG helps to neutralize the rabies virus before it becomes established in the person's body. If there is a wound, it is injected just under the skin around the wound site. If there is no visible wound, it is injected into the buttock muscle in adults, and into the thigh muscle of children. The amount of RIG a person receives is based on their weight. For this reason, more than one injection is usually needed to give the amount required for protection.

- Side effects may include fever, headache, feeling unwell, rash, or chills. There may be some tenderness, soreness or stiffness where the injection was given.

Rabies Vaccine:

- Five doses of rabies vaccine are given by injection over a 28-day period. The vaccine helps your immune system to make antibodies against the rabies virus.
- Adults and older children get the injection in the muscle of the upper arm; infants and children less than 18 months of age get the injection in the thigh muscle.
- Side effects may include fever, headache, nausea, muscle aches and dizziness. There may be tenderness and swelling where the needle was given.

How you can prevent rabies

The following suggestions will help protect you from rabies.

- Vaccinate your cat, dog, or ferret against rabies and keep its rabies immunization up to date. Otherwise, a rabid animal could infect your pet, and your pet could also infect you.
- If you *do* find a bat, dead or alive, ***don't touch it!*** The rabies virus can be transmitted by the animal's saliva (spit) or blood through a cut on your hand or an open sore, even if you're not actually bitten.
- If you find a dead bat out in the woods or away from populated areas, just leave it where it is.
- If you find a dead bat in your yard or near your home where your children or pets may find it, you should pick it up with a shovel and bury it. Again, ***don't touch it!*** Wash your hands well with soap and warm water afterwards.
- If you can't bury the bat, pick it up with a stick, (wear disposable gloves) and put it in a plastic bag. Put this bag in a second plastic bag and seal it tight. Then put it in the garbage (unless prohibited by local by-law). After you have disposed of the stick and gloves, wash your hands well with soap and warm water for at least five minutes.
- If you find a bat in the same room as a sleeping person, an unattended child, or a mentally disabled or intoxicated person, contact your local health unit or family doctor immediately because *that person may have been bitten by the bat and not know it*. Bat bites may be hard to see because bats have very small sharp teeth.
- Bats should not be allowed to live in or near dwellings, or other areas where there are children, such as schools. If bats are in your home, get professional bat control advice. Check pest control in the Yellow Pages under "Pest Control" or visit the Web site below.

- If your cat brings a dead bat home, check with your veterinarian about rabies shots for your cat and whether your cat should be quarantined.
- If you will be travelling for a month or more to areas where rabies is often found in a number of different animals, consider being vaccinated for rabies before you go. Consult your local health unit or a travel clinic.

What if you were bitten in another country?

Rabies is not well controlled in many other parts of the world. Dog bites cause most human rabies in developing countries. If you are attacked and bitten by *any* animal, you should get medical advice about rabies treatment, no matter how long it has been since you were bitten.

Bats in general

Even though bats are the most common carrier of rabies in BC, not all bats have rabies. Bats play key roles in ecosystems around the globe, from rain forests to deserts, especially by eating insects, such as agricultural pests. The best protection we can offer bats is to learn more about their habits and recognize the value of living safely with them. For more information about bats, and how to deal with bats that may be living in your home or nearby, see the Web site of the US Center for Disease Control at:

www.cdc.gov/ncidod/dvrd/rabies/Bats&Rabies/bats.htm



BC Centre for Disease Control
AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY

For more BC HealthFile topics visit
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