Rabies

What is rabies?
Rabies is a disease of the nervous system caused by a virus and can occur in humans and animals. In humans, rabies usually results from exposure to an animal with rabies. Rabies in humans is fatal almost 100% of the time.

What is an exposure to rabies?
There are two types of exposure (bite and non-bite). A bite is any puncture of the skin by teeth. A non-bite exposure occurs when saliva, brain tissue, or spinal fluid from an animal with rabies enters any scratch, abrasion, open wound, eyes, or the mouth.

How is rabies spread?
Rabies virus is spread to people from the saliva of infected animals; usually through a bite. Animals most likely to transmit rabies in the United States include bats, coyotes, foxes, raccoons and skunks. All domestic animals such as dogs, cats, horses, and cattle can also be infected.

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.

What are the signs and symptoms of rabies?
The first symptoms of rabies may be very similar to those of influenza, including general weakness or discomfort, fever, or headache, and may last for days. Later signs and symptoms may include:
- Nausea
- Vomiting
- Agitation
- Anxiety
- Confusion
- Hyperactivity
- Difficulty swallowing
- Hallucinations
- Difficulty sleeping
- Partial paralysis

How long after infection do symptoms appear?
The early period of disease typically ends after 2 to 10 days. Once clinical signs of rabies appear, the disease is nearly always fatal.

Who is most at risk?
Anyone can get rabies after an exposure to a rabid animal. The likelihood that rabies will occur depends on the type of contact or exposure.

How can you tell if an animal is rabid?
Although some animals with rabies look and act normal, most develop one of two forms of the disease. One form is "furious rabies" in which the infected animal is easily excited or angered. The other is "dumb rabies" in which the infected animal becomes paralyzed. Usually animals infected with rabies become irritable, restless, and nervous. The only way to tell if an animal has rabies is to kill it in a humane manner and test its brain for the rabies virus.
What should you do if you are exposed to a rabid animal?
Immediately wash all bite wounds and scratches thoroughly with soap and water. Seek medical attention as soon as possible to determine if you need rabies vaccination.

What type of health problems are caused by rabies?
Once a person begins to show signs of the disease, survival is rare.

How is rabies infection diagnosed?
Several tests are necessary to diagnose rabies before death in humans; no single test is sufficient. Tests are performed on samples of saliva, serum, spinal fluid, and skin biopsies of hair follicles at the nape of the neck.

How is rabies treated?
If you have been exposed to rabies, it is urgent that you contact medical help as soon as possible. Your healthcare provider, possibly in consultation with your state or local health department, will decide if you need a rabies vaccination. Decisions to start vaccination, known as post-exposure prophylaxis (PEP), will be based on your type of exposure and the animal you were exposed to.

How can rabies be prevented?
Vaccination of dogs and cats against rabies is the best way to reduce human exposure and follow these tips:
- Avoid contact with wild animals, and do not keep wild animals as pets. Control of stray animals can decrease both animal and human exposures to rabies.
- Report any animals which have contact with an animal that might have rabies to the local animal control agency.
- Anyone who has contact with an animal that might be rabid should contact the local or state health department.

Where can I get more information?
- Your personal healthcare provider
- Centers for Disease Control and Prevention
- Mayo Clinic

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