Rabies: Treatment and Prevention

Can rabies be treated?

With prompt treatment following exposure, progression of the infection can be prevented.

- If, however, infection is allowed to progress to the appearance of clinical symptoms, rabies is inevitably fatal. In such cases treatment would be strictly supportive, to make the patient as comfortable as possible.
  - Death usually takes place within a week of the onset of symptoms.

What should you do if you get bitten by a wild animal?

If bitten--or scratched--by any animal:

- Clean the wound immediately with soap and water to remove saliva.
- Further clean the wound by allowing it to bleed.
- Contact a healthcare provider right away, to discuss the need for rabies treatment (also referred to as postexposure prophylaxis).
- Because bat teeth are small and may not leave obvious bite marks, a healthcare provider also should be consulted regarding the need for postexposure prophylaxis if an individual:
  - Wakes up and sees a bat in the room
  - Finds a bat in the room of an unsupervised child
  - Sees a bat near a mentally impaired or intoxicated person

What is postexposure prophylaxis?

Postexposure prophylaxis consists of one shot of human-rabies immunoglobulin and five doses of rabies vaccine.

Human-Rabies Immunoglobulin:

- Should be given as soon as possible after exposure, preferably within 24 to 48 hours
- Contains anti-rabies antibodies collected from donated human blood. These antibodies confer passive immunity against rabies, to provide immediate (though temporary) protection against the progression of rabies infection.
Rabies Vaccine:

- Is given in 5 doses, the first dose along with Human-rabies immunoglobulin, the remaining doses 3, 7, 14, and 28 days after the first shot.
- Stimulates the body to produce its own antibodies against rabies virus (active immunity). Active immunity takes longer to develop than does passive immunity (hence the need for human-rabies immunoglobulin, to provide immediate protection), but protects against development of rabies for a longer period of time.

**How does a healthcare provider determine whether the shots are necessary?**

Because definitive diagnosis of rabies infection cannot be made until late in the disease (when treatment is no longer possible and death is inevitable), the decision to pursue therapy in a human patient must be made based on other factors. If possible, the animal involved in the biting/scratching incident is captured and tested for rabies.

- (If the animal does not have rabies, treatment is not necessary.)

Often, however, identification and/or safe capture of the animal is not possible. Under these circumstances, factors to be considered in determining the need for therapy include:

- Species of Animal
- Whether or Not the Encounter was Provoked
  - (Healthy animals generally will not attack humans unless provoked. Rabid animals, on the other hand, are more likely to exhibit strange behavior, such as attacking humans without provocation.)
- Vaccination Status of a Domestic Animal

**How can you lessen your chance of getting rabies?**

To minimize the risk of exposure to rabies:

- Keep rabies vaccinations up-to-date for pets such as cats and dogs.
  - Pet vaccination helps protect both the animal and its owner from rabies, in the event that the pet is bitten by a rabid wild animal.
- Keep pets under direct supervision when inside the yard. Keep pets leashed outside the yard.
- Do not leave dogs chained alone in the yard.
If attacked by a rabid animal, a chained dog cannot escape.

- If a pet is bitten by a wild animal, consult a veterinarian immediately.
- Spay or neuter pets, to decrease the number of unwanted animals that may end up as strays.
- Call the local animal control agency to report stray animals or animals acting strangely.
- Avoid making the house or yard attractive to wild animals:
  - Feed pets inside the house.
  - Keep garbage cans tightly closed.
- Avoid direct contact with wild animals or unfamiliar animals:
  - Enjoy wildlife from a safe distance.
  - Never touch a wild animal, even if dead.
- Teach children not to approach or touch unfamiliar animals (wild or domestic).
- Never adopt wild animals. Call a local animal rescue agency for help with an injured or sick animal. Bats found outside should be left alone.
- To help animal-proof the home:
  - Seal basement, porch, and attic openings.
  - Cap chimneys with screens.

* Capture bats found inside your home & call OCHD to find out if they should be tested

Sources:  U.S. Centers for Disease Control and Prevention  
U.S. Food and Drug Administration  
National Institute of Allergy and Infectious Diseases

**The material in this article is provided for informational purposes only. For specific medical advice or diagnosis, consult a healthcare provider. For a physician referral, click the button above.**

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