RABIES

PUBLIC HEALTH BRIEF

Zill Raval, Epidemiologist





OVERVIEW¹

Rabies is a viral disease that is generally transmitted through the bite of a rabid animal. The virus infects the central nervous system of mammals, ultimately causing disease in the brain that can lead to death. The majority of cases occur in wild animals, such as bats, raccoons, skunks, and foxes. However, any mammal can get rabies, including a human, when bitten by an infected animal.

HOW DO YOU KNOW IF AN ANIMAL HAS RABIES?

You would not be able to diagnose if an animal has rabies just by looking at them. Sometimes they may act strange, and/or aggressive and try to bite you or another animal, but the only way to know for sure is through laboratory testing.

Some things to look for if you are unsure if an animal may have rabies or not are:

- general sickness
- problems swallowing
- · excessive drool or saliva
- · an overly aggressive or lethargic animal
- an animal that bites at imaginary objects
- an animal that appears tamer than you would expect
- an animal that is having trouble moving or may even be paralyzed
- a bat that is on the ground

HCHD RABIES CLINICS

Harford County Health Department holds vaccine clinics for animals at least three times a year, to ensure individuals' pets are vaccinated. Please check the HCHD website for updates and dates on upcoming clinics!

Rabies clinics for humans are held on Thursdays from 2-3:30 pm. Our human rabies clinics are designed to vaccinate local vets, techs, volunteers, and environmental employees who could have potential encounters with a rabid animal.

HCHD nurses also do risk assessments for anyone in the county who has had an encounter with a potentially infected animal to determine whether they need the post-exposure vaccine or not.

DATA⁴

Number of animals submitted for rabies testing:

FY21: 166 FY22: 185 FY23: 181

Number of animals tested positive for rabies:

FY21: 10 FY22: 17 FY23: 16

Number of rabies vaccines administered:

FY21: 941 FY22: 907 FY23: 894

PREVENTION¹

There are many ways to protect your pet from rabies. Ensure your pet maintains a current rabies vaccination as required by law, avoid any wild animals when your pet is outside, and contact animal control to remove any stray dog or cat from your neighborhood.

SPOTLIGHT: RABIES IN HUMANS

Humans can just as likely get exposed to rabies as animals can. The incubation period (the time it takes between exposure and symptoms to appear) could take weeks or even months. The incubation period depends on the location of the exposure site, depending on how close to the brain it is, the type of rabies virus, and any existing immunity. A person may experience flu-like symptoms once the incubation is over. This could include, weakness or discomfort, fever, headache, and irritation or itching at the site of the bite.

Symptoms eventually can reach the brain, causing cerebral dysfunction, such as anxiety, confusion, and agitation. If the disease worsens, it can cause delirium, abnormal behavior, hallucinations, hydrophobia, and insomnia. The acute period lasts 2-10 days. The disease is nearly always fatal and treatment is supportive. Less than 20 cases of human survival from clinical rabies have been documented. Only a few survivors had no history of pre- or postexposure prophylaxis.

For human prevention, the best thing to do is stay away from all wild animals. If you are someone who is at high risk (veterinarian, animal handler, rabies laboratory worker, or your work requires you to be around wild animals), you can receive the rabies vaccine. The rabies vaccine can be given intramuscularly as a precaution, before exposure (2 doses total), or after a person has been exposed (4 doses total).

If you have any further questions, please contact your local health department.

Sources:

- 1. Rabies. Center for Disease Control and Prevention. https://www.cdc.gov/rabies/index.html
- 2. Rabies Signs and Symptoms. Center for Disease Control and Prevention. https://www.cdc.gov/rabies/symptoms/index.html
- 3. Rabies Vaccine. Center for Disease Control and Prevention. Immunize.org
- 4. County Statistics, Harford County Health Department.