



Human Rabies

Definition

Rabies is a preventable viral disease of mammals most often spread through the bite or scratch of an infected animal. The virus affects the brain and spinal cord and can cause death if left untreated. Due to animal vaccination and prompt reporting and medical care, there has not been a case of human rabies in Maine since 1937.

Signs and symptoms

The early symptoms of rabies in people are similar to that of many other illnesses, including fever, headache, and general discomfort. As the disease progresses, more specific symptoms appear which can include insomnia, anxiety, confusion, paralysis, hallucinations, agitation, increase in saliva, difficulty swallowing, and fear of water. Rabies is usually fatal within days after symptoms appear.

Transmission

The rabies virus is transmitted through saliva or brain/ nervous system tissue. You can only get rabies by coming in contact with these specific bodily excretions and tissues.

Diagnosis

In humans, several tests are required. Tests are performed on samples of saliva, serum, spinal fluid, and skin biopsies of hair follicles at the nape of the neck.

Treatment

Treatment after an exposure, called “post-exposure prophylaxis,” or PEP, consists of wound cleaning followed by one dose of immune globulin and four doses of rabies vaccine over a 14-day period. There is no single effective treatment once clinical signs appear, but an experimental protocol called the Milwaukee Protocol has saved lives since it was developed in 2004.

Role of the School Nurse

- Report a suspect case to Maine CDC right away
- Teach students not to touch wild animals or any animal that they do not know
- Teach students to make sure pets are up to date on their rabies vaccinations
- Restrict wild animals from entering the school or school grounds
- Report stray or wild animals seen in close proximity to school grounds to the principal
- Suggest pest management to the principal if evidence of bats is seen in the school

Exclusions

No exclusions. If there is a case of human rabies, the individual will require intensive medical care and a full epidemiologic investigation will be conducted. Epidemiologists may recommend rabies PEP for persons where a bite, open wound, or mucous membrane exposure cannot be definitively ruled out.

Reporting Requirements

Human rabies should be reported immediately upon suspicion to Maine CDC by phone at 1-800-821-5821.

Resources

- Maine CDC Rabies website: www.maine.gov/dhhs/rabies
- Federal CDC Rabies website: <http://www.cdc.gov/rabies>