Rabies Awareness

What is Rabies?

Rabies is a deadly disease caused by a virus that attacks the central nervous system. The virus lives primarily in the saliva, brain tissue, and spinal fluid of a rabid animal.

Infection from the virus causes an acute, progressive encephalomyelitis that is almost always fatal. The incubation period in humans can be several weeks to several months.

Primary routes of exposure from a rabid animal are a skin-breaking wound (bite, scratch, etc.) or contact from an animal's saliva onto an open wound or person's mucous membrane.

A secondary route of rabies exposure is through unprotected contact with potentially infected brain or nervous system tissue. Blood, urine, and feces are not considered infectious. Merely handling an infected animal normally does not constitute an exposure; however, any contact with bats should be considered an exposure.

Rabies is prevalent in Texas. The disease is common in bats, skunks, foxes, raccoons, coyotes, and wolves. Rabies is also found in common household pets such as dogs, cats, and ferrets.

Though less prevalent, livestock such as cows and horses can be affected. Small mammals such as chipmunks, gerbils, guinea pigs, hamsters, mice, rabbits, rats, and squirrels rarely become infected with rabies.

Non-mammals such as birds, fish, insects, lizards, snakes, and turtles never get rabies.

Work Safe, Work Smart

All individuals handling animals, living or deceased, which have been identified as "rabies suspect" should wear nitrile gloves, a fluid resistant lab coat or gown, surgical mask and face shield, and goggles or safety glasses during all procedures where a potential exists for exposure to the animal's saliva, nasal secretions, or mucous membranes.

People conducting or standing within six feet of a procedure being performed on rabies suspect animals (bats, skunks, foxes, racoons, coyotes, wolves, dogs, cats, ferrets, cows, and horses) with the potential to expose brain tissue, neurological tissue, or their respective fluids, should use the following personal protective equipment: a surgical mask, eye protection, nitrile gloves, and a solid front gown or lab coat.

Consideration should be given to the use of kevlar or other cut resistant gloves to prevent cuts or sticks from instruments or bone fragments.

If possible, the number of people involved in the procedure and specimen collections should be limited.

People deemed to be at frequent risk of exposure in their general work activities, as determined by risk assessment, will be offered pre-exposure rabies immunoprophylaxis.

A series of three vaccinations over 28 days is used for pre-exposure prophylaxis. Completion

of the series prior to working under potential exposure conditions is not required.

Continuing surveillance of immunity to rabies is offered to those at frequent risk of exposure in their general work activities. Rabies titers are drawn every two years and booster vaccinations are offered when needed.

People deemed to be at low risk of exposure in their general work activities, as determined by risk assessment, will be given educational information describing risk mitigations and incident response instructions for potential rabies exposure.

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Employees at Risk

People who work with potentially infected animals, either in a clinical or field setting, have a potential to be exposed to rabies. This includes veterinary, clinical, and teaching faculty and staff, veterinary students, people conducting field research of rabies-risk species, support staff for agriculture animal care, and pest control staff.

Potential Exposure to Rabies

A potential exposure to rabies is:

- Any skin piercing injury (bite, nip, scratch) from a bat, skunk, fox, racoon, coyote, wolf, dog, cat, ferret, cow, or horse.
- Any contact with saliva, slobber, mucous membrances, any nervous system tissues or fluids (brain, spinal cord, etc.) from any of the animals listed above.
- Any known or suspected contact with a bat, with or without visible evidence of a wound.



If you believe you have been exposed to rabies at work, make sure to:

- Rinse the affected area with plenty of soap and water (if the exposure is in or near the eyes, use water only), and notify your supervisor as soon as possible.
- Report the exposure immediately to the Biosafety Occupational Health Program (BOHP). You will then be referred to a qualified occupational medicine provider for consultation and any necessary treatment.
- Contact the BOHP at 979.845.6649, 979.862.6455, or 979.845.6475 or email the office at bohp@tamu.edu. More information is available at the BOHP web page at rcb.tamu.edu/bohp.

Pre-exposure vaccination for rabies does not prevent the development of rabies if you are exposed to an infected animal.

Vaccination of pet animals or livestock against rabies does not completely eliminate the risk of rabies being transmitted by these animals. Even a bite from an animal which is currently or has previously been vaccinated MUST be reported.

Those people who are vaccinated and demonstrate a titer for rabies antibodies MUST receive post-exposure treatment if an exposure to rabies is confirmed. It is important not to wait for signs or symptoms of the disease to develop.

Sources

Human Rabies Prevention — United States, 2008

Recommendations of the Advisory Committee on Immunization Practices (May 23, 2008) Authors: Susan E. Manning, MD, Charles E. Rupprecht, VMD, Daniel Fishbein, MD, Cathleen A. Hanlon, VMD, Boonlert Lumlertdacha, DVM, Marta Guerra, DVM, Martin I. Meltzer, PhD, Praveen Dhankhar, PhD, Sagar A. Vaidya, MD, Suzanne R. Jenkins, VMD, Benjamin Sun, DVM, Harry F. Hull, MD

Retrieved December 2, 2009 from the Centers for Disease Control and Prevention's online Morbidity and Mortality Weekly Report, Vol 57, pp 1-26, 28 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm

Rabies Prevention in Texas – 2012

(Revised 8/24/2012) Texas Department of State Health Services Zoonosis Control Retrieved December 12, 2012 from the Texas Department of State Health Services website http://www.dshs.state.tx.us/idcu/disease/rabies/information/prevention/pamphlet/

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