Rabies Prevention and Reporting Protocols

0830-0930 HRS  10/18/07  University of Delaware

Introduction: Thomas Postell, Rabies Program Director

From: Delaware Department of Health and Social Services
Division of Public Health, Dover, DE

Why we are here: To improve awareness and understanding of rabies, and to educate
about protocols involved with rabies exposure and reporting.

History of rabies: There is confirmed documentation of rabies by the Ancient Greeks
as early as 2300 B.C. The word ‘RABIES’ is derived from the
ancient Greek word for ‘RAGE’. Rabies virus causes a viral
encephalomyelitis that is ALWAYS FATAL if left untreated
(70,000 annually worldwide)! But there are not many human
deaths in the U.S., due to Public Health measures and the advent of
efficacious vaccines (human and animal). The last recorded human
rabies case (death) in DE was in 1941. Rabies became endemic in
DE in 1988 due to raccoon migration. More than 200 strains of the
Lyssa-type virus that causes rabies disease.

Supporting Documentation:
DE Code (http://www.delcode.state.de.us/), Title 3, Part VI,
Chapter 82, Subchapter I.
CDC ACIP Recommendations (http://www.cdc.gov)
NASPHV Compendium of Animal Rabies Prevention and Control
(http://www.NASPHV.org)

Exposure: Saliva transfer through a break* in skin or to the surface of a
mucous membrane.
Bite, scratch, non-bite, secondary exposures.

Rabies Disease: Incubation period: Humans: 20 days to 12 weeks. (9 days min. to
19 years max.) Latent canine strain, 1½ to 3 years.
Dog/cat/ferret: 1½ weeks to 5 months, with viral shedding period
of 6 days or less prior to death.
Wildlife: variable.
Progressive nerve infection-to CNS-to Brain-to Salivary Glands
Symptoms: Fever, neurological, headache, paralysis, coma, death
Animal: Behavioral- Furious vs. Dumb

Procedures: Reporting: Mandatory by anyone/everyone (DE Code, Title 3,
Chapter 82, Section 8203). Report of Potential Human Exposure
to Rabies faxed to DPH. Can't assume that someone else will report: 2X better than 0
Dog/cat/ferret exposure: 10-day quarantine (trapping/unique identifiability), regardless of vaccination status (dictates location). (Vaccine failure/breakthrough infection possibility).
Euthanasia and testing is not an acceptable substitute. Failure of animal to complete quarantine will result in testing.
Wildlife: Test if captured/killed at time of incident; if not; Post Exposure Prophylaxis (PEP) with HRIG and Vaccine.
Vaccines: HDCV, PCEC, RVA - 1mL IM given in Deltoid or Thigh (NO Gluteals) on Days 0, 3, 7, 14, 28
Human Rabies Immune Globulin (HRIG) 20 IU/kg Infiltrated into wound. Used due to 7-10 day delay in human Anamnestic Response. Passive immunity w/ half life of 21 days. May be administered through 7th day after 1st vaccine dose. ONCE ONLY!
Treatment: No previous vax; HRIG and 5 vaccine injections
Previous vax; NO HRIG, 2 vaccine injections given on days 0, 3

Exposure Risk Potential:

High: Raccoon, Bat*, Cat, Fox, Skunk, Groundhog, Beaver, Dog, Rabbit*, Horse, Cow, Deer, Ferret, Opossum (Mostly Carnivores)

Low: Small Rodents (Mouse, Rat, Hamster, Mole, Vole, Shrew, Guinea Pig, Gerbil, Squirrel, Chipmunk), Muskrat

Zero: Reptiles, Amphibians, Fish, Birds, Insects

Human to human: Only documented in organ transplantation.

Animal Vaccination: All cats, dogs, and ferrets aged 6 months or greater must be vaccinated for rabies at all times (12 weeks min. age). 1st vaccination is valid for 1 year only. Subsequent boosters valid for time indicated by vaccine manufacturer. Vet must issue certificate to owner (no tags). Owner must present certificate upon request.

Phone numbers: DPH Rabies Program Phone: 744-4545 Fax: 739-3171
KCSPCA: 698-3006 or Toll-Free: 888 352-7722
DE SPCA: 998-2281 (Wilmington City Limits)
Newark PD: 366-7111 (Newark City Limits)
Delaware Division of Public Health Algorithm for Human Rabies Post-Exposure Prophylaxis

Was a person bitten, scratched, or licked on an open wound or mucous membrane by a dog, cat, bat, or other mammal?

- NO
- YES

Did consultation with State Public Health Authorities indicate a risk of Rabies in the species in the geographic area?

- NO
- YES

Was the animal a dog, cat or ferret?

- NO
- YES

Was the animal captured?

- NO
- YES

Was the dog, cat or ferret captured?

- NO
- YES

Inform local animal control to attempt capture for 10 days, if possible.

- YES
- NO

Was Rabies confirmed by Direct Fluorescent Antibody testing of the animal brain?

- NO
- YES

Did the dog, cat or ferret sicken or die with signs of Rabies within the 10-day quarantine period after the exposure?

- NO
- YES

Important Note: Incidents involving bats should be referred to Public Health Rabies Program personnel for individual epidemiological investigative consultation at (302) 744-4545. This holds true for those cases involving documented exposures, and for bats merely found in the home or other occupied space without any documented exposure.