Rabies Prevention and Reporting Protocols

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

Introduction:

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From:

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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 LLS, due to Public Health measures and the advent of

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, $1\frac{1}{2}$ 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

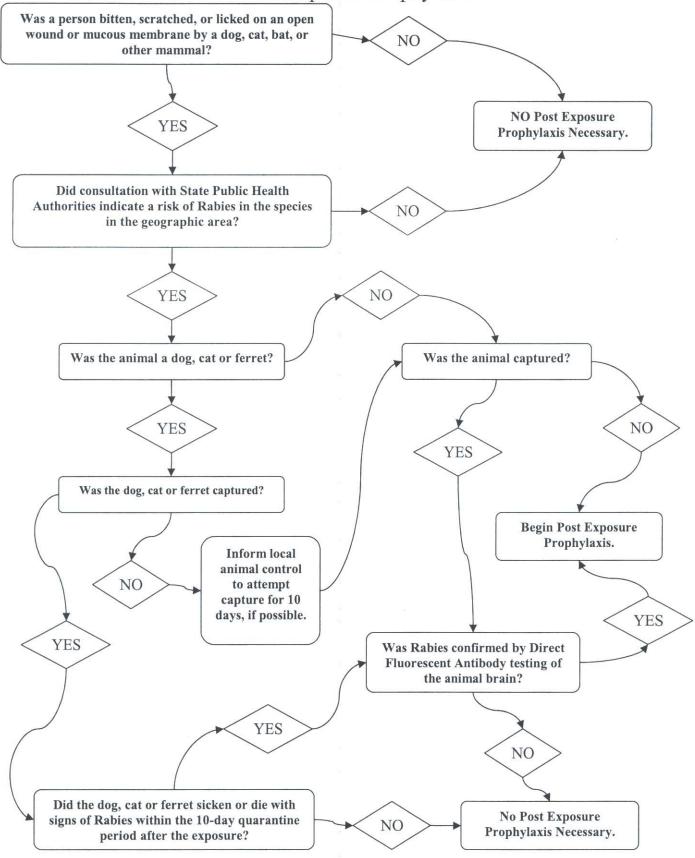
Human to human: Only documented in organ transplantation.

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



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.