Rabies I: Prevention
Zenithson Ng

- Age and vaccination status
    - The minimum age an animal can be given a rabies vaccine is 12 weeks of age, with some counties stipulating 16 weeks.
    - ALL dogs and cats MUST be vaccinated by 6 months of age.
    - A dog or cat is not considered "currently vaccinated" until 28 days after the initial vaccine.
- Who can administer rabies vaccination and certificate
    - The state does not specify who is authorized to administer a rabies vaccine. The animal is considered vaccinated if a licensed veterinarian signs the official rabies certificate.
    - A veterinarian is not permitted to sign a rabies certificate that was not given under his or her jurisdiction (no re-writing of certificates done at another clinic)
    - For imported pets, veterinarians should request the ORIGINAL rabies vaccination certificates (and English translations). Veterinarians should strongly recommend that a dog be vaccinated against rabies if:
        - The client is unable to provide the original certificate
        - The certificate comes from an unknown source; or
        - The reported age does not match the physical appearance of the puppy
- Types of rabies vaccines
    - The State of Tennessee recognizes the approved length of all rabies vaccinations as it appears on the label or package insert (e.g., 1 year or 3 years).
    - There is not much difference between the one year and three year rabies vaccines; what differences do exist are proprietary but may only involve higher concentrations of adjuvant in some 3-year vaccines.
- Waivers for rabies vaccination
    - Tennessee has no legal provision that allows veterinarians to exempt, or waiver, the rabies vaccination requirement for a domestic dog or cat.
    - A waiver of rabies vaccination (see the template of the AVMA's Annual Rabies Vaccination Waiver form) should only be issued when a licensed veterinarian with a valid veterinarian-client-patient relationship with the animal and the appropriate public health authorities concur that the waiver should be issued. The client must be informed that, even if a waiver is issued, the waiver only serves to allow the animal to be properly licensed in compliance with animal control regulations.
    - Antibody titers are not accepted in lieu of rabies vaccination in Tennessee.
    - The Rabies Challenge Fund Charitable Trust will determine the duration of immunity conveyed by rabies vaccines. The goal is to extend the required interval for rabies boosters to 5 and then to 7 years. The Rabies Challenge Fund Charitable Trust is a federally registered 501(c)(3) charitable organization

Rabies II: Exposure

Zenithson Ng

- Prevalence of rabies:
  - Across the US and Puerto Rico in 2012, 6162 animals were confirmed rabies positive. Wildlife (5643) made up 92% of the positive population (Raccoons accounted for the majority of all the cases (32%), followed next by bats, skunks, foxes, "other," and rodents and lagomorphs). Cats (257) made up 4.2% of the positive population. Dogs (84) made up 1.4% of the positive population.
  - Across Tennessee in 2012, 48 animals were confirmed rabies positive (1 cat, 2 dogs, 2 horses, 2 raccoons, 10 bats, 31 skunks).
- Exposure:
  - Classified as bite or non-bite exposure
  - Rabies is ONLY present in saliva and nervous tissues
  - Contact with blood, urine, or feces does not constitute an exposure
- Management of an animal potentially exposed to a rabid animal





Rabies Exposure Flow Chart

For animals exposed or suspected to have been exposed to a rabid animal

****Local or state public health authorities should be consulted immediately****

Domestic animals—Dogs, cats, ferrets, livestock

CURRENTLY VACCINATED*

Revaccinate immediately. Observe for 45 days under owner's control.

Any illness in animal during observation period should be reported immediately to the local health department.

OVERDUE FOR VACCINATIONS

Evaluate on a case-by-case basis in consultation with health authorities.

UNVACCINATED

Dog, cat, or ferret: Euthanize immediately or, if owner unwilling, place in strict isolation for 6 months. Vaccinate upon entry or not later than 28 days before release.

Livestock: Slaughter immediately or confine and observe, on case-by-case basis, for 6 months.

If signs suggestive of rabies develop during isolation period, the animal should be euthanized and tested. Contact local health department for details.

**Wild animals and hybrids (any offspring of wild animals crossbred to domestic animals)*

If exposed to a rabid animal, should be euthanized immediately. If owner unwilling, consult health authorities.

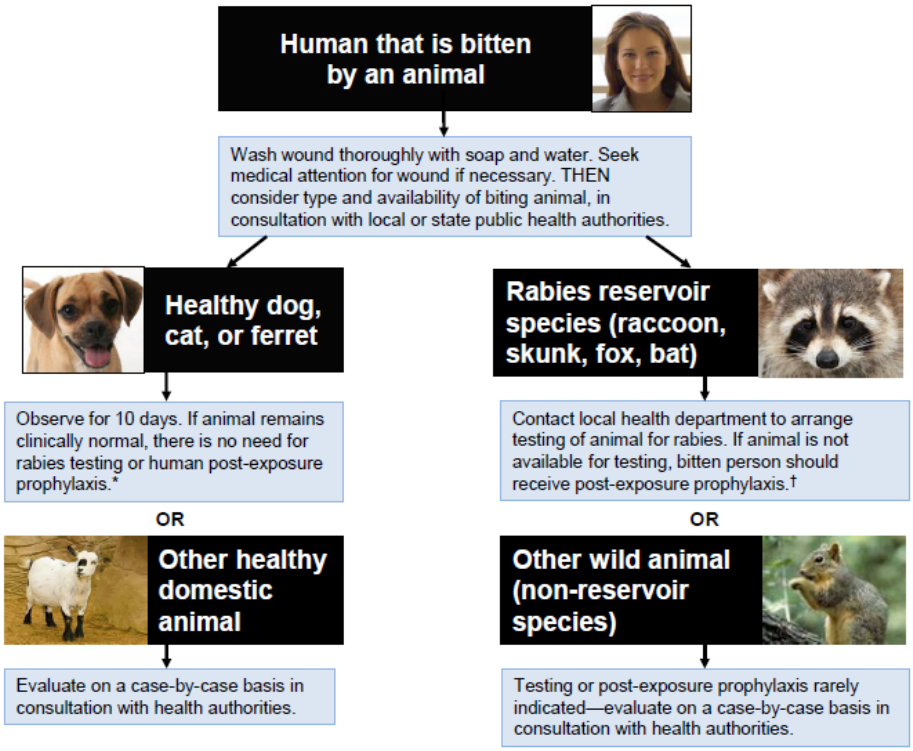
No injectable rabies vaccines are licensed for use in wild animals or hybrids; however, vaccination status may be considered by health authorities in determining disposition of animal.

*Currently vaccinated is defined as initially vaccinated at least 28 days previously or booster vaccinations have been given in accordance with established guidelines.

Updated March 5, 2012

Source: "Compendium of Animal Rabies Prevention and Control 2011"
Available at http://www.nasphv.org/Documents/RabiesCompendium.pdf

- Management of an animal that bites a human



** Any illness in the animal during the confinement period should be evaluated by a veterinarian and reported immediately to the local health department.*

†See "Human Rabies Prevention—United States, 2008", available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm, for additional details and post-exposure prophylaxis protocols for rabies-vaccinated and unvaccinated individuals.

- Post-exposure prophylaxis

Post-exposure prophylaxis for non-immunized individuals
Wound Cleansing: Begin with immediate thorough cleansing of all wounds with soap and water. If available, a virucidal agent such as povidone-iodine solution should be used to irrigate wounds.
HRIG: If possible, the full dose should be infiltrated around wounds. Any remaining volume should be administered IM at an anatomical site distant from the vaccine location.
Vaccine: Human diploid cell vaccine or purified chick embryo cell vaccine – 1.0 mL IM (deltoid), one on each days 0, 3, 7, and 14.*
Post-exposure prophylaxis for previously immunized individuals
Wound Cleansing: Begin with immediate thorough cleansing of all wounds with soap and water. If available, a virucidal agent such as povidone-iodine solution should be used to irrigate wounds.
HRIG: HRIG should NOT be administered
Vaccine: Human diploid cell vaccine or purified chick embryo cell vaccine – 1.0 mL IM (deltoid), one on each days 0 and 3.

- Testing

- The Tennessee Department of Health Division of Laboratory services offers rabies testing services free of charge using the direct fluorescent antibody (DFA) test at any of the 3 labs:
  - TDH Laboratory Services- Nashville
    ATTN: Rabies Lab
    630 Hart Lane, Nashville, TN 37243
    Phone: (615) 262-6300
    Fax: (615) 262-6393
  - Knoxville Regional Laboratory
    ATTN: Rabies Lab
    2101 Medical Center Way, Knoxville, TN 37920
    Phone: (865) 549-5201
    Fax: (865) 549-5199
  - Jackson Regional Laboratory
    ATTN: Rabies Lab
    295 Summar Drive, Jackson, TN 38301
    Phone: (731) 426-0686
    Fax: (731) 421-5199

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Tennessee Department of Health. Rabies Control Manual 2012.