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Jul 12th, 4:40 PM - 5:00 PM

### Rabies Vaccination Protocols and Pitfalls

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<https://trace.tennessee.edu/v-pac/proceedings2014/smallanimal/5>

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## **Rabies I: Prevention**

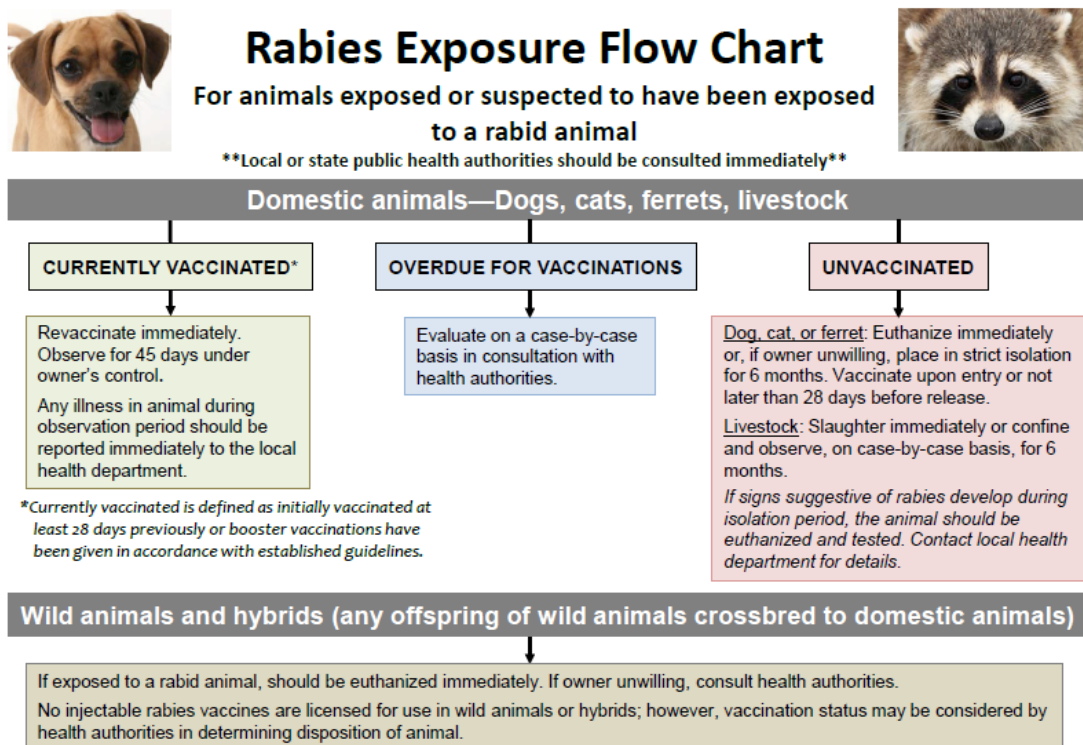
Zenithson Ng

- 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

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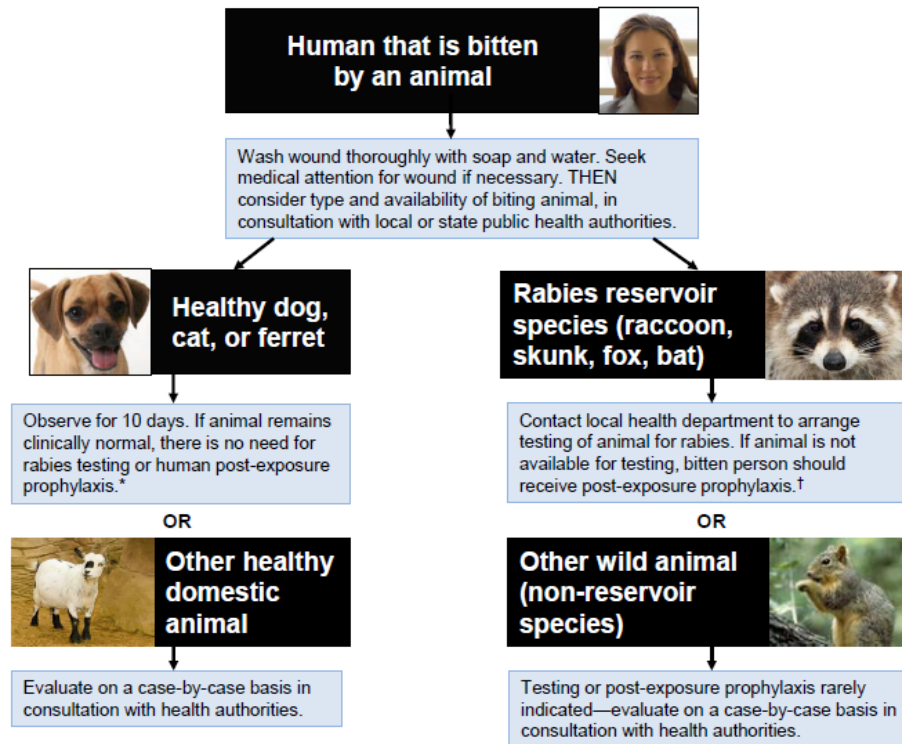
- Prevalence of rabies:
  - Across the US and Puerto Rico in 2012, 6162 animals were confirmed rabies positive. Wildlife (5643) made up 92% of the positive population (Raccoons accounted for the majority of all the cases (32%), followed next by bats, skunks, foxes, "other," and rodents and lagomorphs). 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



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

<b>Post-exposure prophylaxis for non-immunized individuals</b>
<b>Wound Cleansing:</b> 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.
<b>HRIG:</b> 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.
<b>Vaccine:</b> Human diploid cell vaccine or purified chick embryo cell vaccine – 1.0 mL IM (deltoid), one on each days 0, 3, 7, and 14.*
<b>Post-exposure prophylaxis for previously immunized individuals</b>
<b>Wound Cleansing:</b> 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.
<b>HRIG:</b> HRIG should NOT be administered
<b>Vaccine:</b> 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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### **References**

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Dyer JL, Wallace R, Orciari L, et al. Rabies surveillance in the United States during 2012. *J Am Vet Med Assoc* 2013;243:805-815.

Tennessee Department of Health. Rabies Control Manual 2012.