Rabies, Dog Bites Prevalence, and Legislation

Zenny Ng
zng@utk.edu

Follow this and additional works at: http://trace.tennessee.edu/v-pac

Part of the Veterinary Medicine Commons

Zenny Ng, "Rabies, Dog Bites Prevalence, and Legislation" (July 12, 2014). Veterinary Partners Appreciation Conference (V-PAC).
http://trace.tennessee.edu/v-pac/proceedings2014/smallanimal/6

This Event is brought to you for free and open access by Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Veterinary Partners Appreciation Conference (V-PAC) by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
**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**

<table>
<thead>
<tr>
<th>Domestic animals—Dogs, cats, ferrets, livestock</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENTLY VACCINATED</strong></td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

*Currently vaccinated is defined as initially vaccinated at least 10 days previously or booster vaccinations have been given in accordance with established guidelines.

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.


Updated March 5, 2012
- Management of an animal that bites a human

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

Contacts
Tennessee Dept of Health
425 5th Ave North
Cordell Hull Bldg, 3rd Floor
Nashville, TN 37243
Phone: 615-741-3111
Email: tn.health@tn.gov

Dr. Charles Hatcher
State Veterinarian for Tennessee
Dept of Agriculture
440 Hogan Rd
Nashville, TN 37220
Phone: 615-837-5103
Email: tn.agriculture@tn.gov

References
