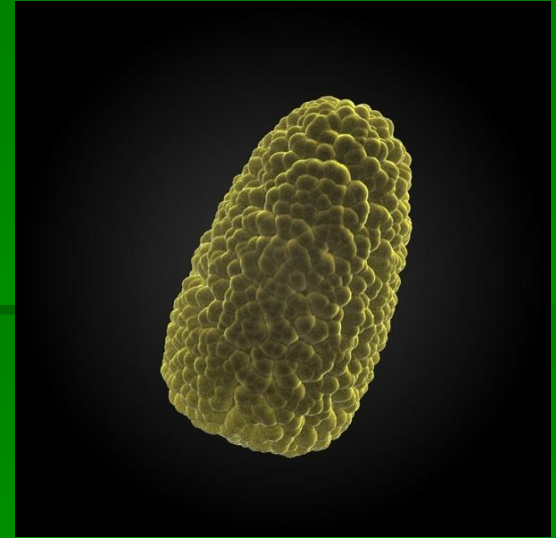# RABIES:
Animals & Animal Exposures

Todd Tedrow, DVM
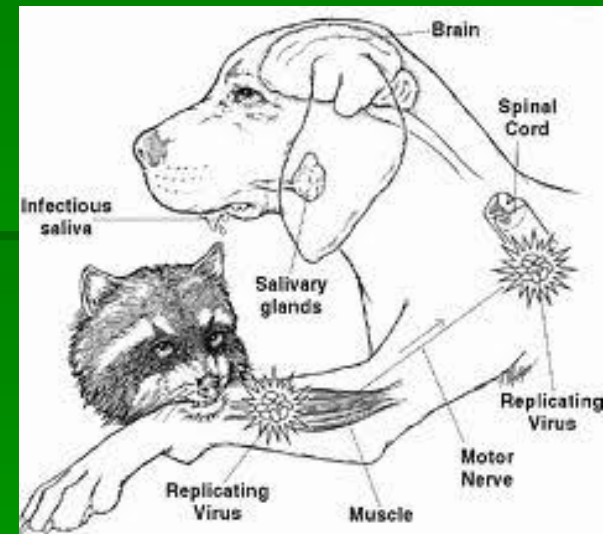SD Animal Industry Board
October 30, 2017

Causative Agent

- *Lyssavirus*

- All mammals are susceptible

- Zoonotic Disease

- Fatal

Transmission

- Direct contact
  - Infected animal
  - Saliva contains the virus
  - Bite wound is most common
  - Also through
    - Open sores
    - Mucous Membranes
- Indirect contact
  - Milk, contact with nervous tissue

Clinical Signs

- Affects the nervous system - Encephalitis
    - Changes in behavior
    - Aggressive or Dumb form
    - Difficulty swallowing
    - Change in vocalization
    - Paralysis
    - Recumbent
    - Death
    - **VARIABLE**

Rabies in South Dakota

- Endemic

- Wildlife Reservoir
  - Multiple variants

- US is free of canine rabies variant

Public Veterinary Medicine: Public Health

Compendium of Animal Rabies Prevention and Control, 2016

National Association of State Public Health Veterinarians Compendium of Animal Rabies Prevention and Control Committee

Catherine M. Brown DVM, MSc, MPH (Co-Chair)

Sally Slavinski DVM, MPH (Co-Chair)

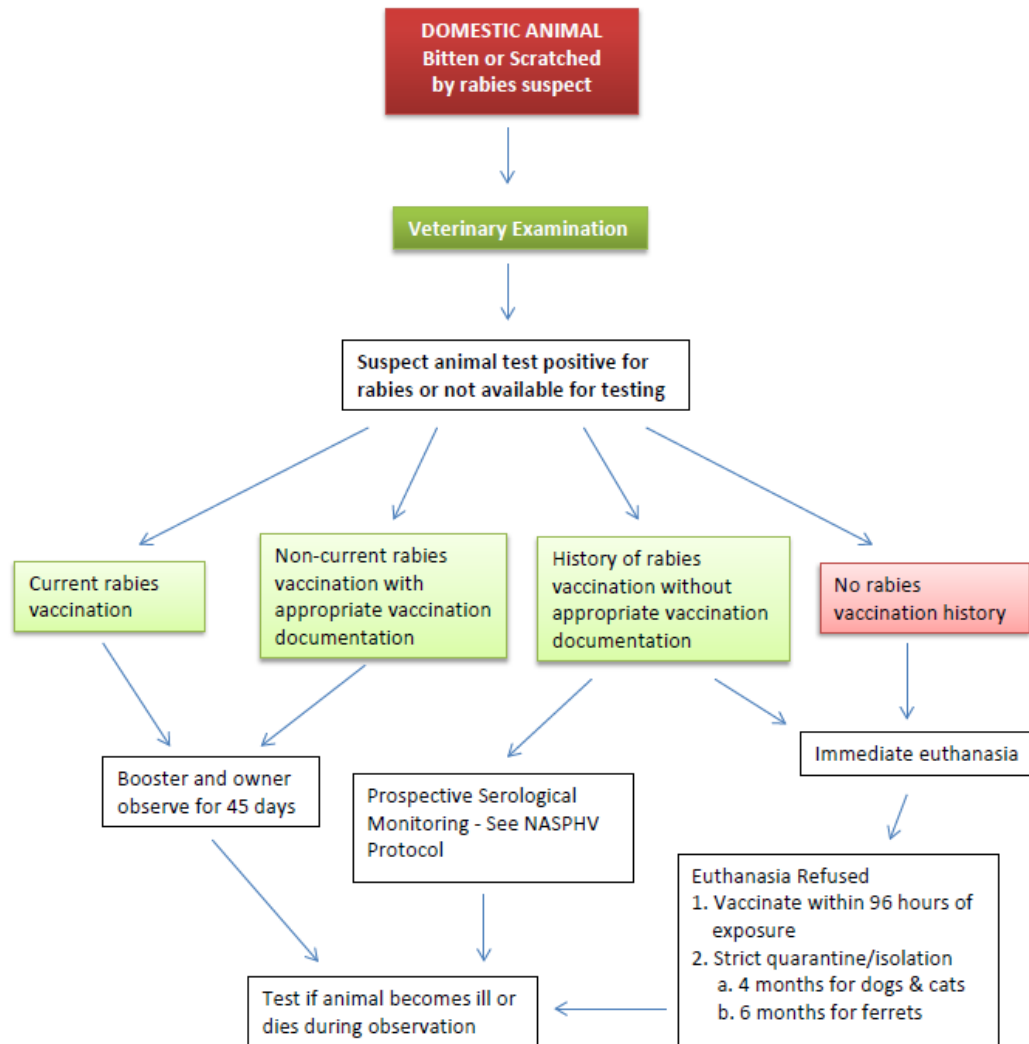**Paul Ettestad** DVM, MS

Tom J. Sidwa DVM, MPH

Faye E. Sorhage VMD, MPH

From the Massachusetts Department of Public Health, 305 South St, Jamaica Plain, MA 02130 (Brown); the New York City Department of Health and Mental Hygiene, 2 Gotham Center, CN# 22A, 42-09 28th St, Queens, NY 11101 (Slavinski); the New Mexico Department of Health, 1190 St Francis Dr, Room N-1350, Santa Fe, NM 87502 (Ettestad); and the Texas Department of State Health Services, PO Box 149347, MC 1956, Austin, TX 78714 (Sidwa).

- http://www.nasphv.org/Documents/RabiesCompendium.pdf

Rabies Exposure Guidelines

DOMESTIC ANIMAL
Bitten or Scratched
by rabies suspect

↓

Veterinary Examination

↓

Suspect animal test positive for rabies or not available for testing

- **Current rabies vaccination**
- **Non-current rabies vaccination with appropriate vaccination documentation**
- **History of rabies vaccination without appropriate vaccination documentation**
- **No rabies vaccination history**

Booster and owner observe for 45 days

Prospective Serological Monitoring - See NASPHV Protocol

Immediate euthanasia

Euthanasia Refused
1. Vaccinate within 96 hours of exposure
2. Strict quarantine/isolation
   a. 4 months for dogs & cats
   b. 6 months for ferrets

Test if animal becomes ill or dies during observation
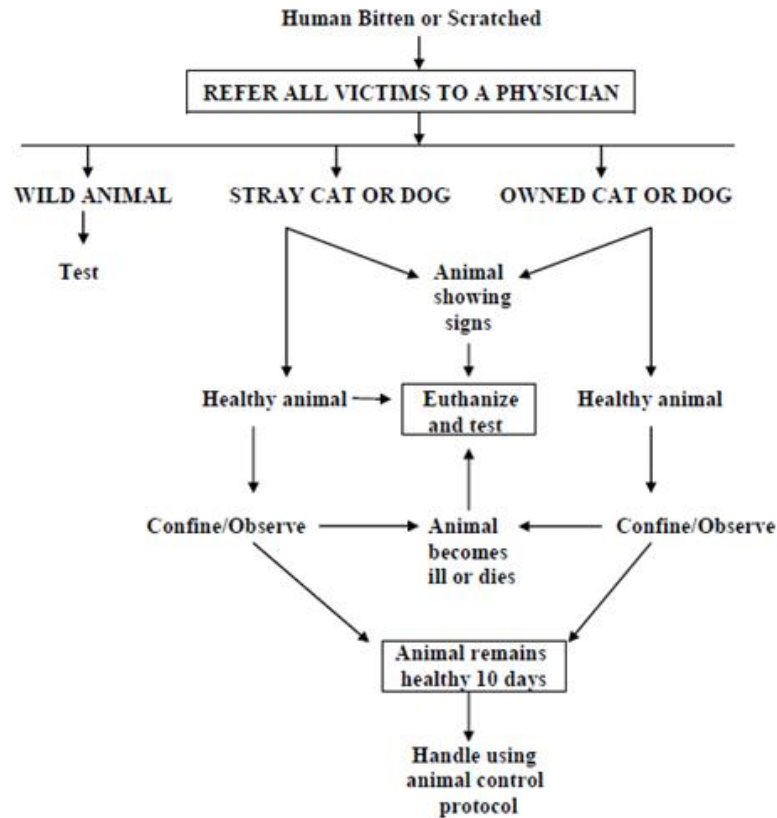
Testing Laboratories:
SDSU Animal Disease Research and Diagnostic Laboratory, Brookings, SD
      605.688.5171 (8am to 5pm)
      http://www.sdstate.edu/vs/adrdl/index.cfm
South Dakota Department of Health, Pierre, SD
      800.592.1861 (8am to 5pm); 800.592.1861 (after business hours)
      https://doh.sd.gov/lab/rabies.aspx

AIB Form RAB400 (Revised 03-16)

RABIES GUIDELINES

Human Bitten or Scratched

↓

| REFER ALL VICTIMS TO A PHYSICIAN |

WILD ANIMAL   STRAY CAT OR DOG   OWNED CAT OR DOG

Test

Animal showing signs

Healthy animal → | Euthanize and test | ← **Healthy animal**

Confine/Observe → **Animal becomes ill or dies** ← **Confine/Observe**

| Animal remains healthy 10 days |

↓

Handle using animal control protocol

For consultation on human exposure to rabies call:
South Dakota Public Health Department, Communicable
Disease Office, Joe Foss Building Pierre, SD 57501
Phone: 800-592-1861

Animal tests for rabies can be performed anytime at the
South Dakota Public Health Lab, 615 E 4th St., Pierre, SD.
Arrangements for testing can be made with the lab by calling
(605) 773-3368 during regular business hours.
For emergencies call 800-592-1861

AIB Form RAB401 (11-09)

Rabies Info Contacts

Addresses, telephone numbers and websites

Department of Health (rabies consultations)
615 East Fourth Street
Pierre, SD 57501-1700
Phone: 800-592-1861 or 605-773-3737;
   after hours 800-592-1861 or 605-773-3737
https://doh.sd.gov/diseases/infectious/diseasefacts/rabies.aspx

Department of Health, Public Health Laboratory (rabies testing)
615 East Fourth Street
Pierre, SD 57501-1700
Phone: 800-592-1861 or 605-773-3368
http://doh.sd.gov/Lab/rabies.aspx

South Dakota Bat Group http://sdbwg.org

Animal Disease Research and Diagnostic Laboratory (rabies testing)
North Campus Drive
South Dakota State University
Brookings, SD 57007-1396
Phone: 605-688-5171
www.sdstate.edu/vs/adrdl

SD Animal Industry Board (livestock and animal veterinary and regulatory issues)
441 S. Fort Street, Pierre, SD 57501
Phone: 605-773-3321
http://aib.sd.gov

CDC Rabies: www.cdc.gov/rabies

Prevention

- #1 **VACCINATION**
  - Very effective
    - 1st at 3 months of age
    - Protected 28 days post vaccination
    - 2nd one year later
  - Follow label

- Avoid Exposure

Thank You   Questions?

Todd Tedrow, DVM

Todd.tedrow@state.sd.us

605.773.3321

http://aib.sd.gov/