next Talks

Hot Button Topics in Veterinary Diagnostics

Dr. Bruce L. Akey
Director, TVMDL

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Agency Overview
Texas A&M Veterinary Medical Diagnostic Laboratory

- Established in 1969
- Provide diagnostic testing services for companion animals, livestock & the food animal industry.
- 500 daily submissions received
- 155,000 cases completed annually
- Nearly 700 state-of-the-art diagnostic tests
- TVMDL receives submissions from Texas, across the United States and around the world.
Locations

• 165 staff

• Over 30 professional staff who hold a DVM and/or PhD

• 21 professionals with board certifications in their specialty

• Strategically located in the livestock and poultry rich regions of Texas
Hot Button Topics in Diagnostics:

Health risks associated with wet, flooded conditions
Health Risks: Flood Conditions

• Animal health diseases
  – Leptospirosis
  – Clostridial diseases

• Insect-borne diseases
  – West Nile Virus
  – Eastern & Western Equine Encephalitis

• Potentially Poisonous Plants
  – Johnsongrass
  – Sorgum species
Health Risks: Flood Conditions

- Leptospirosis
  - Affects livestock and companion animals
    - City dogs & cats
    - Rural cattle & horses
  - Can cause reproductive problems
  - TVMDL performs 2 types of testing
    - MAT
    - PCR
Health Risks: Flood Conditions

- Clostridial diseases
  - Can vaccinate against some diseases, like Blackleg
  - Disturbance in the soil can expose spores of Clostridial bacteria and make them accessible to grazing animals
  - Spores can be carried to new pastures by runoff
Health Risks: Flood Conditions

• Mastitis
  – Inflammation of the mammary gland caused by bacterial pathogens
  • Affecting breeding animals
  • Proper diagnosis is important to treat & preserve mammary tissue
  • Veterinarian should be consulted immediately
    – TVMDL diagnosis by bacterial culture

Photo courtesy Irish Cattle Breeding Federation
Health Risks: Flood Conditions

- Insect-borne diseases
  - Biting insect populations increase significantly following excessive rainfall; thriving in flooded areas
  - Mosquitoes and flies spread a number of viral diseases
    - West Nile Virus
    - Eastern & Western Equine Encephalitis
    - Vaccinations are available and encouraged
Health Risks: Flood Conditions

• Insect-borne diseases
  – Manifest in neurologic symptoms
    • Inflammation of brain & spinal cord
  – TVMDL performs routine regulatory tests for EEE, WEE & WNV in the Serology Section.
Health Risks: Flood Conditions

• Potentially Poisonous Plants
  – Johnsongrass
    • Especially lethal during stressed conditions, such as extreme heat following excessive moisture
  – How does it kill?
    • Prussic acid, aka cyanide, builds up in the plant
    • When ingested, causes acute death losses for livestock owner
  – How can TVMDL help?
    • Toxicology Section routinely tests forage samples
Health Risks:
Flood Conditions
Hot Button Topics in Diagnostics:

Vesicular Stomatitis
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Texas Animal Health Commission

Vesicular Stomatitis Update

June 12, 2015

The Texas Animal Health Commission (TAHC) has confirmed one new case of Vesicular stomatitis (VS) in a horse. The premise is located in Ward County, approximately 30 miles north of Fort Stockton, TX. This is the first case of VS in this county.

The two previously infected herds in Reeves and Pecos County have been released.

The newly identified infected premise is currently under quarantine by the TAHC. Affected horses will be monitored by regulatory personnel until all lesions have healed and a decision is made to release the quarantine (a minimum of 14 days). There is no known exposure to other horses around the state, or at any equine events. It is believed that the virus overwinters in the sand and black fly population in northern Mexico and then moves northward in warmer weather.

Some states and other countries may restrict movement of, or impose additional requirements for susceptible species moving from states with active cases of VS. It is important for shippers or haulers of livestock to contact states of destination well in advance of scheduled movements to determine their entry requirements. For international export information, the USDA Veterinary Services office in Austin, Texas should be contacted.

- For more information about VS, visit the TAHC’s brochures at http://www.tahc.texas.gov/news/brochures/TAHCBrochure_VS.pdf
- For additional information call 512-719-0700 or contact your local TAHC region office http://www.tahc.texas.gov/agency/TAHC_RegionalOfficeMap_2013.pdf

- Affecting 3 Texas counties
  – Ward County
  – Reeves County
  – Pecos County

- Viral disease (vector borne)
  – Affects horses, ruminants, pigs
Vesicular Stomatitis

Photo courtesy Colorado State University

Photo courtesy TheHorse.com
Vesicular Stomatitis

• Be aware of other animals if you travel to a show or event

• Practice good biosecurity
  – Do not share buckets or common water areas
  – Use fly spray when possible
  – Check your animals for signs

Photo courtesy TheHorse.com
Where can Texans find animal health information?
• tvmdl.tamu.edu
  – News tab
    • Sign up for our e-Newsletter
  – Educational Library

• Social media
  – Facebook
    • facebook.com/tvmdl
  – Twitter
    • @tvmdl
Resources

• Texas Animal Health Commission
  – tahc.state.tx.gov

• USDA Animal and Plant Health Inspection Service (APHIS)
  – aphis.usda.gov

• Texas A&M AgriLife Extension Bookstore
  – Free downloads at agrilifebookstore.org
Tour a TVMDL lab

Texas A&M
Veterinary Medical
Diagnostic Lab