2015 Vesicular Stomatitis Virus (VSV) Response Protocol for Veterinarians

ALL LIVESTOCK CASES (such as Cattle, Sheep, Goats, Pigs, Camels) WILL BE INVESTIGATED BY THE STATE OR FEDERAL ANIMAL HEALTH OFFICIALS

Index Equine Case

1. Initial investigation by practicing veterinarian or state/federal animal health official – collect samples
2. Report to State Veterinarian’s Office or CO USDA VS Office
3. State Office or CO USDA VS Office will notify regional USDA VS personnel (Angela Pelzel-McCluskey and Rory Carolan) of VSV investigation when appropriate
4. Verbal Hold Order issued by practicing veterinarian or state/federal animal health official.
   a. The verbal Hold Order on the property restricts the movement of horses and other susceptible animals from leaving the premises
5. Colorado State Veterinarian’s Office will request foreign animal disease (FAD) case number from CO USDA VS Office.
6. Samples submitted to National Veterinary Services Laboratory (NVSL) in Ames, IA or the Foreign Animal Disease Diagnostic Laboratory (FADDL) at Plum Island, NY by state or federal veterinarian who has been trained as a Foreign Animal Disease Diagnostician (FADD).
   a. Index case is tested at no cost to animal owner
   b. Livestock (other than horses) samples submitted to FADDL with an FAD number
   c. Equine samples to NVSL with an FAD number, completed VS 10-4 and VSV investigation worksheet
7. Sample Results
   a. Negative – release verbal Hold Order.
   b. Positive equine case
      i. Quarantine the premises
         1. A Quarantine which is a formal, written no movement requirement, will be placed on the movement of horses and other susceptible animals from the premises. The quarantine will remain in effect for a minimum of 14 days after the start of VSV lesions in the last affected animal.
         2. Any animals added to quarantined premises during the quarantine cannot leave the premises until the quarantine is lifted.
      ii. Owners will receive a written Quarantine from the State Veterinarian’s Office
   c. Positive Livestock cases – handled on a case-by-case basis by the State Veterinarian’s Office in conjunction with CO USDA Veterinary Services office.
Subsequent Equine Cases

1. Practicing veterinarian or state/federal animal health official initiates VSV investigation.
2. Notify the State Veterinarian’s Office or CO USDA VS Office of cases that have suspicious lesions.
3. Determine if the owner of the premises with the involved horse desires one of two options: 
   a. Wants to proceed with laboratory testing at animal owner’s expense
      i. Issue verbal Hold Order
         1. The verbal Hold Order on the property restricts the movement of horses and other susceptible animals from leaving the premises.
         ii. Collect samples and submit to CSU Veterinary Diagnostic Laboratory (CSU-VDL), (refer to the VSV Sample Collection Protocol)
   b. Prefers to be handled as a positive premises with no laboratory testing
      i. Quarantine the premises
         1. A Quarantine, a formal, written no movement requirement, will be placed on the movement of horses and other susceptible animals from the premises. The quarantine will remain in effect for a minimum of 14 days after the start of VSV lesions in the last affected animal.
         2. Any animals added to premises during the quarantine period cannot leave the premises until the Quarantine is lifted.
         ii. Inform owners they will receive a written Quarantine from the State Veterinarian’s Office.
4. Report decision to the State Veterinarian’s Office. Include the following information:
   a. Animal owner name, address phone number
   b. Boarding facility if applicable
   c. Physical address/location of animals
   d. Number of animals affected
   e. Number of animals and additional livestock on premises
   f. Number of animals sampled
   g. Veterinarian who visited and contact number
   h. Photos if available, email to animalhealth@state.co.us
5. Sample Submission
   a. Samples on equine suspects should be submitted to CSU-VDL
      i. Submit samples along with the completed CSU-VDL sample submission form to CSU Veterinary Diagnostic Laboratory
      ii. Include the filled out VSV Investigation Worksheet
      iii. If additional testing is needed at NVSL, required paperwork will need to be completed – contact State Veterinarian’s Office
6. Sample Results
   a. Negative – release verbal Hold Order
b. Positive
   i. A Quarantine, a formal, written no movement requirement, will be placed on
      the movement of horses and other susceptible animals from the premises. The
      quarantine will remain in effect for a minimum of 14 days after the start of VSV
      lesions in the last affected equine. If other livestock on the premises are
      affected, a longer quarantine may be implemented.
      1. Any animals added to premises during the quarantine period cannot
         leave the premises until the quarantine is lifted.
   ii. Inform owners they will receive a written Quarantine from the State
       Veterinarian’s Office.

7. Results Reporting
   a. CSU Veterinary Diagnostic Lab will report results to the practicing veterinarian, State
      Veterinarian’s Office, and CO USDA VS Office.

8. Case Release
   a. Practicing veterinarian and state and federal animal health officials collaborate on
      release of the Quarantine.
      i. Horses with persistent clinical lesions will be handled on a case by case basis.
      ii. Some premises may require a visit by state or federal animal health officials
          prior to release.
   b. State Veterinarian’s Office issues a written Quarantine Release at the appropriate time.

Subsequent Livestock Cases – Cattle, Sheep, Goats, Pigs, Camelids

1. Contact State Veterinarian’s Office or CO USDA VS Office with ALL suspect livestock cases.
2. State or federal animal health officials who are trained as a FADD will handle all the investigations.
   a. All samples on livestock suspects need to be collected by the FADD.
Sample Collection

1. Collect diagnostic specimens ONLY from animals with lesions.
2. Specimens to collect (all species):
   a. Vesicular fluid (from unruptured vesicles)— place in screw-cap tube. If a screw-cap tube is not available, place in plastic serum tube (“snapcap”) and tape or parafilm the lid to prevent leakage. DO NOT submit in a syringe
   b. Vesicular tissue (epithelium)—if available, place in screw-cap tube with a maximum of 3 ml. of tris-buffered tryptose broth (TBTB) – if TBTB is not available, sterile saline can be used
   c. Sterile swabs – (Dacron) of lesions placed in a screw-cap tube with a maximum of 3 mL TBTB media - if TBTB is not available, sterile saline can be used
   d. Serum – at least 2 mL, preferably separated from the clot (CF test can be impacted negatively if serum is not separated from the clot)
   e. Cost of the VSV Compliment Fixation test at CSU is $40 and the PCR for VSV is $35 – both tests need to be run for proper diagnosis

3. Additional specimens for the state/federal FADD to collect from ruminants and swine: CONTACT STATE OR FEDERAL OFFICE FOR FADD COLLECTION FOR PROTOCOL TO FOLLOW
   b. Whole blood – 10 mL (both heparin and EDTA)
   c. Complete set of tissues – especially lymph nodes from dead animals