



Recommended Biosecurity Measures for Equine Events during a Vesicular Stomatitis Virus (VSV) Outbreak in California

- 1. Participants, whenever possible, should arrive at the event with a certificate of veterinary inspection (CVI) issued within 2-5 days prior to the event. CVIs should include this statement: "I have examined all the animals identified on this certificate within 14 days of the shipment date and have found them to be free from signs of vesicular stomatitis virus (VSV). During the last 14 days, these animals have not been exposed to VSV nor located on a VSV-confirmed or a VSV-suspected premises."
- 2. At time of arrival and **prior to entry onto the event grounds,** all horses should be inspected by a USDA Category II Accredited Veterinarian for blister-like lesions in the mouth (tongue, lips), the nostrils, around the coronary band of the hooves, around the teats, and inner or outer ear.
- 3. Immediately quarantine any horse with vesicular lesions and contact your local California Department of Food and Agriculture (CDFA) Animal Health Branch Office.
- 4. Stable all horses from a known VSV-affected county in a separate stabling area.
- 5. Horses from known VSV-affected counties should be observed daily for vesicular lesions and elevated temperatures twice daily with documentation.
- 6. Eliminate breeding grounds for VSV transmission vectors, specifically, the black fly, by daily removal of manure and elimination of standing water.
- 7. Avoid use of communal water sources to the best extent possible. Every animal should have its own water bucket/receptacle, and communal hoses should never be in direct contact with the buckets/receptacles themselves.
- 8. Utilize fly wipes, sprays, foggers and other repellents for use on animals and premises as directed by label instructions as frequently as indicated. Encourage use of pyrethrin fly spray labelled for horses, especially during peak black fly mid-morning and at dusk in the evening.
- 9. Require exhibitors, owners, and trainers to report any suspicious lesions to the show veterinarian or show secretary office immediately.
- 10. Utilize disinfectant to disinfect communal areas and equipment. Effective disinfectants include 2% sodium carbonate, 4% sodium hydroxide, 2% iodophore disinfectants, chlorine dioxide disinfectants, ether and other organic solvents, and 1% formalin.
- 11. Show veterinarians AND event management should regularly observe all susceptible livestock (equids, cattle, sheep, goats, pigs llamas, alpacas, camels) on event grounds for clinical signs of VSV during an event. Often, excess salivation is the first sign of disease. Any VSV suspects should be immediately isolated.
- 12. At the end of the event, obtain destination information for all departing horses, as well as email contact information for the person responsible for the care of the horse(s) to ensure they can be contacted and provided guidance if a disease detection occurs.
- 13. Equine events without a veterinarian in attendance and inspection of all horses prior to entry into the equine event facility is not recommended during a VSV outbreak, and should be held only at the risk and discretion of event management.



Vesicular Stomatitis Virus (VSV) Information

Vesicular stomatitis (VS) is a viral disease caused by vesicular stomatitis virus (VSV) that affects primarily horses and cattle and occasionally swine, sheep, goats, llamas and alpacas. Humans that handle affected animals may become infected, but this is an uncommon occurrence.

Outbreaks usually occur during the warm summer months, particularly in animals pastured along waterways, but can occur anytime there is an influx and/or migration in the fly vector reservoir.

Although VSV does not usually cause animals to die, it can cause significant economic losses to livestock producers. In addition, the disease is of particular concern because its outward clinical signs are similar to Foot and Mouth Disease (FMD), a foreign animal disease eradicated from the United States (U.S.) in 1929. VSV cannot be diagnosed on clinical signs alone; sampling and laboratory testing is crucial to diagnose the vesicular condition and to differentiate it from other diseases, such as FMD or swine vesicular disease.

Clinical Signs

Livestock infected with VSV usually show clinical signs 2-8 days after exposure to the virus. The first sign is usually excessive salivation due to vesicles, blister-like lesions, in the mouth. Vesicles may also be found on the nostrils, teats, and around the hooves. Vesicles swell and break, exposing raw tissue, causing pain and discomfort. Animals may refuse to eat or drink and may show signs of lameness. Affected animals usually recover within two weeks.

Disease Spread

The exact mechanism of spread is currently unknown, but biting insects and animal-to-animal contact play a large role in the spread of the disease. An infected animal's saliva and fluid from ruptured vesicles can contaminate feed, water, housing, and other objects, further spreading the disease.

Diagnosis & Prevention

There is no specific treatment or cure for animals infected with VSV and there are no vaccines available to prevent this disease. Veterinarians and livestock owners who suspect an animal may have VSV or any other vesicular disease should immediately contact a State or Federal animal health authority.

Testing for VSV antibodies in serum (blood) samples, and/or detection of VS virus from swabs of lesions, blister fluid and tissue samples can confirm VSV viral infections. **VSV diagnostic testing can only be performed by a state or federal veterinarian or USDA Accredited Veterinarian.**

Even with the best defense measures, VSV can still affect your herd. The following are ways to help protect horses and livestock:

- Limit movement of animals from affected premises,
- Apply insect control programs,
- Separate animals with lesions from healthy animals,
- Bring animals indoors at night to reduce their exposure to biting insects, and
- Use individual animal equipment or disinfect equipment between use on each animal.

Interstate and International Movement Restrictions

Receiving states and countries often impose additional requirements or restrictions for susceptible animals originating from a VSV-affected states, and especially from VSV-affected counties. Verify all entry requirements with the destination state or country PRIOR to any out-of-state movement. An inspection period within a shortened period of time (often 7 days but occasionally up to 72 hours) is usually required in addition to a specific cortication statement as dictated by the receiving state or country.



For more information, please go to:

https://www.cdfa.ca.gov/ahfss/Animal Health/VS.html

You may also contact any CDFA Animal Health Branch Headquarters or any District Office for additional information:

Sacramento Headquarters: (916) 900-5002

Redding District: (530) 225-2140 Modesto District: (209) 491-9350 Tulare District: (559) 331-3669 Ontario District: (909) 947-5932

