



# Vesicular Stomatitis

## The Disease

Vesicular Stomatitis Virus (VSV) is a viral disease agent 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 a rare event. Outbreaks usually occur during the warm summer months, particularly in animals pastured along waterways.

Although VSV does not usually cause animals to die, it does cause significant economic losses to livestock producers. In addition, this 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 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 may play a 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.

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.

## California Movement Restrictions

Based on the international delisting of VSV as a reportable disease and recent scientific evidence, California has revised the VSV entry requirement statement required on Certificates of Veterinary Inspection (CVI/health certificate) from VSV affected states.

Currently, all horses, cattle, swine, sheep, and goats from a state where VSV has been diagnosed, or visiting an infected state and then returning to California, except those moving directly to slaughter, must be accompanied by a CVI that includes the statement:

*"I have examined all the animals identified on this certificate within seven (7) days of shipment date and have found them to be free from signs of Vesicular Stomatitis (VS). During the last fourteen (14) days, these animals have not been exposed to VS nor located on a VS confirmed or a VS suspected premises."*

The **California Horse Racing Board (CHRB)** may have additional requirements for horses coming from VSV infected areas that are entering race tracks and/or CHRB-approved training centers. For more information, contact CHRB at 916-263-6000.

### Animal Health and Food Safety Services Animal Health Branch

Headquarters - (916) 900-5002  
 Redding District - (530) 225-2140  
 Modesto District - (209) 491-9350  
 Tulare District - (559) 685-3500  
 Ontario District - (909) 947-5932  
**USDA-APHIS-VS - (916) 854-3950 or (877) 741-3690**

For more information, please go to the following:  
[Vesicular Stomatitis Virus Information Page](https://www.cdffa.ca.gov/ahfss/Animal_Health/VS.html)  
[https://www.cdffa.ca.gov/ahfss/Animal\\_Health/VS.html](https://www.cdffa.ca.gov/ahfss/Animal_Health/VS.html)