



VESICULAR STOMATITIS (VS)

June 2019

Overview

Vesicular Stomatitis (VS) is a viral disease that primarily affects horses and cattle, and occasionally swine, sheep, goats, llamas and alpacas. In rare events, humans can also become infected when exposed to and handling infected animals. The disease occurs seasonally in the southwestern United States, Central America and South America. Outbreaks usually occur along waterways during the warmer months of the year. The extent of an outbreak may vary from a few premises in one state to many premises in multiple states.

Clinical Signs

The incubation period for VS in livestock ranges from two (2) to eight (8) days. Excessive salivation may be the first clinical sign of disease and some animals may present with a mild fever. The virus may produce raised, blister-like lesions on the inner surface of the lips, gums, tongue and/or dental pad. Lesions may also occur on the nostrils coronary band, vulva prepuce, and teats. Oral blister rupture causes pain and subsequent reluctance to eat and drink.

Disease Transmission

The methods of VSV spread is not fully known, but insect vectors, mechanical transmission and animal movement are all factors. Important biological insect vectors include sand flies, blackflies and *Culicoides* midges. Mosquitoes, gnats and other flies may be mechanical vectors. Lesions in horses usually occur on the upper surface of the tongue, lips, nostrils, gums and corners of the mouth. Animals generally recover in two (2) weeks if there are no complications in lesion healing. Once detected in a herd, the virus may move from animal to animal by direct contact or exposure to saliva or fluid from ruptured vesicles. The virus is inactivated by sunlight.

Recommended Actions

There is no specific treatment for VSV and there are no licensed vaccines to prevent the disease.

To control disease once diagnosed in livestock on a premises:

- **Movement restrictions** - Animals on the premises will be under quarantine until specific regulatory criteria are met
- **Isolate animals** with lesions from animals without lesions
- **Maintain enhanced biosecurity measures** to minimize risks of fomite transmission of the virus
- **Implement on-farm insect control plan** to include use of insecticides on livestock and practices to eliminate or reduce insect breeding areas
- **Use personal protective measures**, such as disposable gloves, when handling affected animals to avoid human exposure.

**Vesicular lesions in livestock are reportable to the
State Veterinarian (505-841-6161)
and/or USDA APHIS VS (505-313-8050)**