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# Vesicular Stomatitis Virus

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Vesicular stomatitis is a contagious disease of livestock, mainly affecting horses and cattle. Occasionally, this disease can infect swine, sheep, goats, llamas, alpacas, and even people. It is primarily transmitted by biting flies and midges. The disease causes blister-like sores, among other side effects.

Although vesicular stomatitis rarely causes high mortality rates, it can impact animal movement and international trade, resulting in economic losses for livestock

producers. Outbreaks usually occur during warmer months, often along waterways. The Southwestern and Western United States have experienced several outbreaks since 1995, with the most widespread in 2019.

## What To Look For

Clinical signs may appear 2 to 8 days after exposure. Here's what to look for:

- Drooling or frothing at the mouth
  - The first sign of illness is often excessive salivation. If you look inside the mouth, you'll see blanched and raised blisters on the inner surfaces of the lips, gums, tongue, or dental pad.
- Lesions
  - Blister-like lesions can form around the mouth, nose, sheath, udders, ears, and coronary band (where an animal's hairline meets their hooves). If lesions develop around the coronary band, lameness may occur.
- Fever
  - You may notice a rise in body temperature before or at the same time lesions first appear.
- Reluctance to eat
  - The blisters swell and break open, which causes mouth pain, discomfort, and reluctance to eat or drink. This can cause weight loss.

## How To Prevent This Disease

Although experimental vaccines have been developed, none have been approved for use in horses. The best way to prevent the disease is by:

- Isolating new horses before introducing them to your herd.
- Controlling insects on your property with fly traps, sprays, and clean horse pens.
- Separating sick horses from healthy horses on your property.
- Handling healthy animals before sick animals.
- Washing and disinfecting your hands and boots after working with sick animals. If possible, change and wash your clothes as well.

## How It Is Treated

Vesicular stomatitis is treated with supportive care. Since the lesions may be quite painful, your veterinarian may prescribe anti-inflammatory drugs. If your animal is having trouble eating, softening their grain in warm water could encourage them to eat more. Softening hay cubes can also help if they're having trouble eating grass and hay. If secondary infections develop around lesions, your veterinarian may prescribe antibiotics.

## Report Signs of Animal Disease

Producers or owners who suspect an animal disease should contact their veterinarian to evaluate the animal or herd. [Find an accredited veterinarian.](#)

Animal health professionals (veterinarians; diagnostic laboratories; public health, zoo, or wildlife personnel; and others) report diagnosed or suspected cases of [nationally listed reportable animal diseases](#) to [APHIS Area Veterinarians in Charge](#) and to the [State animal health official](#) as applicable under State reporting regulations.

## Controlling Vesicular Stomatitis

### Information for Veterinarians

If you suspect vesicular stomatitis, contact your local, State, or Federal animal health officials. You may be directed to collect specific samples or a foreign animal disease diagnostician may be dispatched.

In the event of an outbreak, APHIS may activate pre-approved National Animal Health Laboratory Network laboratories to test equine samples after the index case in your State is confirmed.

[View list of National Animal Health Laboratory Network Labs Approved To Test for Vesicular Stomatitis](#)

Isolate lesioned animals. State animal health officials will quarantine the farm to help prevent disease spread. Ensure good biosecurity practices when handling sick and healthy horses. Make sure you and your clients use personal protective equipment when handling animals with lesions to prevent disease transmission between animals and people.

### **More Information**

- [APHIS Factsheet: Vesicular Stomatitis](#) (315.29 KB)
- [Vesicular Stomatitis in Horses](#) (American Association of Equine Practitioners)
- [Factsheet: Vesicular Stomatitis](#) (Center for Food Security and Public Health)
- [OIE Factsheet: Vesicular Stomatitis](#) (World Organisation of Animal Health)

#### Previous U.S. Outbreaks of Vesicular Stomatitis

The following reports summarize recent outbreaks of vesicular stomatitis in the United States.

- [2023-2024 Vesicular Stomatitis Virus \(VSV\) Situation Report](#) (625.34 KB)
- [Final Situation Report: 2020 Outbreak](#) (954.69 KB)
- [Final Situation Report: 2019 Outbreak](#) (752.46 KB)

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