

Vesicular Stomatitis

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Vesicular Stomatitis has appeared again in New Mexico, Colorado and Texas. At this time of the year, VS often appears in these states so it is not a totally unusual situation. However, it is important to recognize the clinical signs of VS as they can mimic the signs of Foot and Mouth Disease. And the appearance of FMD would be a very unusually situation that needs to be discovered at the earliest possible moment.

VS affect cattle, sheep, horses and pigs. The disease causes vesicles or blister-like lesions in the mouth, nose and feet (Picture 1). It can also cause blisters on the skin of the teats. One of the early signs of VS in cattle is many cows standing around with excessive drooling or salivation (Picture 2). They may be seen to be smacking their lips or sucking on their tongue. Generally, the blisters rupture easily leaving the raw underlying tissue exposed. Around the edges of the ruptured blister may be seen tags of skin that previously formed the blister (Picture 3). There is lots of pain from the raw tissue as the nerve ending are exposed. Due to the pain, affected animals may not want to eat or drink due to the mouth sores; may be reluctant to walk due to sore feet; and resist being milked when the teats are involved. Cattle or sheep with nursing young, may refuse to let the calves or lamb nurse. Due to the teat lesions, mastitis is a common result of VS infections.

VS is highly contagious from animal to animal. Many animals within a herd will become sick within a few days (Picture 4). VS will not be isolated in a single animal for very long. In a few days it can quickly spread through an entire herd by direct contact with infected animals or from exposure to saliva and the fluid from the ruptured blisters. In many areas where VS occurs on a seasonal basis each year, blood-sucking sandflies or perhaps mosquitoes are thought to spread the disease. As it takes a while for enough sandflies to become infectious, the seasonal outbreaks of VS usually occur in mid to late summer.

As VS is so highly contagious, it is very important to get a solid diagnosis as soon as possible after the clinical signs are noticed. The only way to get a diagnosis is to have the state or federal veterinarians collect samples from the livestock and submit them for laboratory analysis. Livestock owners suspecting VS should immediately contact their local veterinarian or state agency. Once suspected, all susceptible animals will be quarantined to the premise until a laboratory diagnosis confirms the causative agent is VS or something else. As Foot and Mouth Disease looks exactly like VS, it is imperative to get an early diagnosis.

The spread of VS can be controlled by restricting the movement of exposed or infected livestock. In areas where sandflies are thought to spread the disease, fly control measures may also be used. It is possible for humans to get VS so precautions such as hand-washing are recommended after handling livestock or working in livestock pens.

The important take-home message is that VS and FMD can not be told apart by the disease signs seen in livestock and they both spread very rapidly due to their highly contagious nature. Any signs of excessive drooling, blisters or raw areas in the mouth, nose, feet or teats should be immediately reported, particularly if it occurs in several animals. Your prompt action could prevent a wide spread outbreak that could have enormous economic consequences.

For more information on VS or FMD, check out the USDA website on the internet <http://www.aphis.usda.gov>.

Picture 1. Vesicles or blisters in the mouth of a cow with a vesicular disease. This may be seen with VS or FMD.



Picture 2. Excessive drooling is a common early signs of the vesicular diseases such as VS or FMD.



Picture 3. Ruptured vesicle or blister in the mouth of a cow with a vesicular disease. Note the tags of skin around the edges of ruptured blister.



Picture 4. Many animals will quickly become infected in an outbreak of a highly contagious vesicular disease like VS or FMD.

