

VESICULAR STOMATITIS

CHRISTINE HAMILTON



If affected with Vesicular Stomatitis, a farm can be quarantined for at least 21 days.

This virus causes painful lesions around the mouth and hooves of horses.

By Andrea Caudill

IN JUNE, VESICULAR STOMATITIS, CAUSED BY A VIRUS THAT produces painful lesions mostly around the mouth, was reported in South Texas and central New Mexico. The sporadic virus is native and exclusive to the Americas, most commonly in the southwestern United States. It was last reported three years ago, and due to its appearance, some travel limitations have been placed on horses traveling in and out of these states.

"The most recent outbreak was in 2006 and limited to Wyoming only, where 17 horses and a dozen cattle on 13 premises were confirmed to have the virus," says Bob Hillman, D.V.M., Texas' state veterinarian and head of the Texas Animal Health Commission, the state's livestock and poultry health regulatory agency.

In 2005, an outbreak involved livestock on at least 445 premises in Arizona, Colorado, Idaho, Montana, Nebraska, New Mexico, Texas, Utah and Wyoming. In 2004, affected animals were detected in eight counties each in Texas and New Mexico and in 22 Colorado counties. Before the 2004 outbreak, VS last appeared in 1998, when Arizona, Colorado, New Mexico and Texas had cases.

The disease most commonly appears during the summer and fall.

Symptoms

THE FIRST SIGNS OF VESICULAR STOMATITIS INCLUDE BLISTER-LIKE lesions in the mouth, on the tongue, lips and nose as well as along the coronary band and on the udder or sheath. The

pain from these can cause a horse to go off its feed.

When the blisters break open, ulcers can develop, causing drool and froth from the mouth.

A horse suffering from vesicular stomatitis might be mistaken for an animal suffering from dental problems or colic. If a horse goes off feed, it can suffer significant weight loss.

If lesions develop around the hoof, a horse might suffer symptoms of lameness. In severe cases, this can sometimes cause laminitis, or cause the hoof wall to slough off.

The incubation period for vesicular stomatitis ranges from two to eight days. Lesions and ulcers can take as little as two weeks to several months to heal, and there is a risk of secondary infection when the lesions break open. Vesicular stomatitis is generally not fatal.

The lesions caused by vesicular stomatitis are very similar to foot-and-mouth disease in cloven-footed animals, a highly-contagious and sometimes fatal virus. It hasn't been seen in the United States since 1929, but there have been outbreaks in the United Kingdom as recently as two years ago; and a serious outbreak in Ireland in 2001, which, due to its proximity to racetracks, shut down the industry for several weeks.

"If the blisters and lesions are seen in cattle, sheep, pigs or other cloven-hooved animals, our first concern is a possible introduction of foot-and-mouth disease, the most costly and destructive foreign animal disease," said Hillman. "Horses are not susceptible to foot-and-mouth disease, but any time blisters or unusual sores are seen, animals should be examined by



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It is believed that Vesicular Stomatitis is spread by flies, and can be transmitted by common vectors such as shared equipment.

a veterinarian as soon as possible.”

Animals showing symptoms of the disease must be tested to confirm the presence of the virus. Other common causes of these symptoms include sunburn, contact with or ingestion of toxic weeds or toxicity from anti-inflammatory medications such as bute.

Humans can also be infected with vesicular stomatitis, which causes flu-like symptoms such as headache, fever, muscle ache and extreme fatigue.

Care

BECAUSE VESICULAR STOMATITIS IS A VIRUS, THERE AREN'T ANY medications to directly treat it. Care consists of supportive treatment to make the horse more comfortable.

Anti-inflammatory medications can decrease swelling and pain.

To encourage a horse to eat, make feed soft, such as creating mashes or soaking hay.

Antibiotics can be used if the horse develops fever, swelling, inflammation or pus around sores.

Animal health officials in nearly all states, including Texas, require infected animals and their herd mates to be quarantined until at least 21 days after all lesions have healed. A follow-up examination of the animals by the state veterinarian's office is required prior to quarantine release.

“Move sick animals away from the remainder of the herd to protect against disease spread,” Hillman said. “Do not move sick animals from the premises, and call your veterinarian or the nearest animal health commission office.”

Because humans can get the virus and can spread it to

other animals, precautions are necessary. When handling horses, wear latex gloves and avoid direct contact with a horse's saliva or fluid from blisters. Take extra precautions to keep the fluids from your mouth, eyes or any open wounds. If you experience symptoms after treating an infected horse, consult a physician immediately.

Prevention

THE TRANSMISSION OF VESICULAR STOMATITIS IS STILL UNKNOWN. Because of the disease's seasonal nature, it is believed that sand flies and black flies play roles in the virus transmission. The virus can be passed directly between horses through contact with saliva or fluid from blisters, and it can also be transported on equipment such as buckets, stalls, fences, trailers and feed.

To control insect populations, eliminate standing water, which can be potential breeding grounds for insects. Keep stable areas clean and remove waste regularly. There are also commercial fly-reduction products, such as fly predators, that might help.

Disinfect feed buckets, waterers, trailers and equipment regularly to prevent the spread of the virus.

Before travel, check the requirements of the venue and state to which you are going to ensure that you have the proper paperwork.

“To prevent the spread or introduction of infection, many states and countries will place additional entry requirements or restrictions on the movement of animals from affected states, or portions of the state,” Hillman said. “Call the state or country of destination before moving livestock, to ensure that all entry requirements can be met. Do not risk shipments being turned away, or worse, spreading disease and facing legal action by animal health authorities.”

The American Association of Equine Practitioners provided information for this article.

VESICULAR STOMATITIS

- Vesicular stomatitis is caused by a virus, and it only periodically reappears in the population.
- VS causes painful blister-like lesions around the mouth and hooves, and is very similar to the symptoms of foot-and-mouth disease.
- Affected animals should be tested to ensure symptoms are caused by VS and not the far more serious foot-and-mouth disease.
- Treatment for VS includes supportive treatment for pain from blisters, and possibly antibiotics when the blisters break open.
- Flies are believed to be the vectors causing the spread of VS, and their populations should be controlled.
- Check with your veterinarian before hauling a horse across state lines, as health papers may be necessary.



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Before hauling your horse to a new location from a state affected by VS, make sure that your paperwork is in order.