

# Vesicular Stomatitis is Back Again

by Heather Smith Thomas

**V**esicular stomatitis virus is headed north again; several cases appeared in June in Arizona and New Mexico. As with the outbreak in 1995, there will be some restrictions for interstate movement of livestock. Anyone planning to move animals to another state should ask their veterinarian to call ahead for the latest information on testing requirements or restrictions.

Health officials are diligent to prevent its spread because symptoms are similar to foot-and-mouth disease. The only way to tell these diseases apart is through laboratory tests. In the 1995 outbreak, many livestock shows, sales and events were cancelled and movement of livestock was limited as much as possible from affected areas in an effort to halt spread.

Vesicular stomatitis occurs in warmer southern regions (South America, Central America and Mexico) and only occasionally comes as far north as the United States. The last major episode prior to 1995 was in 1982-83 (which

affected 14 states and cost the livestock industry millions of dollars).

Officials want to keep it from becoming established in this country because of its impact on the livestock industry (lost weight and milk production) and because of its similarity to more serious foreign disease such as foot-and-mouth disease and swine vesicular disease.

Vesicular stomatitis can affect horses, cattle, pigs, and occasionally sheep, goats and llamas, and many species of wildlife, including deer, bobcats and raccoons. Humans can be infected by handling sick animals.

The disease causes blisters in mouth and dental pad, tongue, lips, nostrils, teats and feet. The blisters swell and break and skin sloughs away, leaving painful ulcers which cause animals to stop eating and drinking (losing weight) because of the raw tissue and pain. Blisters on the coronary band can cause lameness, sometimes founder, and occasionally loss of a hoof.

The most common clinical sign is drooling. Affected animals have high fever. Incubation time from exposure to blister

formation is two to eight days, sometimes longer. Often excessive salivation is the first noticed sign, with temperature rise beginning when blisters first appear. Close examination of the mouth will show blanched, raised vesicles. If there are no complications such as secondary infections, the affected animal usually recovers in two to three weeks.

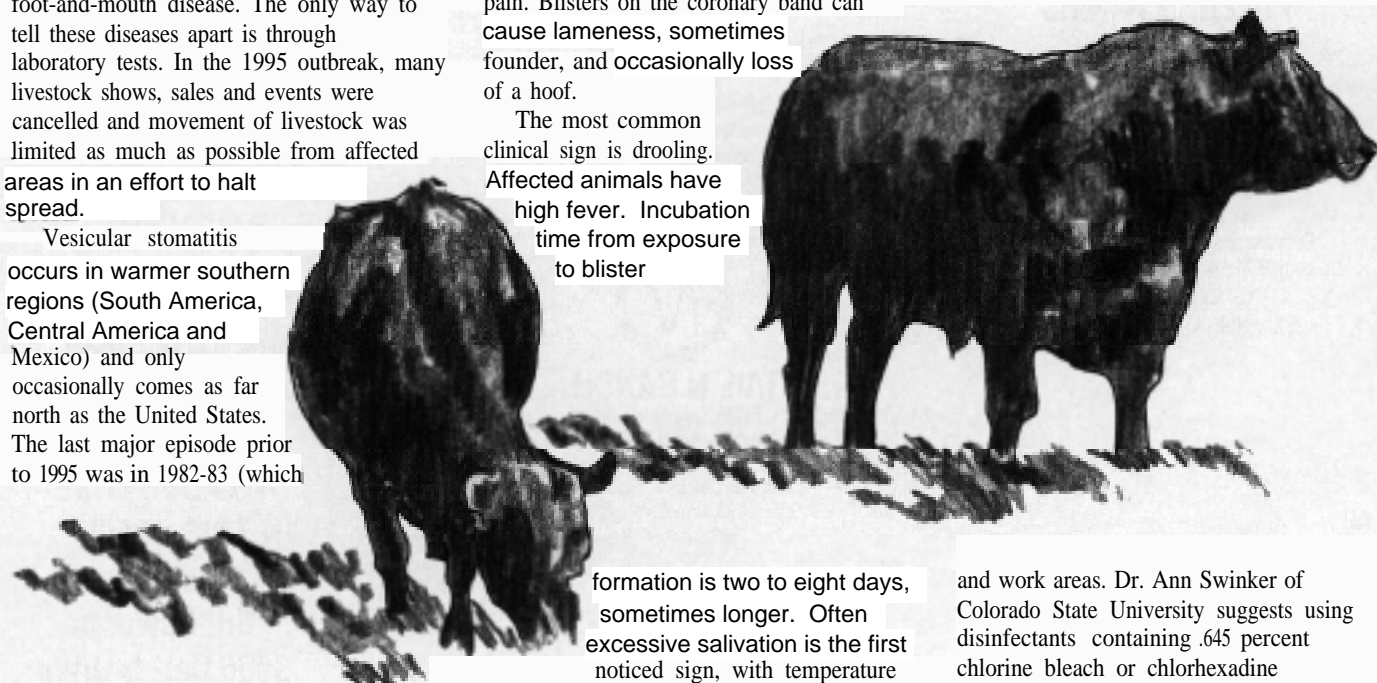
There is no specific treatment except to prevent secondary infection where blisters have broken. Animals can be protected from

vesicular stomatitis by avoiding exposure. Sanitation and quarantine on affected farms can usually keep it from spreading until it dies out. Mild antiseptic mouthwashes and ointments can help alleviate pain and speed recovery in affected animals.

Spread of the virus is by insects (such as sand flies and black flies), mechanical transmission and contact with saliva from an infected animal (or fluid from ruptured blisters). Movement of animals increases chance of spread. Moving infected animals, poor sanitation of vehicles used in transport and walking between infected and non-infected premises are ways in which the virus can be spread. Blister fluid or saliva in water buckets can infect susceptible animals. An area that had a sick animal can't be considered free of vesicular stomatitis until at least 30 days have passed since the affected animals lesions have healed.

If a case occurs on a farm, the animal should be quarantined, preferably in a stall. Do not move any animals from the premises unless they are going directly to slaughter, for at least 30 days after the last sick animal's lesions have healed.

Insect control can help prevent the spread along with disinfecting equipment



and work areas. Dr. Ann Swinker of Colorado State University suggests using disinfectants containing .645 percent chlorine bleach or chlorhexadine (Nolvasan).

Use protective measures when handling infected animals, to prevent human exposure by contact with infected body fluids. The virus can be transmitted to humans through skin or respiratory systems, causing flu-like symptoms. Prevalence of vesicular stomatitis in people may be under-reported because it's often misdiagnosed. In

humans, it causes acute illness— fever, muscle aches, headache and general discomfort with blister lesions rarely seen.

**Anyone planning to move animals to another state should ask their veterinarian to call ahead for the latest information on testing requirements or restrictions.**

People who handle affected animals can contact vesicular stomatitis if they don't take proper precautions to avoid infection. When handling livestock that might have the disease, gloves should be worn to protect the hands from saliva and blister fluid. These fluids should never be allowed to come into contact with mucous membranes such as the eyes and mouth, or open wounds.

To protect livestock from vesicular stomatitis avoid stress or medication that might compromise the immune system. Use

insecticide and insect repellent daily, especially around the ears and belly, and use insecticide eartags in cattle. Isolate new animals for at least 21 days so they can't introduce vesicular stomatitis into healthy herds. Quarantine areas should be as far away from the main herd as possible. Avoid shared feeding equipment, cleaning tools and health care equipment. Use separate sets of equipment for each group, if it must be shared, clean and disinfect it thoroughly for at least 10 minutes between uses. Clean and disinfect feed bunks and water sources daily.

People caring for animals should shower and change clothing and boots when moving between the quarantined group and the main herd. If possible, care for the isolated animals after handling the main herd to avoid contamination.

For more information on vesicular stomatitis, contact your veterinarian, or USDA Animal and Plant Health Inspection Service (APHIS) at (301) 734-8073. Information is also available at any state veterinarian's office or state department of agriculture.