

Animal Health Advisory: Vesicular Stomatitis Virus in a horse in Los Angeles County
6.22.2023

Key Points

- **Vesicular Stomatitis Virus (VSV)** was confirmed in a horse in Los Angeles County as of June 9, 2023.
- One premise in LA County is under quarantine, overseen by the California Department of Food and Agriculture (CDFA)
- VSV cases (primarily horses) have also been diagnosed in San Diego County, Riverside County, San Bernardino County, and Orange County. The first detection was in San Diego County on May 17, 2023.
- A total of 95 premises across Southern California have been quarantined since May 17, with 28 having already completed and cleared quarantine.
- **Learn about VSV** and increase vigilance for VSV.
- **Educate** horse and livestock owners about VSV.
- **REPORT suspected VSV cases in Los Angeles County.** During Monday-Friday (non-holidays), report to LA County Veterinary Public Health (LACVPH). Your report will be quickly shared with CDFA. On Weekends & Holidays, report suspected VSV cases in LA County horses to **BOTH** LACVPH and CDFA in order to prevent delays in response. See below for how to report.

Dear Animal Health Colleagues,

Overview

The California Department of Food and Agriculture (CDFA) and the US Department of Agriculture (USDA) reported that a single premise in LA County is confirmed to have a horse infected with Vesicular Stomatitis Virus (VSV), as of June 9, 2023.

Other premises with infected horses have been reported from most other Southern California counties including San Diego County, Riverside County, San Bernardino County, and Orange County. The first detection was in San Diego County on May 17, 2023. CDFA reports that 95 premises have been placed under quarantine across the region since the outbreak began, with 28 of them having already cleared quarantine. One facility in Texas is also under quarantine.

Vesicular Stomatitis is caused by an enveloped RNA virus in the family Rhabdoviridae. VSV is susceptible to numerous disinfectants when used properly, i.e. applied after surfaces are cleaned and with the appropriate contact time. Examples include 1% sodium hypochlorite, 40-70% ethanol, phenolic disinfectants and more.

VSV is not usually found in the USA most of the time. VSV cases occur annually in southern Mexico, Central America, and northern areas of South America, and causes sporadic outbreaks in the USA, usually in Texas, New Mexico, and Arizona.

VSV primarily affects horses and cattle. It may also affect sheep, goats, pigs, llamas and alpacas, deer, raccoons, and other animals. The incubation period in livestock is usually 2-8 days.

Clinical signs typically include:

- Fever
- Blister-like lesions and ulcers in and around the mouth, nose, coronary band, and/or sheath/udders
- Excessive drooling/frothing at the mouth and reluctance to eat due to pain from the lesions. This may be seen before the lesions are noticed.
- Lameness or laminitis may occur if lesions develop around the coronary band.

VSV transmission occurs via:

- Direct contact with the lesions of infected animals or their saliva or nasal discharge
- Fomites (bucket, stall doors, shoes, clothing, and other surfaces and equipment) contaminated by the saliva or discharges from infected animals
- Insect vectors, such as black flies, and midges

Can people get infected with VSV?

Yes, although symptomatic human infection from VSV appears to be uncommon, VSV is a zoonotic virus. People can get infected when they directly handle animals that have the virus. Symptoms of VSV infection in a person may include fever, muscle aches, headache, and weakness, enlarge lymph nodes, or conjunctivitis. Occasionally humans may develop oral blisters that look like cold sores. People usually recover within a week. People handling animals suspected of having VSV, or equipment and surfaces contaminated by secretions from a VSV-infected animal, should wear gloves, at minimum, and wash hands after. Consider wearing a mask, eye protection and protective clothing as well.

Suspension on exports to Canada

Because of the VSV outbreak, export of horses, swine and ruminants from California to Canada was suspended on May 18, 2023. Veterinarians can contact the CDFA Animal Health Branch at 916-216-2281, of the USDA Los Angeles Port Office at 310-955-3311 or vspslax@usda.gov to learn more about livestock export requirements.

Learn about VSV

CDFA and USDA have created a wealth of situational updates and educational materials related to VSV. LA County equine and livestock veterinarians are strongly encouraged to familiarize themselves with all of the material. CDFA's webpage on VSV includes situational updates, fact sheets in English and Spanish, sampling guidance for testing horses, biosecurity recommendations for horse shows, and much more:

- CDFA VSV info - https://www.cdfa.ca.gov/AHFSS/Animal_Health/VS.html
- USDA VSV info - <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/equine/vsv/vesicular-stomatitis>
- Peck DE et al. 2020. Management Strategies for Reducing the Risk of Equines Contracting Vesicular Stomatitis Virus (VSV) in the Western United States. <https://www.sciencedirect.com/science/article/pii/S0737080620301179?via%3Dihub> Open access. Includes photos of lesions, and detailed discussion on vector control to prevent spread of VSV.
- Vesicular Stomatitis Technical Factsheet – Iowa State University's Center for Food Security and Public Health - https://www.cfsph.iastate.edu/Factsheets/pdfs/vesicular_stomatitis.pdf

Educate horse and livestock owners about VSV

- VSV Fact Sheet from CDFA – English - https://www.cdfa.ca.gov/ahfss/Animal_Health/pdfs/VS_Factsheet.pdf
- VSV Fact Sheet from CDFA – Spanish - https://www.cdfa.ca.gov/ahfss/Animal_Health/pdfs/VS_FactsheetSP.pdf
- Vesicular Stomatitis Fast Facts – from Iowa State University's Center for Food Security and Public Health: https://www.cfsph.iastate.edu/FastFacts/pdfs/vesicular_stomatitis_F.pdf

If you suspect a VSV case:

- **Immediately ISOLATE the animal.** Do not wait for confirmatory testing. Increase fly control in the area. Assure that no equipment is shared between the affected animal and other animals. Handle the sick animal last and wear gloves when handling. Wash hands, disinfect boots and change clothes after handling the affected animal.
- **REPORT suspected VSV cases in Los Angeles County**
 - **During Monday-Friday (non-holidays)** -> Report to LA County Veterinary Public Health (LACVPH). Your report will be quickly shared with CDFA. 213-288-7060, vet@ph.lacounty.gov. Complete and submit Animal Disease Reporting Form - <http://ph.lacounty.gov/vet/docs/Forms/AnimalDiseaseDeath.pdf>
 - **On Weekends & Holidays** -> Report suspected VSV cases in LA County horses to **BOTH** LACVPH and CDFA in order to prevent delays in response.
 - **LACVPH** - 213-288-7060, vet@ph.lacounty.gov). Complete and submit Animal Disease Reporting Form - <http://ph.lacounty.gov/vet/docs/Forms/AnimalDiseaseDeath.pdf>

- **CDFA** – 916-900-5002. VSV case reporting and sampling information - https://www.cdfa.ca.gov/ahfs/Animal_Health/pdfs/California_Vesicular_Stomatitis_Suspect_Case_Reporting.pdf

Sincerely,

Karen Ehnert, DVM, MPVM, DACVPM
Director
Veterinary Public Health
Los Angeles County Department of Public Health
313 N. Figueroa St, Room 1127
Los Angeles, CA 90012
(213) 288-7060
(213) 481-2375 Fax
kehnert@ph.lacounty.gov
<http://publichealth.lacounty.gov/vet/>

Please email vet@ph.lacounty.gov if you wish to unsubscribe or need other AHAN-related assistance. To sign up for future Animal Health Alerts or to view previously released AHANs, please visit <http://publichealth.lacounty.gov/vet/AHAN.htm>.
