

July 16, 2020 4pm to 5pm

Vesicular Stomatitis Virus Update

hosted by

Kansas Horse Council's Region 4 Director, Chris Kaegi Stephens and

Executive Director, Justine Staten

We welcome and give thanks to the Kansas Department of Agriculture, Division of Animal Health Commissioners

Dr. Justin Smith, Dr. Andy Hawkins & Dr. Sara McReynolds





Kansas Vesicular Stomatitis Virtual Town Hall Meeting

June 25, 2020





SERVING
THE STATE'S
LARGEST INDUSTRY...
AGRICULTURE







USDA-VS/KDA Collaboration



Dr. Shelley Oelkers: 785-213-8469 Dr. Kara Butterfield 620-290-0636 Dr. LewAnn Schneider: 785-207-2127 Dr. Paul Grosdidier: 785-633-3638 Brown Doniphan S Republic Marshall Norton **Phillips** Smith Nemaha Cheyenne Rawlins Washington Jewell Atchison Cloud Jackson Pottawato Leavenworth Rooks Osborne Mitchell Grosdidier Schneider Clay Riley Graham efferson Wyandotte **Oelkers Butterfield** Ottawa Shawnee Lincoln Wabaunsee Geary Gove Trego Russell Wallace Johnson Dickinson Douglas Ellis Saline Morris Ellsworth Osage Miami Franklin Rush Lane Lyon Ness **Barton** McPherson Marion Chase Coffey Anderson Linn Pawnee Hodgeman **Finney** Harvey Hamilton Stafford Kearny Reno Allen Woodson Bourbon **Edwards** Greenwood Nelson **Butler** Garten Gray Sedgwick Ford Pratt Neosho Wilson Stanton Grant Haskell Crawford Kiowa Kingman Gibson Elk Montgomery Labette Cowley Meade Clark Sumner Cherokee Barber Morton Stevens Seward Comanche Harper Chautauqua

Dr. Gerald Gibson: 785-215-9217

Dr. John Nelson: 620-931-8079

Dr. Cody Garten: 785-207-5414

VSV In the News

Confirmed June 16, 2020

1320 Research Park Drive Manhattan, KS 66502 785-564-6700 www. agriculture.ks.gov



900 SW Jackson, Room 456 Topeka, KS 66612 785-296-3556

Laura Kelly, Governor

Mike Beam, Secretary

NEWS RELEASE June 17, 2020

For more information: Heather Lansdowne 785-564-6706 AgMedia@ks.gov

KDA Confirms Vesicular Stomatitis in Horses in Butler County

MANHATTAN, Kansas — The Kansas Department of Agriculture has announced that vesicular stomatitis virus (VSV) was confirmed in horses in Butler County on June 16, 2020. Kansas becomes the fourth state in the U.S. to have confirmed cases of VSV this year.

The infected horses live on different private residences in south central Kansas. When clinical signs were first identified on a premises in Butler County, KDA contacted veterinarians in the region to alert them of the possibility of VSV, which led to additional suspect cases in the area. Upon receiving the laboratory confirmation, KDA established a quarantine on the three affected premises. KDA has tested a number of other animals in the region which are showing clinical signs consistent with VSV, and are awaiting final laboratory testing.

"Protecting the health and safety of horses and other livestock in Kansas is our highest priority," Dr. Justin Smith, Animal Health Commissioner said. "We encourage all livestock owners across Kansas to be aware of the clinical signs of VSV and follow best practices to limit exposure to insects. Livestock owners should take extra precautions to limit exposure to other animals."

VSV is a viral disease which primarily affects horses, but can also affect cattle, sheep, goats, swine, llamas and alpacas. In horses, VSV is typically characterized by lesions which appear as crusting scabs on the muzzle, lips, ears, coronary bands, or ventral abdomen. Other clinical signs of the disease include fever and the formation of blister-like lesions in the mouth and on the dental pad, tongue, lips, nostrils, ears, hooves and teats.

Infected animals may refuse to eat and drink, which can lead to weight loss. Vesicular

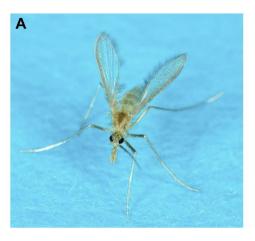


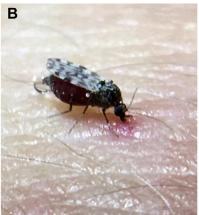
Viral disease

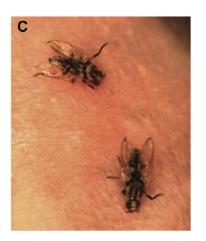
- Two serotypes
 - Indiana
 - New Jersey

Transmission:

Sand flies, Midges, Black flies



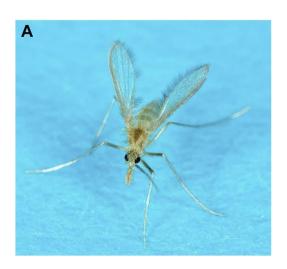






Sand Fly

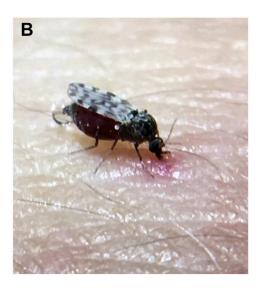
- Prefer high nutrient area that remain dry (Tree holes, rock crevices, animal burrows)
- Primarily Nocturnal





Biting Midges

- Prefer high nutrient areas that remain wet, moist (wet leaves, compost, mud around ponds and troughs)
- Tend to move and feed around sunset and sunrise





Black Flies

- Prefer aquatic habitats that have flowing water(irrigation ditches, springs, rivers, streams)
- Active during the day and early evening, rarely at night
- Some species can travel up to 7 miles per day





- Transmission:
 - Direct nose-to-nose contact
 - Mechanical fomites:
 - Buckets
 - Shared feed resources
 - Common water source
 - Shoes, clothing, hands
 - Contaminated equipment





Significance:

- Primarily affects horses
- Cattle, sheep, goats, swine, llamas and alpacas

•Clinical signs:

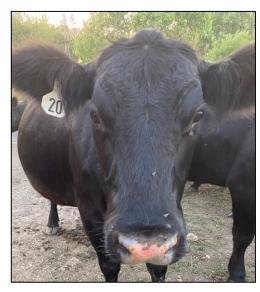
- Reluctance to eat
- Drooling
- Frothing at mouth
- Lameness
- Drop in milk production













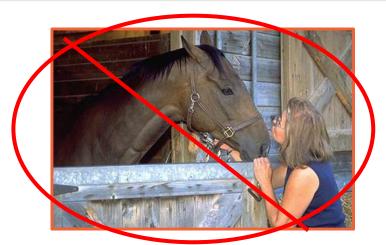






Zoonotic

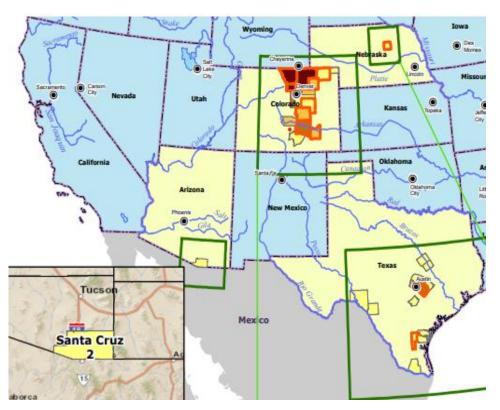
- Not common
- Infection from
 - Lesions
 - Saliva
 - Nasal Secretions
- Symptoms
 - Influenza like illness
 - Fever
 - Muscle aches
 - Headaches
 - Malaise
- Personal Protective Equipment
 - Gloves
 - Masks and/or face shields
 - Wash hands frequently





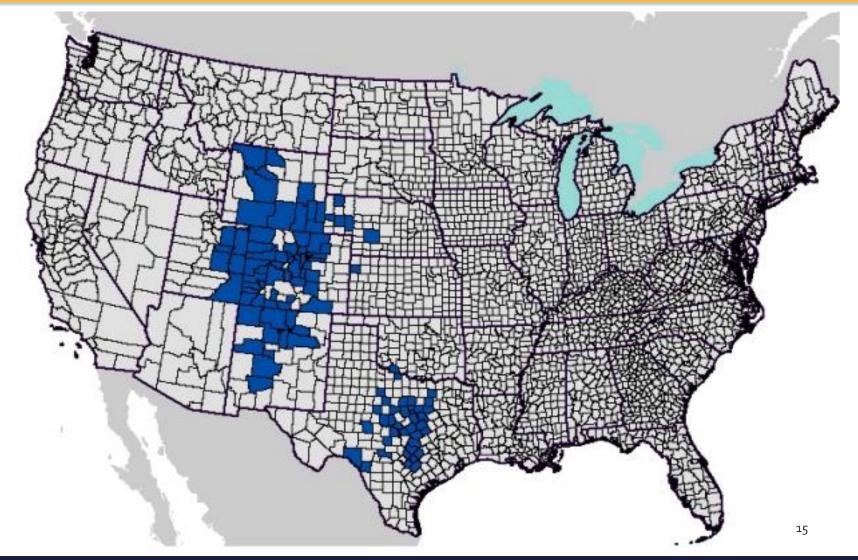


- Incursion vs Expansion
- Historical outbreaks
 - **2004, 2005, 2006**
 - **2009, 2010**
 - **2012**
 - **2014, 2015**
 - **2019**



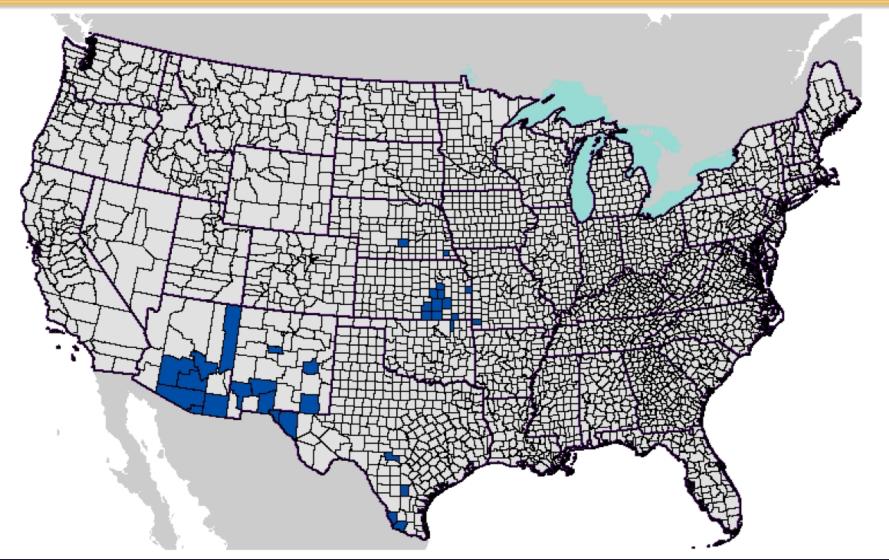
2019 VSV - USDA





2020 VSV - USDA











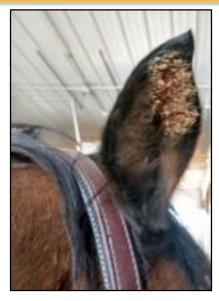










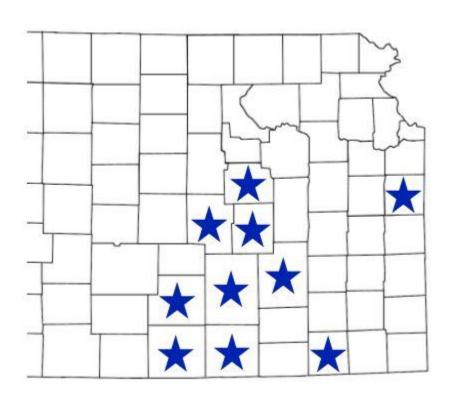






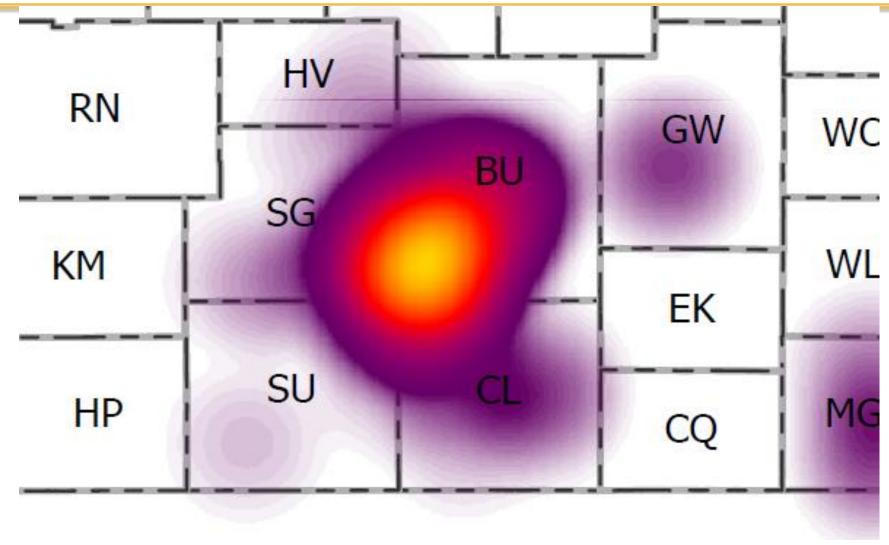


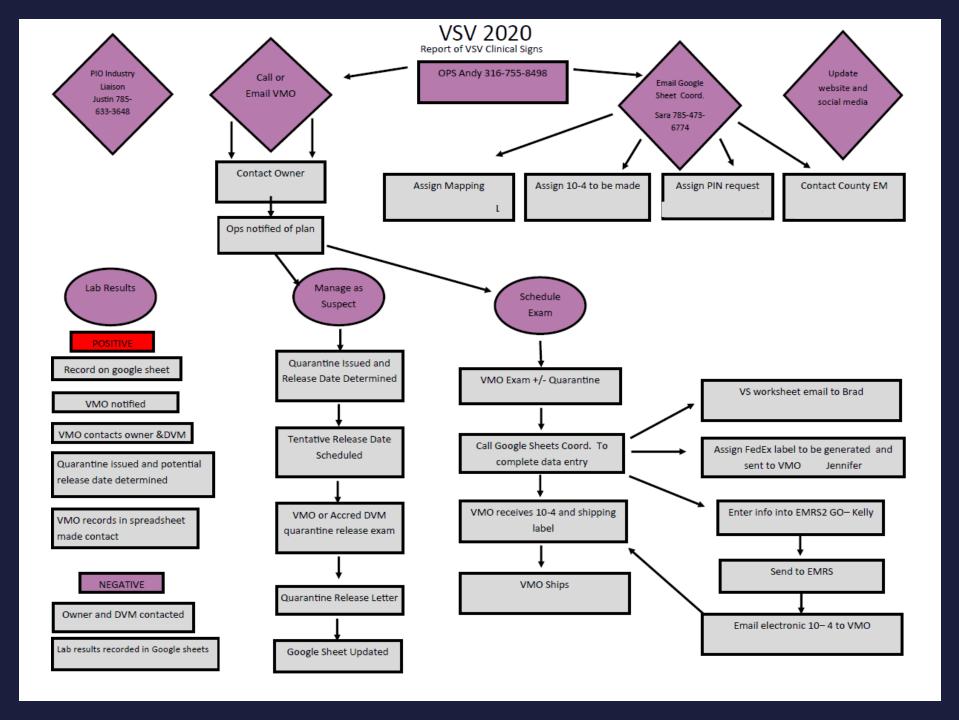
- ■152 Total Investigations
- 10 Positive Counties (Butler, Chase, Cowley, Greenwood, Marion, Miami, Montgomery, Morris, Sedgwick, Sumner)
- 64 Positive Premises
 - 371 Head of Horses and 407+ additional livestock
- 36 Premises Suspect &/or Pending Lab Results



Vesicular Stomatitis Virus – July 9









Non - Positive Counties

 Index case must be examined by regulatory veterinarian and have laboratory confirmation

Positive Counties

- Accredited Veterinarian Sample Collection Protocol
- Management as Suspect Premises in lieu of testing
- Quarantines will remain in place for 14 days from the onset of lesions in the last affected animal
- Quarantine release inspection by veterinarian



- Quarantine established on all affected premises
 - No susceptible livestock movement on or off premises
 - Violations

K.S.A. 47-604 Any person who knowingly and intentionally violates, disregards or evades, or attempts to violate, disregard or evade any order establishing or regulating a quarantine issued pursuant to article 6 of chapter 47 of the Kansas Statutes Annotated, and amendments thereto, upon conviction of a violation of this section, such person shall be guilty of a severity level 7 nonperson felony.



- No restrictions for shows/events
 - VSV Guidelines for Shows and Fairs
 - Recommend exhibitions have pre-entry exam

-or-

- Certificate of Veterinary Inspection (Health Certificate) issued within last 48 hours
- Post signage on good biosecurity practices
- Consider limiting exhibitions to one day events
- Provide situational awareness and manage current stats on website

www.agriculture.ks.gov/VSV



VESICULAR STOMATITIS VIRUS

STOP THE SPREAD OF VSV: CONTROL INSECTS!

Focus on clean pens, especially manure removal.

Use appropriate fly spray and fly traps.

Utilize summer sheets and hoods when possible.



VESICULAR STOMATITIS VIRUS

WATCH THESE HOT SPOTS FOR VSV SYMPTOMS!

VSV is characterized by crusting scabs or lesions on the mouth, tongue, nostrils, ears, coronary bands, hooves, teats or ventral abdomen.

Other symptoms include drooling/frothing at the mouth, lameness, fever and refusal to eat and drink, which can lead to weight loss.



VESICULAR STOMATITIS VIRUS

STOP THE SPREAD OF VSV: BIOSECURITY

- · Separate affected animals
- Control insects
- Handle healthy animals before sick animals
- Wash and disinfect hands, boots, equipment, stalls
- Don't share equipment (water buckets, brushes, etc.)
- Change clothes between healthy and sick animals





www.agriculture.ks.gov/vsv



Biosecurity – Increased Vigor



- Separate affected horse(s)
- Controlling insects
 - fly spray
 - fly traps
 - maintaining clean pens, manure removal
 - utilizing summer sheets, hoods, leggings
- Handle all healthy animals before sick animals
- Practice personal biosecurity measures
 - Wash and disinfect hands, boots, equipment, stalls
 - Change clothes between affected and non-affected animals

Biosecurity – Increased Vigor



- Premises Management
 - Improve drainage
 - Remove standing vegetation
 - Provide indoor shelter during peak vector feeding times
 - Reduce artificial lighting
 - •Increase air movement in barns ??
 - Increase daily observation of your horses

2020 Kansas VSV Additional Info.



- •Interstate import restrictions
 - Check with destination state for requirements
 - KS additional import requirements for livestock from a known positive state

All horses, cattle, sheep, goats and swine originating from any county where vesicular stomatitis (VS) has been diagnosed in the past 30 days, (except cattle and swine transported directly to slaughter), must be accompanied by a health certificate (certificate of veterinary inspection), permit, and signed by an accredited veterinarian that includes the following statement: "All animals identified on this certificate have been examined by me and found to be free of vesicular stomatitis. These animals have not been exposed to vesicular stomatitis nor located on premises where vesicular stomatitis has been diagnosed within thirty (30) days."

Canadian import restrictions

Regarding Vesicular stomatitis (VS), all states in which the animal(s) have resided in the
past twenty-one (21) days were free from clinical and epidemiological evidence of
vesicular stomatitis during the twenty-one (21) days immediately prior to export to
Canada.

www.agriculture.ks.gov/VSV

Justin Smith DVM justin.smith@ks.gov

Andy Hawkins DVM andy.hawkins@ks.gov

Sara McReynolds DVM sara.mcreynolds@ks.gov

Gerald Gibson DVM gerald.gibson@ks.gov

Paul Grosdidier DVM paul.grosdidier@ks.gov

John Nelson DVM john.nelson@ks.gov



Kansas Department of
Agriculture
Division of Animal Health
785-564-6601
agriculture.ks.gov/animalhealth







Thank You