



2020 Vesicular Stomatitis Virus (VSV) Situation Report – April 29, 2020

Information current as of 3:00 pm MDT, 04/29/2020

Since the last situation report (4/23/2020), there have been 4 new VSV-affected premises identified (2 confirmed positive, 2 suspect) in 3 states:

Arizona (1 new confirmed positive premises)

- **Pinal County (New Infected County)** – 1 confirmed positive equine premises

New Mexico (2 new suspect premises)

- Dona Ana County – 1 new suspect equine premises
- Sierra County – 1 new suspect equine premises

Texas (1 new confirmed positive premises)

- **El Paso County (New Infected County)** – 1 confirmed positive equine premises

Classification of Cases

Premises that have laboratory diagnostic confirmation of VSV are categorized as confirmed positive premises. Once a county is confirmed as VSV-positive, new equine premises presenting with clinical signs of VSV in that county are not required to be tested for confirmation of the disease, but the premises will be quarantined and classified as a suspect premises.

Quarantines

Confirmed positive and suspect premises are quarantined for at least 14 days from the onset of lesions in the last affected animal on the premises.

Summary of the Outbreak (Updated information in blue)

The 2020 VSV outbreak began on April 13, 2020, when the National Veterinary Services Laboratories (NVSL) in Ames, Iowa confirmed the first VSV-positive premises in Dona Ana County, New Mexico. Arizona and Texas subsequently broke with VSV cases which were confirmed by NVSL on April 22, 2020 (Cochise County, Arizona) and April 23, 2020 (Starr County, Texas).

Since the start of the outbreak, **14 VSV-affected premises have been identified (12 confirmed positive, 2 suspect)**. All **fourteen (14)** of these premises have only equine species clinically affected and no clinically affected cattle have been identified at this time. New Mexico has identified **9** affected premises (7 confirmed positive, 2 suspect) in 3 counties (Dona Ana, Eddy, and Sierra Counties). Arizona has identified **2** affected premises (2 confirmed positive, 0 suspect) in 2 counties (Cochise and Pinal Counties). Texas has identified **3** affected premises (3 confirmed positive, 0 suspect) in 2 counties (El Paso and Starr Counties).

Summary of VSV-Affected Premises

Table 1. Location, number, and status of VSV-affected premises. New information in blue.

	Confirmed Positive Premises	Suspect Premises	Premises Released from Quarantine	Current Premises Quarantined
ARIZONA				
Cochise County	1	0	0	1
Pinal County	1	0	0	1
TOTAL: 2 COUNTIES	2	0	0	2
NEW MEXICO				
Dona Ana County	4	1	0	5
Eddy County	1	0	0	1
Sierra County	2	1	0	3
TOTAL: 3 COUNTIES	7	2	0	9
TEXAS				
El Paso County	1	0	0	1
Starr County	2	0	0	2
TOTAL: 2 COUNTIES	3	0	0	3
TOTAL PREMISES ALL STATES	12	2	0	14

Table 2. Cumulative count of species clinically affected on VSV-positive premises.

State	Premises with clinically affected equine species	Premises with clinically affected bovine species	Premises with clinical signs in both equine and bovine species	Premises with clinical signs in other susceptible species	Total affected premises
ARIZONA	2	0	0	0	2
NEW MEXICO	9	0	0	0	9
TEXAS	3	0	0	0	3
TOTAL	14	0	0	0	14

Map 1. Counties with Current VSV-Quarantined Premises (shaded in blue)

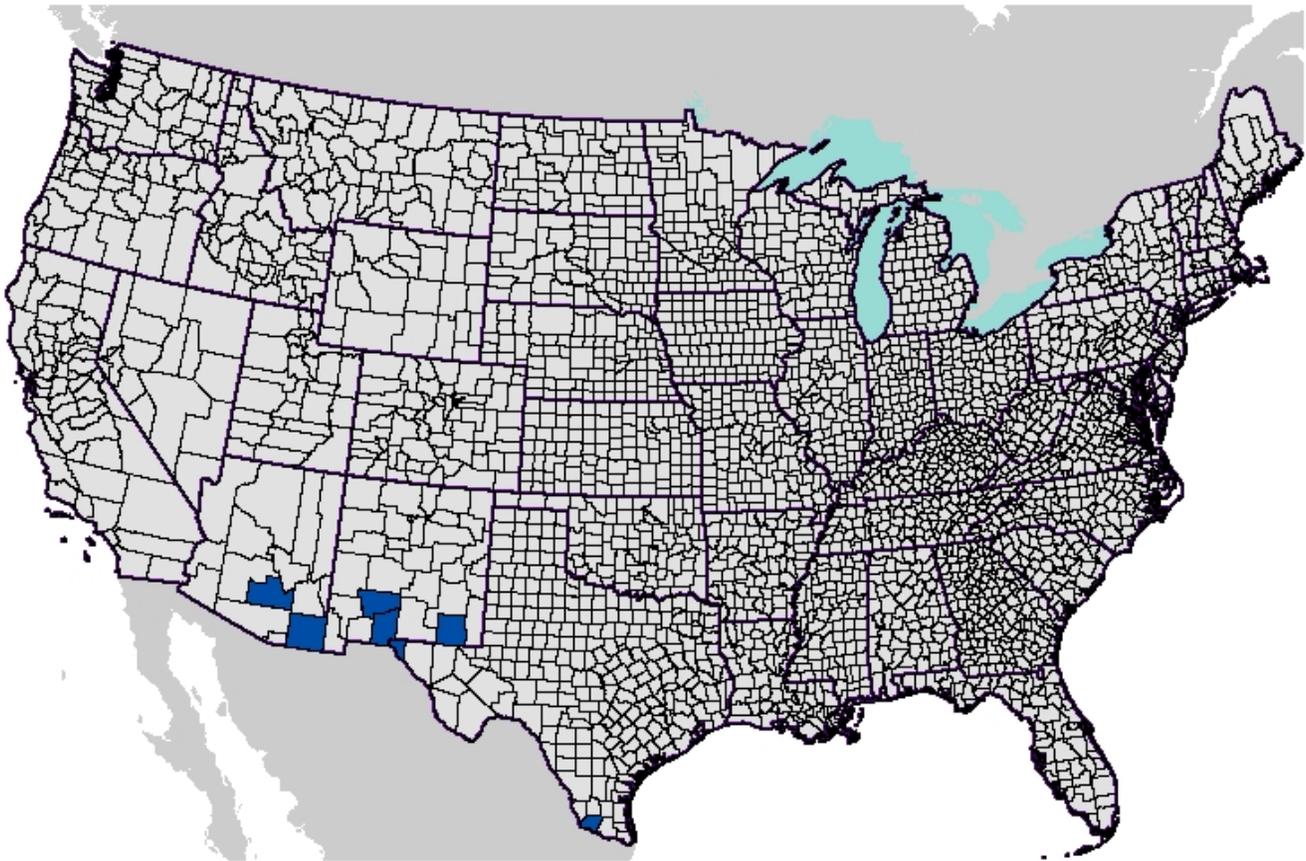


Table 3. VSV Serotypes Identified During the 2020 Outbreak

Both VSV-Indiana (VSV-IN) and VSV-New Jersey (VSV-NJ) serotypes have been identified during the 2020 outbreak. VSV-IN occurred in the U.S. in 2019, while VSV-NJ was last isolated in the U.S. in the 2014-2015 outbreak. Both serotypes are known to circulate in endemic cycles in southern Mexico. The last U.S. outbreak involving both serotypes occurred in 1997-1998.

State	Premises with VSV-IN serotype confirmed	Premises with VSV-NJ serotype confirmed	Premises with VSV serotype unconfirmed*	Total VSV affected premises
ARIZONA	1	0	1	2
NEW MEXICO	7	0	2	9
TEXAS	1	2	0	3
TOTAL	9	2	3	14

*Livestock in the southwestern U.S. and Rocky Mountain region have been exposed to both VSV-NJ and VSV-IN in recent outbreak years. New infection with either serotype in 2020 can cause elevated antibody titers to both serotypes if previously encountered. The current infection serotype on a premises may not be able to be confirmed if elevated antibodies to both serotypes are present in the animals and antigen detection tests (RT-PCR and virus isolation) are negative. Additionally, VSV serotype will not be known in suspect cases in which diagnostic testing does not occur.

Table 4. Timeline of Events

Date	Event
April 13, 2020	VSV index case for the U.S. confirmed at NVSL – Dona Ana County, New Mexico. New affected county confirmed – Sierra County, New Mexico
April 20, 2020	New affected county confirmed – Eddy County, New Mexico
April 22, 2020	VSV index case for Arizona confirmed – Cochise County, Arizona
April 23, 2020	VSV index case for Texas confirmed – Starr County, Texas
April 27, 2020	New affected county confirmed – Pinal County, Arizona
April 29, 2020	New affected county confirmed – El Paso County, Texas