United States Department of Agriculture

Animal and Plant Health Inspection Service

Veterinary Services

2020 Vesicular Stomatitis Virus (VSV) Situation Report – May 21, 2020

Information current as of 5:00 pm MDT, 05/21/2020

There have been no new VSV-infected states identified since April 23, 2020. Currently affected states include Arizona, New Mexico, and Texas.

Since the last situation report (5/14/2020), there have been 7 new VSV-affected premises identified (7 confirmed positive, 0 suspect) in 3 states. Updates are as follows:

Arizona (3 new confirmed positive premises)

- Cochise County – 2 new confirmed positive equine premises
- **Santa Cruz County (New Infected County) –** 1 confirmed positive equine premises
- Since the last situation report, 3 premises have been released from quarantine – 1 in Cochise County, 1 in Gila County, and 1 in Pima County.

New Mexico (1 new confirmed positive)

- Dona Ana County – 1 new confirmed positive equine premises
- Since the last situation report, 2 premises have been released from quarantine in Dona Ana County.

Texas (3 new confirmed positive premises)

- **Hudspeth County (New Infected County) – 1 confirmed positive equine premises**
- **Kerr County (New Infected County) – 1 confirmed positive equine premises**
- **McMullen County (New Infected County) – 1 confirmed positive cattle premises**
- Since the last situation report, 7 premises have been released from quarantine – 1 in El Paso County, 4 in Starr County, and 2 in Zapata County.

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, **34 VSV-affected premises have been identified (31 confirmed positive, 3 suspect).** Thirty (30) of these premises had only equine species clinically affected and 4 premises had clinically affected cattle (McMullen, Starr, and Zapata Counties, Texas).

Arizona has identified 8 affected premises (8 confirmed positive, 0 suspect) in 5 counties (Cochise, Gila, Pima, Pinal, and Santa Cruz Counties). New Mexico has identified 16 affected premises (13 confirmed positive, 3 suspect) in 6 counties (Bernalillo, De Baca, Dona Ana, Eddy, Grant and Sierra Counties). Texas has identified 10 affected premises (10 confirmed positive, 0 suspect) in 6 counties (El Paso, Hudspeth, Kerr, McMullen, Starr, and Zapata Counties). There have been a total of 21 previously VSV-infected or suspect premises that have completed the quarantine period and been released. Thirteen (13) premises remain under VSV quarantine.

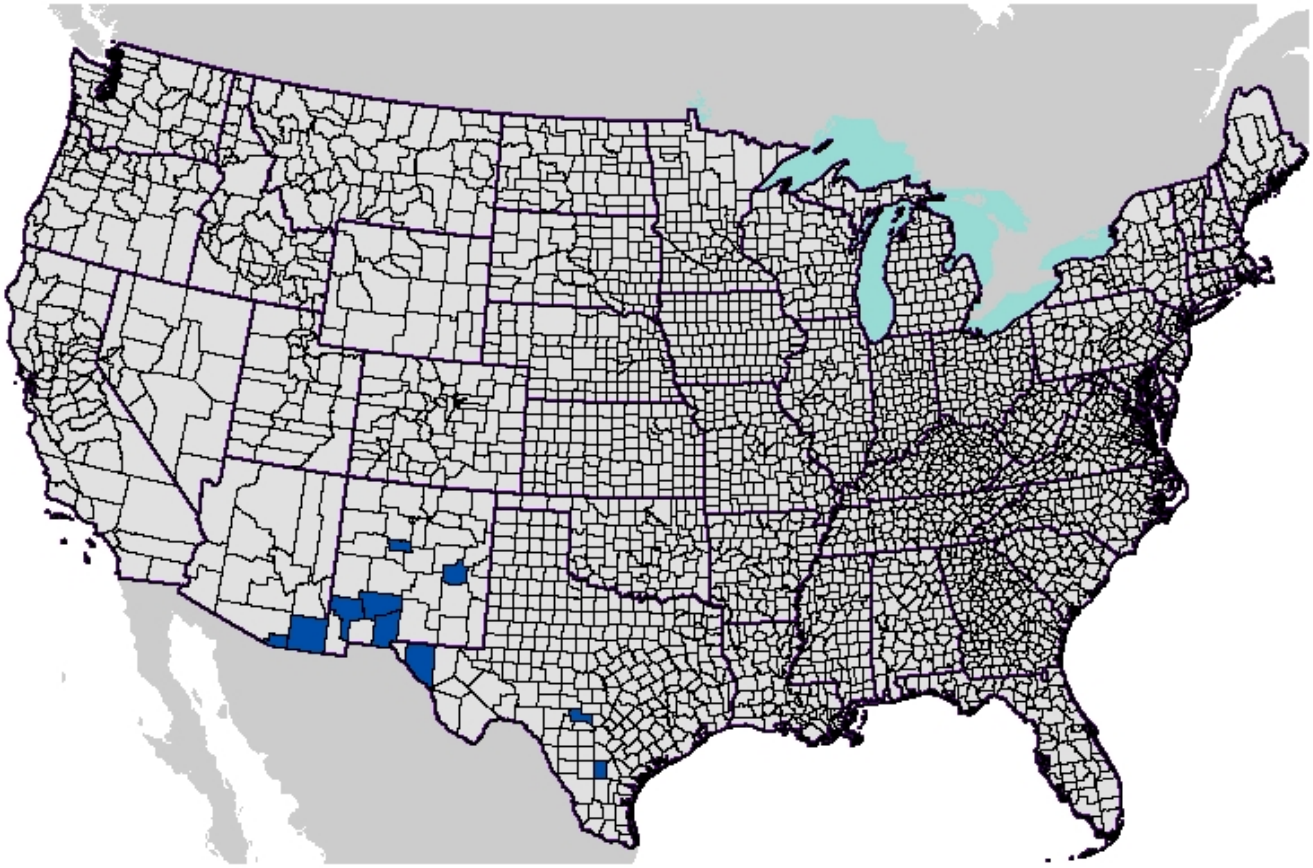
Summary of VSV-Affected Premises

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

ARIZONA	Confirmed Positive Premises	Suspect Premises	Premises Released from Quarantine	Current Premises Quarantined
Cochise County	4	0	2	2
Gila County	1	0	1	0
Pima County	1	0	1	0
Pinal County	1	0	1	0
Santa Cruz County	1	0	0	1
TOTAL: 5 COUNTIES	**8**	**0**	**5**	**3**
NEW MEXICO				
Bernalillo County	1	0	0	1
De Baca County	2	0	0	2
Dona Ana County	6	1	5	2
Eddy County	1	0	1	0
Grant County	1	0	0	1
Sierra County	2	2	3	1
TOTAL: 6 COUNTIES	**13**	**3**	**9**	**7**

TEXAS	Confirmed Positive Premises	Suspect Premises	Premises Released from Quarantine	Current Premises Quarantined
El Paso County	1	0	1	0
Hudspeth County	1	0	0	1
Kerr County	1	0	0	1
McMullen County	1	0	0	1
Starr County	4	0	4	0
Zapata County	2	0	2	0
TOTAL: 6 COUNTIES	**10**	**0**	**7**	**3**
TOTAL PREMISES ALL STATES	**31**	**3**	**21**	**13**

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



Map 2 (Cumulative). Counties with Premises Quarantined for VSV in 2020 (shaded in blue)

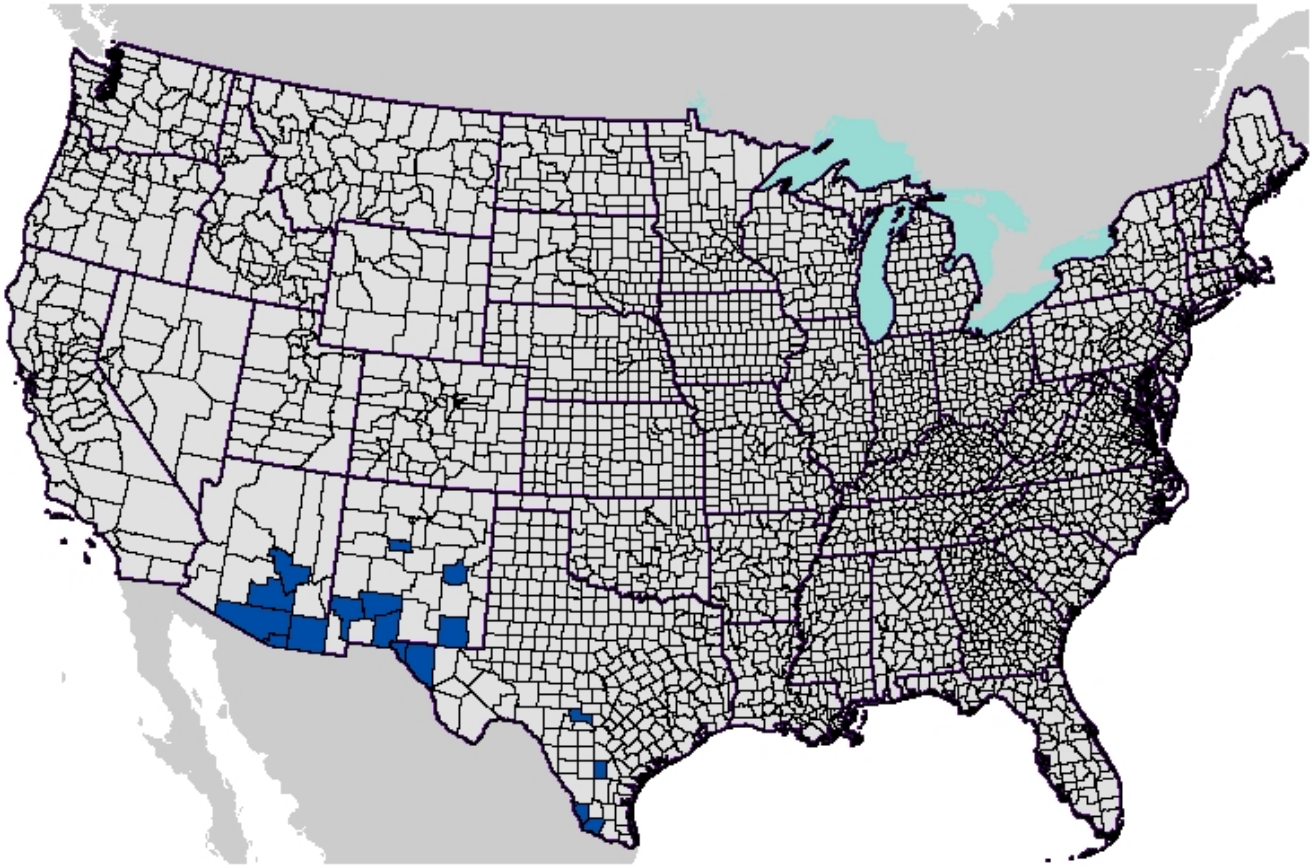


Table 2. Cumulative count of species clinically affected on VSV-positive premises.

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	8	0	0	0	8
NEW MEXICO	16	0	0	0	16
TEXAS	6	4	0	0	10
TOTAL	**30**	**4**	**0**	**0**	**34**

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	7	0	1	8
NEW MEXICO	13	0	3	16
TEXAS	3	7	0	10
TOTAL	**23**	**7**	**4**	**34**

*Livestock in the southwestern and Rocky Mountain regions of the U.S. 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
May 4, 2020	New affected county confirmed – Grant County, New Mexico
May 6, 2020	New affected counties confirmed – Gila County, Arizona; Zapata County, Texas
May 7, 2020	New affected counties confirmed – Pima, County, Arizona; Bernalillo and De Baca Counties, New Mexico
May 19, 2020	New affected county confirmed – McMullen County, Texas

May 20, 2020	New affected county confirmed – Hudspeth County, Texas
May 21, 2020	New affected counties confirmed – Santa Cruz County, Arizona; Kerr County, Texas