

# Washington State VETERINARIAN



July 2020  
Volume 2, Issue 1



## The inside sCOOP on raising healthy backyard flocks

Dr. Dana Dobbs, DVM

Over the last few years, owning a backyard flock has increased in popularity. There are several reasons for this ranging from having fresh meat and eggs, starting a new hobby, having a 4-H project, or raising birds for exhibition or sale. Having a chicken coop can be a fun and educational experience for the entire family, and teaches children responsibility. In some cases, these feathered friends have become so popular, they've become pets, even sporting human attire!

With the COVID-19 crisis, more people are interested in raising birds and other livestock than ever before. Unfortunately, many have never raised poultry or livestock, which may result in poor animal husbandry practices and accidental spread of disease.

Unfortunately, chickens and other poultry can be asymptomatic carriers of disease. In chickens, certain species of bacteria such as Salmonella can cause severe gastrointestinal illness in humans. This is especially true for children, immunocompromised individuals, and the elderly. Additionally, waterfowl may transmit viruses such as avian influenza to chickens, which can rapidly spread to surrounding flocks. Under the right conditions, some of these viruses can mutate and may infect other livestock or humans. An emergency response to these incidents will often result in flock depopulation, movement controls, economic and emotional loss, and impacts on international trade.

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## The inside sCOOP on raising healthy backyard flocks, continued from page 1

How can owners safely enjoy poultry and minimize disease concerns? The first steps to raising healthy poultry include education and applying sound biosecurity practices. “Bio” refers to life, and “security” indicates protection. Since the COVID-19 outbreak, some of these concepts should already be familiar:

- Wash hands before and after handling poultry
- Do not kiss or snuggle birds
- Do not bring poultry into houses, especially kitchens
- Use dedicated clothing and footwear for feeding, cleaning the coop, or handling chickens
- Stay away from birds and other pets if you are sick
- Clean and disinfect equipment, feeders, water containers, perches, nest boxes, etc., on a regular basis
- Separate chickens and domestic waterfowl and isolate any new or returning birds from the flock for at least 30 days
- Prevent wild migratory waterfowl from having access to the flock via enclosed coops, fencing, overhead barriers, and mesh
- Use safe food handling practices and proper cooking temperatures for harvested poultry

Additional excellent biosecurity resources for any flock size can be found at:

- [The Poultry Biosecurity website](#)
- [USDA's "Defend the Flock" Resource Center](#)



Owners observing unusual illness in their birds should call their veterinarian for assistance. If the flock is experiencing signs of respiratory disease or high mortality, call the WSDA Avian Health Sick Bird Hotline immediately at **1-800-606-3056**.

Raising poultry can be a rewarding and fun experience for everyone. Because of the recent pandemic, families are staying home and trying to find ways to stay occupied and provide alternate food sources. However, it is important to understand the basics of animal care and employ sound biosecurity principles to stay safe, raise healthy birds, and prevent disease transmission. ☘

## EQUINE

# Remember to vaccinate your horses for West Nile Virus

**Dr. Ben Smith**

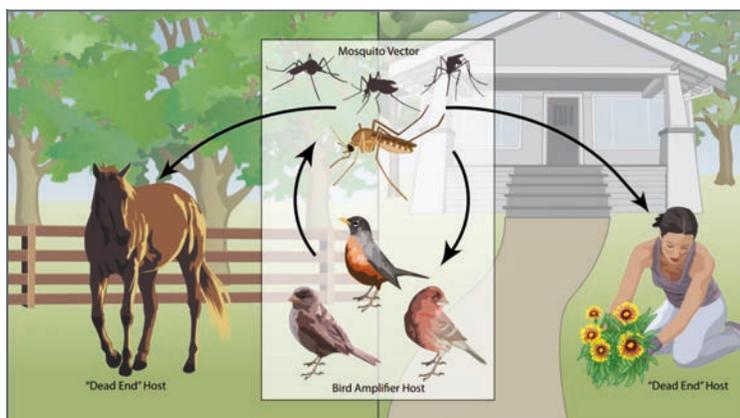
With all the chaos spinning off the coronavirus epidemic, don't let protecting horses from West Nile Virus (WNV) get lost in the commotion—remember to vaccinate horses for WNV before the start of mosquito season.

The neurologic disease caused by WNV can have a range of signs from non-existent to flu-like to death. The ataxic/neurologic horse can be particularly difficult and expensive to treat. Horses getting neurologic signs have up to a 35% chance of death. In cases that progress to neurologic signs, euthanasia is a common outcome. Recovered equines often have lifelong neurologic issues.

Mosquitoes transmit WNV to humans and horses, which can be, quite literally, dead-end hosts. Keys to mitigation include eliminating mosquito habitat (old tires with standing water, stagnant water tanks and ponds, etc.), vaccination, and insect repellent. The vaccine works well to prevent this devastating disease and can be combined with vaccines recommended for other diseases.

The WNV vaccine used in each case should be administered according to veterinary directions. Initial vaccination is usually two injections 21-28 days apart, then annually. It is important to give the second or annual vaccination near the start of mosquito season.

In several past years, Washington State has held the unwelcome distinction for having the most WNV cases in the country. All the cases reported were in unvaccinated or under-vaccinated equines. If a suspected case is seen, please [report to WSDA Animal Services](#) immediately. We will engage the Department of Health to follow the disease's progression and investigate the possibility of associated human sickness.



Source: CDC

# Washington Reportable Disease Stats

## MAY 2020

DISEASE REPORTED	ANIMAL	NUMBER
Coronavirus	Feline	1
Brucellosis ( <i>Brucella canis</i> )	Canine (dog)	2
Heartworm	Canine (dog)	10
Leptospirosis	Canine (dog)	2
Lyme Disease ( <i>Borrelia burgdorferi</i> )	Canine (dog)	1
Madei-Visna (Ovine progressive pneumonia)	Ovine	16 (one premise)
Strangles ( <i>Streptococcus equi subsp. equi</i> )		7

## JUNE 2020

DISEASE REPORTED	ANIMAL	NUMBER
Coronavirus	Feline	1
Heartworm	Canine (dog)	7
Leptospirosis	Canine (dog)	1
Lyme Disease ( <i>Borrelia burgdorferi</i> )	Canine (dog)	3
Strangles ( <i>Streptococcus equi subsp. equi</i> )	Equine (horse)	1

## Tick Paralysis

Dr. Ben Smith

The Washington State University veterinary teaching hospital reported the year's first case of tick paralysis in April. The victim in this case was an alpaca but it could have been any species, including a human. This is a reminder to be on the lookout for tick paralysis, a common and potentially fatal disease tick bites can transmit.

### The cause

Organisms in tick saliva can cause many tick-borne diseases, but tick paralysis is unique because it results directly from the tick itself. A neurotoxin secreted by some ticks as they feed causes the damage. The neurotoxin can incapacitate an animal within 72 hours and left untreated, the situation can quickly become deadly. I have seen a single tick bring down a 2000-pound bull.

### Treatment

Finding the offending tick can be challenging, but it's key to treatment. When looking for ticks, concentrate on the vertebral area. If you decide to clip the animal, proceed with caution to avoid cutting through the tick and leaving the mouth parts. Once you find and remove the tick, recovery can be dramatic. Affected animals often get up as soon as the offending tick has been removed.

### Prevention

Insecticidal pour-ons and sprays can be helpful, but are not completely effective; incorrect dosing and inadequate coverage are common issues. There are also very few products with tick labeling. These products tend to be quite strong, so caution for the sake of the animal and applicator is warranted. Injectable anti-parasitics are helpful, but kill the tick only after it has latched on for blood meal.

Ticks seem to be especially prevalent this year, so be careful when walking in brush or tall grass. Check animals closely, and if one goes down suddenly, make tick paralysis a top rule-out.



# Equine herpes virus confirmed in King County

Dr. Ric Torgerson and Dr. Amber Itle, Assistant State Veterinarian

In May, WSDA learned of an outbreak of equine herpes virus myeloencephalopathy (EHM) on a farm in King County. EHM or EHV-1 neuropathogenic strain is a highly contagious, potentially fatal virus for horses. Cases are defined by positive EHV-1 tests and compatible clinical signs. EHM is not zoonotic.

After receiving the report of the three laboratory-confirmed cases in King County, WSDA coordinated with the attending veterinarian and immediately enacted a quarantine on the premises. The farm owner had already isolated the three positive index cases upon observing signs of EHM. Horses housed near the index cases were tested, as were horses new or returning to the premises in the previous 30 days, and horses showing signs of infection. WSDA lifted the quarantine when each animal tested negative in two consecutive PCR tests.

Given the highly infectious nature of the virus, WSDA urges veterinarians to educate clientele about signs of EHV-1 and EHM along with response plans to contain an outbreak as quickly as possible.

## Signs of EHV-1

- Fever of 101.5 F or higher
- Discharge from the eyes or nose
- Respiratory signs
- Swelling of the limbs
- Spontaneous abortions
- Neurological signs such as ataxia, weakness, urine dripping, lack of tail tone, and recumbency (most common with EHM)

EHV-1 often exhibits a biphasic fever (see chart on page 5). Horses shed large viral loads during the first phase (T >101). They develop clinical signs during the viremic phase with significantly higher temperatures but decreased viral shedding. Identifying horses during the first phase is critical to making management decisions that can decrease risk of transmission to other horses.

## Client Education

Educational outreach should clarify the differences between the respiratory, abortive, and neurologic forms of EHV-1, as well as the differences between the wild-type and mutant virus neurologic forms. Clients should be educated about the signs of EHV-1 and EHM and instructed to contact a veterinarian immediately if any are observed.

Caretakers should:

- Know horses' normal temperatures and check them routinely, preferably first thing in the morning and last thing in the evening.
- Record findings in a farm log sheet.

- Check temperatures before administering medications (especially NSAIDS) because medications can lower body temperature.
- Prepare an isolation stall in advance on all premises to accommodate a horse with any signs of contagious illness.
- Teach all persons connected with horses effective cleaning and disinfecting protocols.

## Submitting samples

It is critical to take the correct samples to detect the EHV-1 virus. Nasal swabs for virus detection and serologic blood samples should be obtained for evidence of infection and/or exposure to EHV-1. Veterinarians should submit a red top (serum) blood tube, a lavender top (whole blood) tube, and nasal swabs. Send samples to a laboratory accredited by the American Association of Veterinary Laboratory Diagnosticians; the Washington State Animal Disease Diagnostic Laboratory and University of California-Davis Real-time PCR Research and Diagnostics Core Facility are good options. Notify the state veterinarian's office immediately when laboratory results are positive and preferably when signs compatible with EHV-1 and/or EHM are observed.

## Biosecurity plans are essential

The EHV-1 virus spreads between horses through direct and indirect contact. Nose-to-nose and aerosol transmission is common, as is contact with contaminated fomites and surfaces. Incubation is two to 14 days. People cannot be infected by the virus but they can carry it on their clothes and hands.

### CLEAN UP YOUR ACT

**Reduce disease risk for you and your animals!**

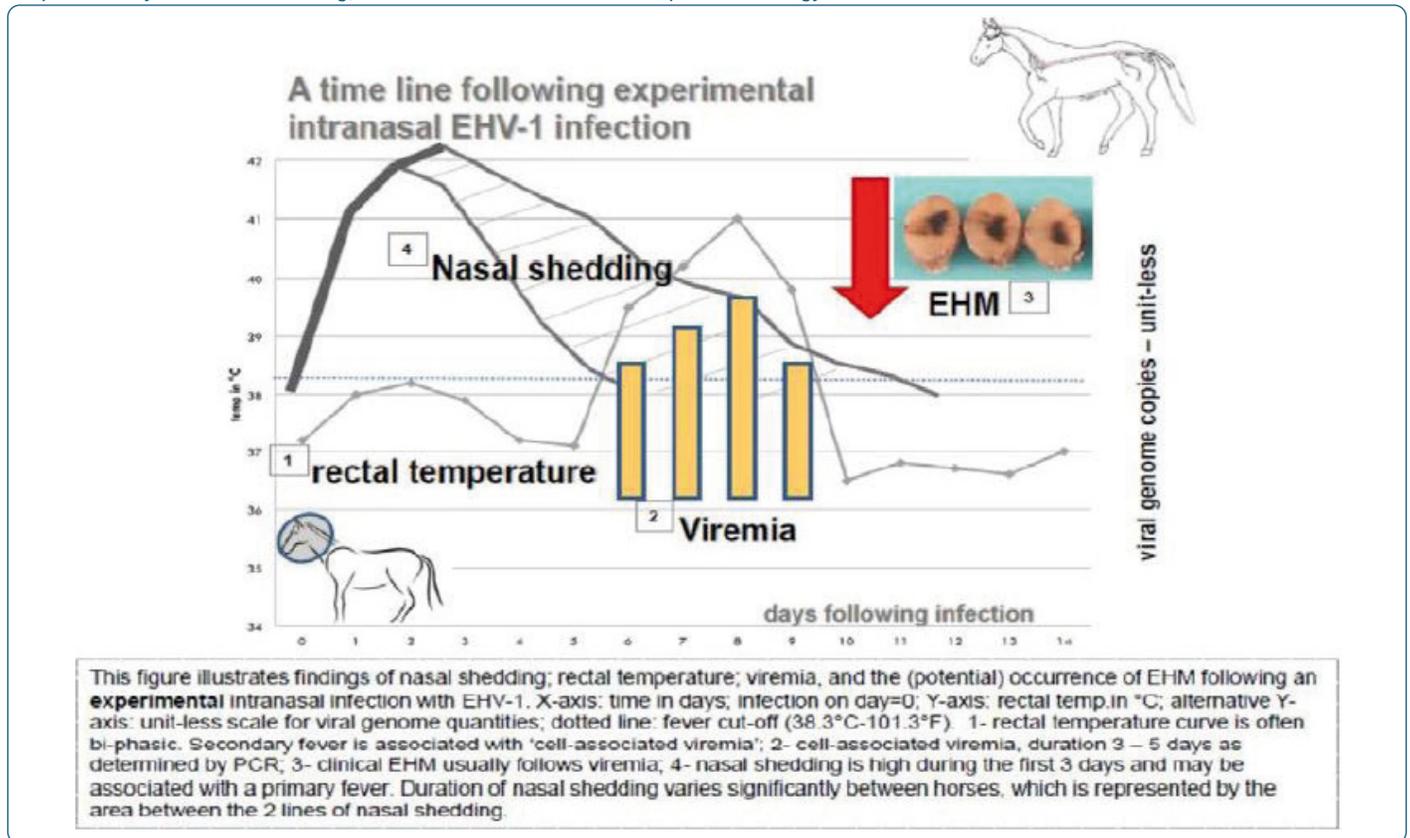
 <b>Wash your hands</b> before and after contacting animals.	 Use an <b>effective disinfectant</b> at the <b>right concentration</b> and recommended <b>contact time</b> .	 <b>Do not allow smoking, food, drinks, or strollers</b> in animal areas.
 Keep <b>vaccinations up-to-date</b> for you and your animals.	 <b>Stay home</b> if you or your animal are sick.	 Keep <b>communal hoses out of water buckets</b> .
 <b>Clean and disinfect footwear</b> before and after visiting animal facilities.	 <b>Quarantine new animals</b> or those returning from an event for 30 days.	 <b>Protect animal feed and water</b> from contamination.
 <b>Do not share tools, tack, or equipment</b> with others.	 <b>Control vermin</b> such as rodents and wild birds.	 <b>Prevent direct contact</b> between animals at an event.

  
**Clean equipment with soap and water** before disinfecting.

  
 Washington State Department of Agriculture  
**ANIMAL HEALTH PROGRAM**  
 agr.wa.gov

[Download this printable poster](#) with tips on how your clients can protect their facilities from contagious diseases.

For more information on biosecurity plans, event plans, or WSDA's response to confirmed or suspected EHM cases, please contact the state veterinarian's office at [ahhealth@agr.wa.gov](mailto:ahhealth@agr.wa.gov), (360) 902-1878, or (800) 942-1035 after hours. ☞



# Modernizing Animal Disease Reporting for Veterinarians

## Dr. Minden Buswell

Washington's animal disease reporting system got a big upgrade this month with the launch of a new tool for private veterinarians and diagnostic labs allowing them to [submit reports](#) via desktop computer, tablet, or smart phone.

This new reporting option aims to improve ease of access, data integrity, efficiency, and ultimately, keep Washington's animals, animal industries, and people safer.

WSDA's Animal Health Program (AHP) leads our state's animal disease control efforts, with the overarching goal of promoting animal and public health. We rely on accurate and consistent reporting from our partners in private veterinary practice and diagnostic laboratories to achieve our animal disease control goals. Our partners are the first line of defense against dangerous and destructive animal diseases.

The [Washington State Animal Reportable Disease list](#) includes diseases from the World Organization of Animal Health (OIE) notifiable disease list, USDA's National Animal Health Reporting System disease list, Washington State Department of Health's (DOH) zoonotic disease list, and WSDA's diseases of concern.

### The new database system aims to reduce reporting barriers by:

- allowing electronic reporting and uploading of laboratory reports and supporting documentation
- decreasing submission times
- decreasing animal/zoonotic disease response times
- increasing state interagency communication

Historically, veterinarians and laboratories made reports via phone, fax or email and these reporting methods are still available. But this month, AHP added an [animal disease reporting web page](#) where veterinarians and labs can submit information and supporting documentation from any computer.

The system automatically integrates reports into the Animal Tracks central repository, alerts the state veterinarian's office via email, and alerts DOH if the report involves a zoonotic disease.

WSDA-AHP's protocols for receiving, recording, managing, and sharing these animal health surveillance data have evolved in recent years. In 2018, we adopted the Reportable Animal Diseases (RAD) Database. Despite the success of the RAD database, its effectiveness as a tool for data intake, management, analysis, and dissemination was limited.

In early January, the state veterinarian's office migrated the RAD database to the Animal Tracks System, a central repository for livestock identification and animal disease traceability information. This change should improve data integrity across animal health, animal disease traceability, and livestock identification domains. ☘

SMALL ANIMAL

# Rabbit hemorrhagic disease virus confirmed in the Southwest

Dr. Amber Itle, Assistant State Veterinarian

On March 24, 2020, National Veterinary Services Laboratories, Foreign Animal Disease Diagnostic Laboratory (NVSL-FADDL) confirmed rabbit hemorrhagic disease virus type 2 (RHDV2) in New Mexico. Concurrent with the confirmation of disease in domestic privately owned rabbits, mortality also was reported in wild black tailed rabbits (*Lepus californicus*) and desert cottontail rabbits (*Sylvilagus audubonii*) in the region. Since then, detections of RHDV2 have been confirmed in domestic and wild rabbits in Arizona, Texas, Nevada, California, Utah and Colorado. Mexico reported domestic and wildlife cases caused by RHDV2 in several states as well.

The strain of RHDV2 in the Southwest outbreak is phylogenetically distinct from the RHDV2 virus in Washington and British Columbia, indicating two distinct points of infection. The RHDV2 virus in Washington does not seem to affect wild rabbits.

The World Organization of Animal Health (OIE) has categorized states with confirmed cases of RHDV2 in wild or feral populations with the status “stable endemic.” Cases in states with this status will no longer be investigated as a foreign animal disease.

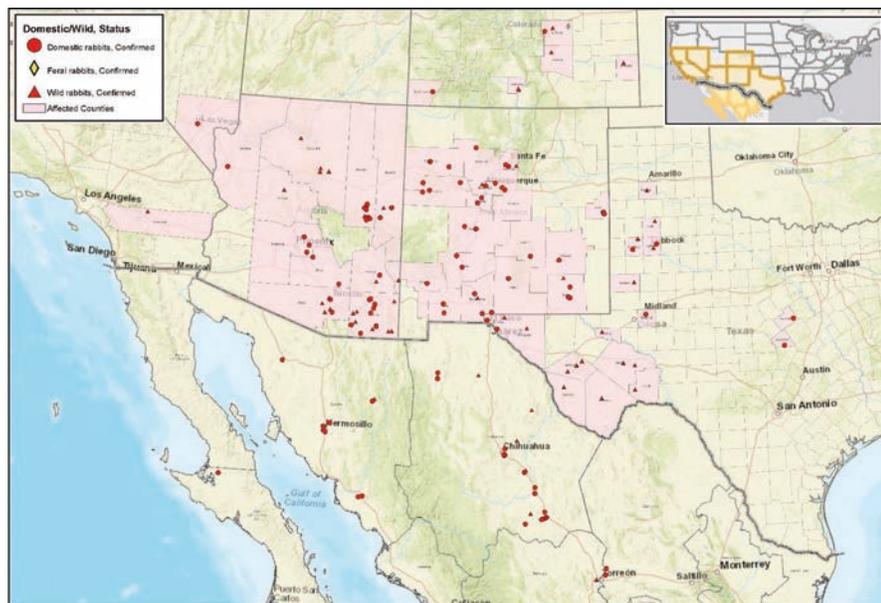
The RHDV2 vaccine is unapproved and unlicensed for use in the U.S. However, restricted importation from the E.U. and use in the U.S. is possible through an application to the USDA. The importation of vaccine requires special permits, port brokers, and confirmation of a cold supply chain to ensure efficacy. In addition, the companies manufacturing those vaccines have limited production capacity and cannot keep up with U.S. demand. So far, three veterinarians in Washington State have successfully imported the vaccine.

The production process that is necessary to manufacture the killed vaccines includes the use of live rabbits. However, Filavac and Eravac are the only viable vaccine options available for the U.S. at this time. The USDA Center for Veterinary Biologics will only approve the use of killed vaccines for conditional use in the U.S. as a tool in the face of an outbreak. Currently, a U.S. manufacturer is working with a university to develop a domestic, USDA approved, new-generation vaccine for RHDV. ☿

The National Assembly of State Animal Health Officials have developed several RHD guidance documents including:

1. Frequently Asked Questions
2. Biosecurity
3. Shows/Exhibitions
4. Response
5. Cleaning and Disinfection
6. Disposal
7. Vaccination

Please contact WSDA if you would like a copy of any of these documents.



**AZ-CA-CO-NM-NV-TX Confirmed Domestic, Wild, and Feral Domestic Rabbits Rabbit Hemorrhagic Disease Virus 2**

Map Created: 6/1/2020  
Data as of: 6/1/2020 8 AM MT



Map courtesy: USDA APHIS Veterinary Services

## From the WSDA Ag Briefs Blog

[Equine Herpes Virus \(EHC\) detected in King County](#)

Read other posts and subscribe at:

[wastatedeptag.blogspot.com](http://wastatedeptag.blogspot.com)

# What you should know about out-of-state pigs in Washington State

Closures and other disruptions related to COVID-19 have slowed production at many Midwestern pork processing plants and led to an uptick in Washington State pig importation.

Due to the decrease in processing capacity, individuals motivated by financial gain, concern about waste, or animal welfare have been trucking loads of young “weaner” pigs as well as finished hogs into Northwest states.

## Problems with this situation:

1. These pigs are coming from areas where serious swine diseases such as Porcine Epidemic Diarrhea (PEDV) and Porcine Reproductive and Respiratory Syndrome (PRRS) are common. These diseases are not common in Washington and we do not want them to become established here.
2. Inadequate record keeping and the unknown final destination of individual pigs complicates traceback in the event of a disease outbreak.
3. Pigs are not ruminants. In particular, these imported pigs are poor candidates for pasture raising or finishing; they are a composite breed developed for rapid weight gain in controlled indoor environments on finely tuned diets. They cannot survive on a fiber-based diet.
4. Many of these pigs are destined for novice “backyard” owners (via craigslist, etc.) with little knowledge of pig husbandry and lack of adequate fencing. In a worst-case scenario, this could result in a feral pig population establishing a stronghold in our state.
5. WSDA has received reports some of these imported pigs are sick on arrival and some have died. Necropsy results revealed the dead pigs had circovirus 2 and the PRRS virus, neither of which were detected previously in Washington.
6. All pigs coming into Washington must have a Certificate of Veterinary Inspection covering every animal being transported; a permit number; and individual identification for each pig. More information is available on the [WSDA web site](#).
7. Washington State has little or no surplus slaughter capacity for an influx of pigs. This could lead to finished animals being held well beyond slaughter weight and cause animal welfare and carcass-quality concerns.
8. Pigs must be processed and slaughtered at a USDA inspected facility if the pork is being sold and distributed to the public. Pigs used for personal use only can be harvested by an experienced custom slaughter facility in accordance with food safety rules.
9. In the absence of appropriate slaughter and processing options, novice owners could turn to killing and processing their animals at home. This scenario carries serious animal welfare and food safety risks.
10. More information is available at the [WSDA news release site](#).



Detailed information on pork production is available at the [Pork Information Gateway](#). If you have questions or concerns about importing swine into WA, please contact WSDA at [ahealth@agr.wa.gov](mailto:ahealth@agr.wa.gov) or (360) 902-1878 or (800) 942-1035 after hours.

This information is available in a fact sheet (publication 852) you can [download from our website](#).

BOVINE

# Vesicular stomatitis: back for another round

Dr. Amber Itle, Assistant State Veterinarian

In April, the National Veterinary Services Laboratories (NVSL) in Ames, Iowa confirmed the nation’s first case of vesicular stomatitis virus (VSV) for the year in New Mexico. Since then, the outbreak has spread to include Arizona, Texas, Kansas, Nebraska, and Oklahoma.

Since the start of the outbreak, USDA identified 77 VSV-affected premises. Seventy-three of these premises had only equine species clinically affected and four premises had clinically affected cattle. Last year, the disease reemerged in the U.S. with the largest outbreak in 40 years. USDA identified 1,144 VSV-positive premises during 2019 as the disease spread through eight states: Colorado, Kansas, Nebraska, New Mexico, Oklahoma, Texas, Utah, and Wyoming.

No VSV cases have been identified in Washington in recent years, but it’s important to remain watchful, employ appropriate biosecurity and minimize livestock exposure to common VSV carriers such as black flies, sand flies, and biting midges (*Culicoides spp.*).

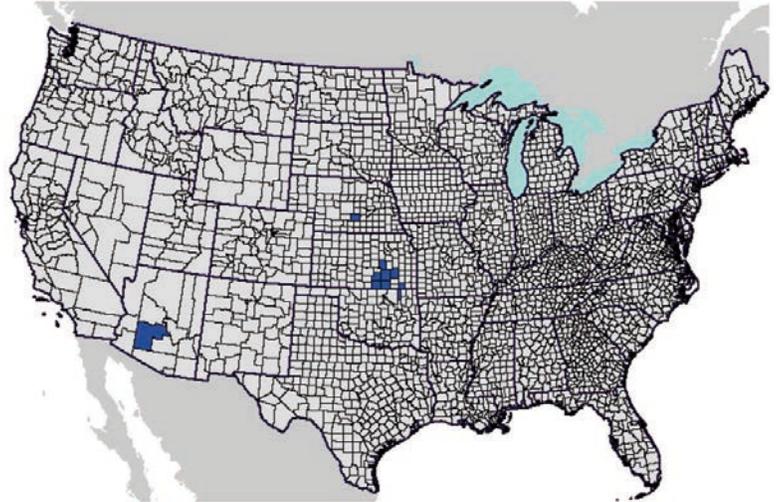
Investigations of the recent VSV cases indicate infected insects are the likely source of infection. Biosecurity measures and vector mitigation have been instituted to reduce the within-herd spread of the virus. The animals are being monitored and the premises will remain under state quarantine until 14 days from the onset of lesions in the last affected animal on the premises.

Previous infection with VSV is not proven to be protective and some horses may become re-infected in the same season.

[Please report](#) to the state veterinarian any suspicious lesions including blisters, sores, sloughing of the skin in the mouth, on the tongue, on the muzzle and ears or above the hooves. Be especially vigilant with horses with a history of recent travel. ☞

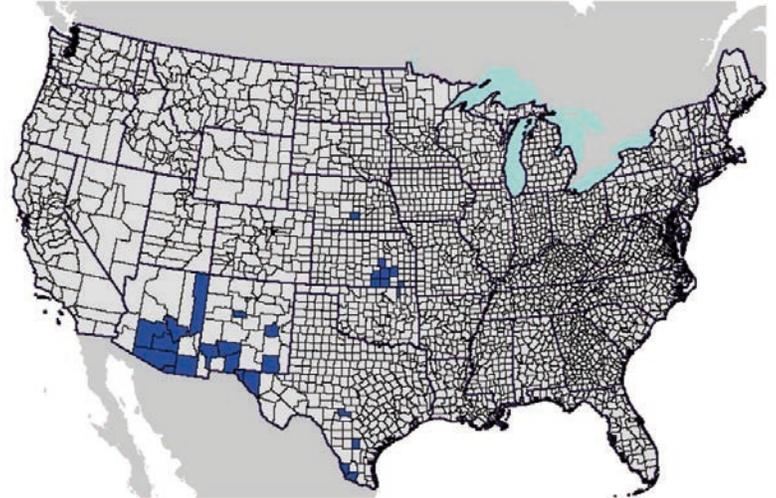
Map 1 (Current).

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



Map 1 (Cumulative).

Counties with Premises Quarantined for VSV in 2020 (shaded in blue)



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