

Estimated first onset	Estimated end date	Jurisdiction affected	Species affected	Diagnosis	Estimated # of cases to date	Lead agency	Comment
6/2019	8/2019	National Capital, Baltimore Metro	Human	WNV	4	MDH	
7/2019	10/2019	National Capital, Eastern Shore	Mosquito Pools	WNV, EEE	WNV(6), EEE (3)	MDA	
9/2019	9/2019	Eastern Shore	Equine	EEE	1	MDA	

ZOONOTIC AND OTHER ANIMAL DISEASES OF CONCERN IN MARYLAND

Table 1. New or Ongoing Morbidity or Mortality Animal or Zoonotic Disease Events

For questions regarding specific disease events, please contact the lead agency noted. This contact information is for use by Maryland veterinarians and health professionals:

MDA - Maryland Department of Agriculture: ahops.mda@maryland.gov, 410-841-5810

MDH - Maryland Department of Health, Center for Zoonotic and Vector-borne Diseases: mdh.czvbd@maryland.gov, 410-767-5649

MD DNR - Maryland Department of Natural Resources, Fish & Wildlife Health Program, 410-226-5193

The Maryland Department of Natural Resources (MD DNR) receives reports of wildlife disease cases via the 24/7 toll-free MD Natural Resources Police Call Center:

1-800-628-9944, the USDA/MD DNR Call Center: 1-877-463-6497, or the MD DNR Wildlife & Heritage Service office in Annapolis 1-410-260-8540.

***Streptococcus zooepidemicus* Outbreak in Swine in Midwest**

The Iowa State University Veterinary Diagnostic Lab (ISU VDL) recently confirmed *Streptococcus equi ssp zooepidemicus* in two potentially related swine mortality events in the Midwest as the cause of acute deaths in sows and feeder pigs. While *S. zooepidemicus* is an opportunistic commensal organism in horses, it is not commonly isolated from swine. Efforts are ongoing to further characterize the isolates and to assist with future prevention efforts.

The clinical picture observed included lethargy, weakness, high fever, swift spread among pigs of highly varied sources within the affected premises, and rapidly escalating mortality levels approaching 30 - 50% among affected populations. Swine veterinarians should consider this rule-out, as well as African Swine Fever and Classical Swine Fever, for high mortality cases, and report these cases to the Office of the State Veterinarian 410-841-5810 for further investigation.

Human infection with *S. zooepidemicus* is rare, but has been diagnosed in humans with animal contact or ingestion of unpasteurized dairy products. *S. zooepidemicus* can cause severe and potentially fatal disease in humans. Clinical signs may include bacteremia, endocarditis, arthritis, glomerulonephritis, necrotizing myositis, and meningitis. To date, no human cases have been identified in association with this outbreak. More information regarding the outbreak investigation can be found at: <https://www.swinehealth.org>.

To report cases of disease in:	Contact:
Domestic animals	MDA Animal Health Program Office 410-841-5810 http://mda.maryland.gov/animalHealth/Pages/Diseases.aspx
Humans	MDH Center for Zoonotic and Vector-borne Diseases 410-767-5649 https://phpa.health.maryland.gov/OIDEOR/CZVBD/pages/Home.aspx
Wildlife	MD DNR/USDA Call Center 877-463-6497

ZOONOTIC AND OTHER ANIMAL DISEASES OF CONCERN IN MARYLAND

MOHB Summary of 2019 Maryland Arboviral Surveillance Season

The 2019 surveillance season for arboviruses of public health concern, including West Nile (WNV) and Zika viruses, in Maryland concluded on October 31, 2019. The Maryland Departments of Health, Agriculture, and Natural Resources have discontinued enhanced surveillance for human encephalitis and aseptic meningitis and surveillance for arboviral activity in mosquitoes, equines, and wildlife. Mosquito control activities in response to arboviral disease detection have also been discontinued.

As of November 5, 2019, four human WNV cases have been reported in the Baltimore Metropolitan and National Capital regions. Two (50%) of those case-patients were classified as having neuroinvasive disease (meningitis or encephalitis); none of the cases were fatal. Dates of illness onset ranged from June 12th to August 9th. The number of human WNV cases in 2019 was markedly lower than the 45 cases reported in 2018. In addition to WNV, 10 human travel-associated dengue cases (8 confirmed, 2 probable) have been reported in Maryland in 2019, representing 1% of the 852 travel-associated cases reported in the United States. No human chikungunya cases were reported this year. Zika virus case counts have also waned, and to date this year there have been only two cases reported in Maryland. All Zika virus cases in Maryland to date have been travel-associated, so it is possible that there will be ongoing detection of cases beyond the mosquito season.

A total of 1,442 mosquito pools were submitted to MDH in 2019 by the Maryland Department of Agriculture Mosquito Control Program for testing for WNV, Eastern equine encephalitis (EEE) virus, and St. Louis encephalitis virus (SLE) via RT-PCR. Six mosquito pools in the National Capital region tested positive for WNV. These consisted primarily of *Culex species* mosquitoes. In addition, three mosquito pools tested positive for EEE on the lower Eastern Shore. The first was a pool of *Culex species* mosquitoes, which routinely feed on humans; the other two were *Culiseta melanura* mosquitoes, which routinely feed on birds. A horse in the same region was also confirmed with EEE infection. No WNV equine cases were reported in Maryland in 2019 and no additional arboviral activity was reported.

Please see these websites for additional information:

Maryland Department of Health West Nile Virus Page

<https://phpa.health.maryland.gov/OIDEOR/CZVBD/Pages/west-nile-virus.aspx>

Maryland Department of Agriculture for mosquito control and reportable diseases in animals

https://mda.maryland.gov/plants-pests/Pages/mosquito_control.aspx

Healthy Animals, Healthy YOUTH Program

The University of Maryland 4-H Extension, the Maryland Department of Health, the Maryland Department of Agriculture, and West Virginia University have partnered to create the “Healthy Animals, Healthy YOUTH program”.


This collaborative effort, funded by a grant from the U.S. Department of Agriculture, the Centers for Disease Control and Prevention, and the Council of State and Territorial Epidemiologists, aims to improve awareness and knowledge of influenza and other zoonotic diseases among rural youth and to facilitate effective One Health responses to relevant public and animal health issues.

Current efforts include the addition of zoonotic disease modules to the existing 4-H Animal Husbandry and Quality Assurance Training Program (AH&QA), a requirement for youth who will care for and show farm animals at fairs and expositions throughout the year, and the development of zoonosis activity kits, comprised of lesson plans and hands-on learning exercises for various age groups. Fair signage and social media messaging have also been developed for use by fair organizers and local health departments. Available at: <https://phpa.health.maryland.gov/OIDEOR/CZVBD/Pages/czvbd-resources.aspx>.

More information about the program is available online at:

<https://extension.umd.edu/news/healthy-animals-healthy-youth>



Please wash your hands after being in the barn. 

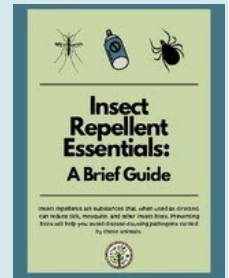


PRACTICE SAFE HABITS TO STAY HEALTHY.
No food, drink, strollers or toys inside the barn. Don't kiss the animals.
Wash your hands when you leave. 

Newly Developed Insect Repellent Use Guide

The Northeast Regional Center of Excellence in Vector-borne Diseases (NEVBD) has recently developed a brief guide on the essentials of insect repellent use. This free handout is available online at: <https://hdl.handle.net/1813/66722>. NEVBD also has a limited supply of printed booklets available for distribution.

Please contact nevbd@cornell.edu for more information regarding this resource.



Vet's Corner

How can I prevent rabies exposures to myself and my staff?

- ◆ Train all staff members on how to properly restrain and handle animals
- ◆ Use appropriate personal protective equipment (PPE) when handling suspected rabid animals
- ◆ Consider obtaining the rabies pre-exposure vaccine series for staff members, especially those who handle wildlife, fractious animals, or animals with an unknown rabies vaccine status
- ◆ If you have been vaccinated, have your rabies titers checked every two years to determine if you are due for a routine booster dose
- ◆ Remember to keep rabies on your differential list, when appropriate
- ◆ For more information visit: https://www.cdc.gov/rabies/specific_groups/veterinarians/staff.html

MARYLAND ANIMAL RABIES CASES, 2019

Table 2. New (confirmed since the previous Bulletin) and Cumulative Rabies Cases, Week Ending November 23, 2019

Jurisdiction	Bat Total (New)	Cat Total (New)	Cow Total (New)	Dog Total (New)	Fox Total (New)	Groundhog Total (New)	Raccoon Total (New)	Skunk Total (New)	Other Total (New)	Total (New)
Allegany					1					1
Anne Arundel	3(2)				1(1)		13(4)			17(7)
Baltimore	2				3(1)		19(5)	1		25(6)
Baltimore City	3(1)						14(2)			17(3)
Calvert										
Caroline	1				1(1)		3	2(2)		7(3)
Carroll		3(1)			1		12(5)			16(6)
Cecil	1	1(1)					8(2)	1	1	12(3)
Charles	1				1		3(1)			5(1)
Dorchester		1(1)			1		4(2)			6(3)
Frederick	1	2(1)			1	1	14(3)	3(1)	1	23(5)
Garrett							3(1)			3(1)
Harford	1				2		17(2)			20(2)
Howard		1	1				3(1)		1	6(1)
Kent							2			2
Montgomery	3				3		16(5)			22(5)
Prince George's	2	1			3(1)		4	1		11(1)
Queen Anne's							9(6)	1(1)		10(7)
Saint Mary's					2	1(1)				3(1)
Somerset					2		3			5
Talbot					1		7	1(1)		9(1)
Washington		4			1		4(2)			9(2)
Wicomico	1(1)				1		4(1)			6(2)
Worcester					6	1	10(2)			17(2)
Total (New)	19(4)	13(4)	1		31(4)	3(1)	172(44)	10(5)	3	252(62)

Other: Sheep 1, Ferret 1, Goat 1

For complete animal rabies data:

<https://phpa.health.maryland.gov/OIDEOR/CZVBD/pages/Data-and-Statistics.aspx>

To view previous issues of the Maryland One Health Bulletin (MOHB):

<http://mda.maryland.gov/animalHealth/Pages/md-one-health.aspx>

Maryland Department of Health Weekly Public Health and Emergency Preparedness Bulletin:

<https://preparedness.health.maryland.gov/Pages/PHPSA.aspx>

National Wildlife Health Center New and Ongoing Wildlife Mortality Events Nationwide:

<https://www.usgs.gov/centers/nwhc>

U.S. Livestock and Poultry Disease Events and Trends:

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information>

Maryland Department of Health Weekly Influenza Report:

<https://phpa.health.maryland.gov/influenza/Pages/home.aspx>