

ZOONOTIC AND OTHER ANIMAL DISEASES OF CONCERN IN MARYLAND

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

Estimated first onset	Estimated end date	Jurisdiction affected	Species affected	Diagnosis	Estimated # of cases to date	Lead agency	Comment

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

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

Maryland Arbovirus Surveillance Summary, 2017

The 2017 surveillance season for West Nile virus (WNV) and other arboviruses of public health concern in Maryland concluded on October 31. 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 responses that are conducted in response to arboviral disease detection have also been discontinued.

Human Surveillance

As of October 31, 2017, five (four confirmed and one probable) human WNV cases have been reported in three jurisdictions: Anne Arundel (1), Harford (1), and Montgomery (3) counties. Four (80%) of the case-patients were classified as having neuroinvasive disease (meningitis or encephalitis), and none of the cases were fatal. Dates of illness onset in endemic cases ranged from September 1st to September 29th. Age ranged from 48–67 years, with a median age of 60 years. The number of human WNV cases in 2017 was slightly lower than the number of cases reported in 2016 (6), and well below the 46 cases reported in 2015. In addition to WNV, one human travel-associated chikungunya case was reported in Maryland this year, accounting for 1% of the 85 chikungunya cases reported nationwide.

Zika virus case counts have waned over 2017, and to date this year there have been 62 cases reported. All Zika virus cases in Maryland to date have been travel-associated, and therefore it is possible that there will be ongoing detection of cases beyond mosquito season.

Mosquito Surveillance

A total of 1,678 mosquito pools were submitted by the Maryland Department of Agriculture Mosquito Control Program to MDH for testing for West Nile virus (WNV), Eastern equine encephalitis (EEE) virus, and St. Louis encephalitis virus via RT-PCR. Species submitted included *Aedes albopictus*, *Aedes vexans*, *Coquillettidia perturbans*, and a variety of *Culex* mosquitoes. In addition, partners at the Department of Defense tested mosquito pools for endemic arboviruses. A total

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	877-463-6497 or 800-628-9944

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of 13 pools of mosquitoes from two jurisdictions tested positive for WNV infection in 2017: one pool in Montgomery County reported by the Department of Defense, and 12 in Prince George's county. In addition, three pools of mosquitoes tested positive for Cache Valley virus via virus isolation in Prince George's county.

Equine Surveillance

Three WNV-positive equine cases were reported in 2017 in Cecil, Charles and Harford counties.

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 Health Zika Virus page:

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

Maryland Department of Agriculture Mosquito Control page:

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

One Health—The intersection of animal, environmental and human health

- One Health affects all of us: 6 in 10 infectious diseases in people are spread from animals. Both wild and domestic animals can transmit diseases to humans and to each other.
- One Health is a global approach: infectious disease threats are everywhere, and diseases do not respect borders. Shipping and air traffic can move people, animals and diseases across the globe very quickly.
- One Health includes our furry friends: people should learn to enjoy their pets and other animals without getting sick from diseases that animals can carry.

History of the Maryland One Health Bulletin (MOHB):

In 2010, Drs. Jo Chapman (MDA), Cindy Driscoll (DNR), and Katherine Feldman (MDH) met to develop the concept, content, and structure for the MOHB. Mary Armolt (MDH) designed the newsletter format. In March 2011, the inaugural issue (Issue 1 Volume 1) of the Maryland One Health Bulletin was released, and featured Chronic Wasting Disease detection in Maryland deer as the first topic. Since that time, 56 MOHB issues have been distributed to approximately 2090 veterinarians, wildlife biologists, and federal, state and local public health partners. It has also been shared with universities, states, and national and international organizations. Special Maryland One Health timely "Alerts" highlighting specific disease events are also distributed to these email groups. Topics presented in the MOHB have included: influenza in swine, canine, feline and avian populations, algal blooms, salmonella in chicks and turtles, snowy owl irruption, pet food recalls, morbillivirus dolphin die-off, tularemia in rabbits, tick prevention, Ebola and Zika virus surveillance and response, and management of animals at fairs and shows.

Please contact us if you have topics of interest that you would like covered in future issues.

An Expression of Thanks to Katherine Feldman, DVM, MPH

We would like to extend our gratitude to Dr. Katherine Feldman for her 10 plus years of service to Maryland as the State Public Health Veterinarian and Chief of the Center for Zoonotic and Vector-borne Diseases (CZVBD).

Throughout her tenure at MDH, she has led and supported a wide range of infectious disease outbreak responses, Katherine has also mentored students, EIS Officers, and other public health professionals, published articles in professional journals, established and strengthened professional relationships with colleagues on the local, state, and federal levels, and has been recognized for consistently strong leadership. Many have benefited from her tireless commitment to the One Health approach that promotes and protects both human and animal health in Maryland. We wish her the best as she takes the next step in her distinguished public health career.

MARYLAND ANIMAL RABIES CASES, 2017

Table 2. New (confirmed since the previous Bulletin) and Cumulative Rabies Cases, Week Ending November 18, 2017

Jurisdiction	Bat	Cat	Cow	Dog	Fox	Groundhog	Raccoon	Skunk	Other	Total
	Total (New)	Total (New)	Total (New)	Total (New)	Total (New)	Total (New)	Total (New)	Total (New)	Total (New)	(New)
Allegany	1						1			2
Anne Arundel	3	1				1	3			8
Baltimore	3				1		11(1)			15(1)
Baltimore City	6(1)	1				3	8(1)			18(2)
Calvert										
Caroline	1						3(2)	1		5(2)
Carroll	1	4	1				6	1		13
Cecil	2	4(1)					6			12(1)
Charles	3	2					3(1)			8(1)
Dorchester	1						2	1	1	5
Frederick	8(1)	6					17(2)	2(1)		33(4)
Garrett							2	2(1)		4(1)
Harford	1	1(1)				1	15			18(1)
Howard	1				1	1	3			6
Kent							1			1
Montgomery	2	1(1)			2	1	21(4)			27(5)
Prince George's	4	3			1		2			10
Queen Anne's							2(1)	1		3(1)
Saint Mary's										
Somerset							3			3
Talbot							7(2)			7(2)
Washington	2	3(1)			3	1	4	1		14(1)
Wicomico	1	1			1		2			5
Worcester		1					7		1	9
Total (New)	40(2)	28(4)	1		9	8	129(14)	9(2)	2	226(22)

Other: Opossum 2

For complete animal rabies data:

<https://phpa.health.maryland.gov/OIDEOR/CZVBD/Pages/rabies.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:

http://www.nwhc.usgs.gov/mortality_events?ongoing.jsp

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>