

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

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.

Dark False Mussel Ingestion and Liver Failure in Dogs

Since 2004, approximately 30 dogs in Maryland have been treated for or died from liver failure that may be associated with ingestion of dark false mussels. Most cases have been in the Anne Arundel County area in the Magothy and Severn Rivers, however other areas may be at risk. There is no current indication that these illnesses are related to water pollution. No morbidity/mortality in wildlife has been associated with dog cases.

Dogs present with vomiting and diarrhea and may actually vomit mussels. Clinical test findings include extremely elevated liver enzymes. Blood tests from recent cases indicate high levels of copper. Pathology findings include indications of toxin exposure.

Dark false mussels (*Mytilopsis leucophaeata*) are native to the Chesapeake Bay and occur in higher abundances during low salinity years. They are commonly found along piers, riprap, rope lines, and on boat bottoms. Although these mussels are easily accessible throughout the year, they appear to become associated with dog illnesses mainly during late fall/early winter when they are scraped from boat bottoms and disposed of improperly.

Marina operators, boat owners, dog owners, and other persons using boat ramps, are advised to dispose of scraped mussels appropriately in garbage cans in order to help prevent inadvertent poisonings of dogs. A flyer was distributed to marinas around the state and to increase awareness and help prevent further exposures.

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

Dark False Mussel Ingestion and Liver Failure in Dogs (continued)

The Maryland Departments of Agriculture, Natural Resources, Environment, and Health are investigating the source of possible toxins involved with these events. Further updates will be provided as information is obtained. While we will not have any conclusive statements regarding the cause of these cases until testing is completed, we ask that you report any incidents of liver failure in dogs associated with ingestion of mussels, barnacles or boat scrapings to the Office of the Maryland State Veterinarian by emailing animalhealth.mda@maryland.gov or calling 410-841-5810.

If you have any questions regarding this matter, please contact the Maryland Department of Agriculture - Animal Health Program at 410-841-5810.

Caution: Dog Owners

Please be aware there have been dog illnesses and fatalities associated with the ingestion of dark false mussels and barnacles. False mussels are native to the bay and are commonly found throughout the year on dock ropes, floats, boat hulls and scrapings. The State of Maryland is investigating possible causes of these illnesses. There is no indication that they are related to water pollution.

When winterizing your boat please remember to:

- Keep pets away from boats after being pulled out for the season.
- Do not allow pets in area when cleaning boats.
- Dispose of all paint chips, barnacles and mussels in garbage containers.
- Keep dogs on leash to avoid potential exposure to mussels.



Third Human Case of the RB51 Strain of Brucellosis Associated with Consuming Raw Milk

In December 2018, the New York State Department of Health reported a human case of the RB51 strain of brucellosis associated with the consumption of raw (unpasteurized) cow's milk. This is the third known case of brucellosis from *Brucella* RB51 associated with raw milk acquired in the United States. The other two cases, both diagnosed in 2017, resided in Texas and New Jersey.

Brucellosis is a zoonotic bacterial disease that affects humans and many animal species. In humans, symptom onset can occur anywhere from five days to six months post exposure. Infection is characterized by fever and nonspecific influenza-like symptoms that frequently include malaise, anorexia, headache, fatigue, muscle and joint pain. Without appropriate treatment, brucellosis can become chronic and life-threatening complications can develop.

RB51 is a weakened strain of *Brucella abortus* bacteria used to vaccinate young female cattle. Vaccinating cows with the RB51 vaccine helps prevent abortions in cows and reduces the risk of people coming into contact with cows infected with more severe strains of *Brucella*. However, in rare cases, vaccinated cows can shed RB51 in their milk. The only way to avoid this potential exposure to RB51 is to pasteurize milk. The heat of pasteurization kills RB51, other types of *Brucella*, and a variety of other disease-causing pathogens.

In the U.S., human cases of brucellosis are rare. Most cases occur in people who have traveled to countries where *Brucella* is more common and either drank contaminated cow, sheep or goat milk or had contact with infected animals. Less frequently, infections have been associated with contact with feral swine or, more rarely, dogs, or accidental exposure in a lab setting.

Additional information on brucellosis is available online at: <https://www.cdc.gov/brucellosis/exposure/index.html>

MARYLAND ANIMAL RABIES CASES, 2019

Table 2. New (confirmed since the previous Bulletin) and Cumulative Rabies Cases, Week Ending February 9, 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										
Anne Arundel							1(1)			1(1)
Baltimore										
Baltimore City										
Calvert										
Caroline							1(1)			1(1)
Carroll										
Cecil							1(1)			1(1)
Charles										
Dorchester										
Frederick		1(1)					4(4)	1(1)		6(6)
Garrett							1(1)			1(1)
Harford					1(1)		4(4)			5(5)
Howard										
Kent										
Montgomery							2(2)			2(2)
Prince George's							1(1)			1(1)
Queen Anne's							1(1)			1(1)
Saint Mary's					1(1)					1(1)
Somerset										
Talbot										
Washington		1(1)								1(1)
Wicomico										
Worcester							1(1)			1(1)
Total (New)		2(2)			2(2)		17(17)	1(1)		22(22)

Other:

For complete animal rabies data:

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

MARYLAND ANIMAL RABIES CASES, 2018

Table 2. Cumulative Rabies Cases, Ending December 31, 2018

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										
Anne Arundel	4	1			1	1	4		1	12
Baltimore	2	2					17			21
Baltimore City	5	1			1		15			22
Calvert					1					1
Caroline	1				1		5			7
Carroll		4			2	1	8	2		17
Cecil							5			5
Charles							4	2		6
Dorchester							10			10
Frederick	8	4	1		2		9	2	1	27
Garrett			1				2			3
Harford	1				3	2	7			13
Howard		4					10			14
Kent	1				1					2
Montgomery	2	1		1	4		18	2		28
Prince George's		1					9	1		11
Queen Anne's							4			4
Saint Mary's		1			3		1			5
Somerset							3		1	4
Talbot					1		13			14
Washington		2					3	5		10
Wicomico	1	1		1	1		2			6
Worcester	1	2			2		19	1	1	26
Total (New)	26	24	2	2	23	4	168	15	4	268

Other: Bobcat 1; Opossum 2; Otter 1