ZOONOTIC AND OTHER ANIMAL DISEASES OF CONCERN IN MARYLAND

BULLETIN

March 11, 2015

Volume 5, Issue 1

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

MARYLAND

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

DHMH - Maryland Department of Health and Mental Hygiene, Center for Zoonotic and Vector-borne Diseases: dhmh.czvbd@maryland.gov, 410-767-5649

DNR - Maryland Department of Natural Resources, Fish & Wildlife Health Program, FWHP.DNR@maryland.gov 410-226-5193

Highly Pathogenic Avian Influenza in the Pacific and Central United States

Veterinarians in Maryland are urged to educate their clients who are small flock owners to take precautions to protect their flocks from Highly Pathogenic Avian Influenza (HPAI) H5N8 and H5N2 subspecies, currently in the Pacific Flyway but at risk of spreading east due to mixing of bird populations in the north and arctic regions during migrations. This strain of HPAI has caused high morbidity and mortality in poultry exposed to the virus and captive raptors fed infected waterfowl. These virus strains can travel in wild birds without them appearing sick. **No human cases of these avian influenza viruses have been detected in the United States, Canada, or internationally, and there continues to be no public health concern.** As a reminder, the proper handling and cooking of poultry and eggs to an internal temperature of 165°F kills bacteria and viruses.

In mid December, HPAI H5N8 was initially found in a gyrfalcon and a wild duck in Washington State. Since then, this Highly Pathogenic H5N8 Avian Influenza has been detected in wild birds, backyard flocks, free-range/organic poultry flocks, and game bird flocks in Oregon, Idaho, Nevada, and Utah; and in commercial chicken and turkey flocks in California, Minnesota, Missouri, and Arkansas. To reduce the risk of infection and spread of disease, increased surveillance, enhanced biosecurity and outreach, and recommendations or requirements to house commercial free range or organic poultry indoors have been implemented in western states, along with depopulation of affected flocks.

The H5N8 virus originated in Asia and spread rapidly along wild bird migratory pathways during 2014, including the Pacific Flyway. In the Pacific Flyway, the H5N8 virus has mixed with North American avian influenza viruses, creating

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				
Wild animals	MD DNR / USDA Wildlife Service Call Center 1-877-463-6497 http://www.wher.org				
Humans	DHMH Center for Zoonotic and Vector-borne Diseases 410-767-5649 http://phpa.dhmh.maryland.gov/OIDEOR/CZVBD/SitePages/Home.aspx				

ZOONOTIC AND OTHER ANIMAL DISEASES OF CONCERN IN MARYLAND

Highly Pathogenic Avian Influenza in the Pacific Flyway (continued)

new mixed-origin viruses. These mixed-origin viruses contain the Asian-origin H5 (H represents the surface protein hemagglutinin) part of the virus, which is highly pathogenic to poultry. The N (representing the surface protein neuraminidase) parts of these viruses came from North American low pathogenic avian influenza viruses.

USDA has identified two other mixed-origin viruses in the Pacific Flyway: the H5N2 virus and new H5N1 virus. The new H5N1 virus is <u>not</u> the same virus as the H5N1 virus found in Asia, Europe and Africa that has caused some human illness. Detailed analysis of the virus is underway in cooperation with the U.S. Centers for Disease Control and Prevention. None of these viruses have been identified in humans, nor are they expected to pose a public health risk.

Maryland is in the Atlantic Flyway; however, in light of the fact that wild birds migrate and mix between flyways, it pays to be vigilant. We ask you to:

- 1) Report any sick or dead backyard birds or poultry, especially acute upper respiratory cases to the Maryland Department of Agriculture 410-841-5810;
- 2) For wildlife report morbidity or mortality events of five or more birds (especially waterfowl, shorebirds, raptors, etc.) to the MD DNR USDA Wildlife Services Call Center: 1-877-463-6497 (M-F) or the MD DNR Natural Resources Police Communications Center: 1-800-628-9944 (24/7 toll-free); and
- 3) Recommend that your clients practice enhanced bio-security by using entry foot baths, isolating new birds for 21 days minimum, and most important preventing contact between their flock and wild birds.

Additional Information on biosecurity for backyard flocks can be found at: <u>http://healthybirds.aphis.usda.gov.</u> Additional information on the HPAI in the Pacific Flyway can be found at: <u>http://www.aphis.usda.gov/wps/portal/</u> <u>aphis/home/.</u>

Prevalence of Risk Factors for Suicide Among Veterinarians — United States, 2014

In 2014, a web-based questionnaire was distributed to veterinarians in 49 states and Puerto Rico, to which 10,254 U.S. veterinarians (approximately 10% of employed veterinarians) responded. Results indicated that 6.8% of male and 10.9% of female respondents were characterized as having serious psychological distress (compared to 3.5% and 4.4% in the general population). In addition, mental health conditions reported by veterinary school graduates included depressive episodes, suicidal ideation, and suicide attempts. Limited data are available on suicide risk factors among U.S. veterinarians. Veterinarians participating in two wellness summits held in September 2013 concluded that more research is needed on veterinarians and their mental health. For more information, please see the full report on the CDC Morbidity and Mortality Weekly Report webpage (MMWR February 13, 2015 / 64(05); 131-132) at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6405a6.htm?s_cid=mm6405a6_e, and in the AVMA journal: JAVMA News 2013; 243:1368–75.

MARYLAND ANIMAL RABIES CASES, 2014

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						3	1		5
Anne Arundel	15				2		16(1)	2	1	36(1)
Baltimore	6	2					14(1)	1		23(1)
Baltimore City	20	1			2		5			28
Calvert	1				1		1	1		4
Caroline					1		2	1		4
Carroll	2	5					7	1		15
Cecil							3	1	1	5
Charles	1				2		5	3		11
Dorchester	1						5			6
Frederick	2	4(1)			3		22(1)	4		35(2)
Garrett							1			1
Harford	2				3		16			21
Howard	1	1			1		4			7
Kent										
Montgomery	10				1	2	26(1)	1		40(1)
Prince George's	12				6(1)	1	5			24(1)
Queen Anne's	2						5	1		8
Saint Mary's						1	3	1		5
Somerset						1	14			15
Talbot							6	1		7
Washington	1	1			2		5(1)			9(1)
Wicomico	1	2			2		6	1		12
Worcester	1	2			1		18	1		23
Total (New)	79	18(1)			27(1)	5	192(5)	21	2	344(7)

Table 2. New (confirmed since the previous Bulletin) and Cumulative Rabies Cases, Week Ending December 31, 2014

Other species: Deer-1, Opossum (1)

Animal Rabies in Maryland, 2014—Summary

In 2014, 344 animals of 4,138 submitted (8.3%) were laboratory confirmed rabid in Maryland. This includes 192 raccoons, 79 bats, 27 foxes, 21 skunks, 1 deer, and 18 cats. This total is 8.3% lower than the 375 confirmed rabid animals reported in 2013 and 3.9% lower than the 358.2 five-year average for the years 2008-2012. Although Montgomery County reported the highest raw number of rabid animals (40) followed by Anne Arundel County (36), when adjusted for population size, these figures change considerably. Somerset County reported the highest incidence of rabid animals per 100,000 population, at 56.7, while Worcester Co reported the second highest at 44/100,000 population. The cornerstone of rabies prevention and control is rabies vaccination of domestic animals, and we thank local health officials and Maryland veterinarians for their ongoing efforts to reduce the incidence and associated impact of rabies in Maryland.

MARYLAND ANIMAL RABIES CASES, 2015

Table 2. New (confirmed since the previous Bulletin) and Cumulative Rabies Cases, Week Ending March 7, 2015

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		2			3
Baltimore										
Baltimore City	1						1			2
Calvert										
Caroline				1						1
Carroll							1			1
Cecil										
Charles					1		1			2
Dorchester										
Frederick							3			3
Garrett							2			2
Harford							2			2
Howard					1		1			2
Kent									1	1
Montgomery					1		3	1		5
Prince George's							1			1
Queen Anne's							1			1
Saint Mary's		1								1
Somerset		1								1
Talbot										
Washington							1			1
Wicomico							1			1
Worcester							3			3
Total (New)	1	2		1	4		23	1	1	33

Other (1): Horse (1)

For complete animal rabies data:

http://phpa.dhmh.maryland.gov/OIDEOR/CZVBD/SitePages/Home.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 and Mental Hygiene Weekly Public Health and Emergency Preparedness Bulletin:

http://preparedness.dhmh.maryland.gov/SitePages/Public%20Health%20And%20Emergency%20Preparedness% 20Bulletins.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:

http://www.aphis.usda.gov/wps/portal/banner/help?1dmy&urile=wcm%3apath%3a%2FAPHIS_Content_Library% 2FSA_Our_Focus%2FSA_Animal_Health

Maryland Department of Health and Mental Hygiene Weekly Influenza Report:

http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx0