

December 12, 2023 Volume 13, Issue 3

ZOONOTIC AND OTHER ANIMAL DISEASES OF CONCERN IN MARYLAND

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, 877-463-6497

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.

HPAI Update and Reporting Information

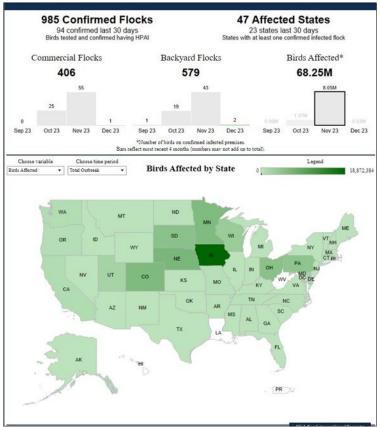
High Path Avian Influenza (HPAI) viruses continue to circulate in North America since the beginning of the current outbreak in 2022. With the holidays quickly approaching, this is a reminder to contact the Maryland Department of Agriculture Animal Health Program with any suspect domestic bird cases, and the Maryland Department of Natural Resources for any wild bird cases (see RESOURCES).

<u>U.S. HPAI</u>

Commercial and Backyard birds: In early October the USDA considered closing the 2022-2023 event because no new cases had been reported in several months, however this fall an uptick in commercial and backyard bird detections occurred and continues. To date 68.25 million birds have been depopulated in 47 states – (406 commercial and 579 backyard flocks).

https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/ animal-disease-information/avian/avian-influenza/hpai-2022/2022-hpai-commercial-backyard-flocks

Wild Birds: 8,187 positive detections have been documented, with thousands more likely affected. Both routine surveillance and mortality reports are included in



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 https://dnr.maryland.gov/wildlife/Pages/default.aspx

Maryland Department of Natural Resources

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HPAI Update and Reporting Information (continued)

this total.

Mammals: 206 detections have been reported in a wide variety of aquatic and terrestrial mammals.

MARYLAND HPAI

Commercial and Backyard Birds: On November 21st - 192,900 commercial broilers were depopulated in Caroline County. As of December 2023, Maryland has depopulated 1,979,604 in 4 counties in broilers, commercial table egg breeders and table egg layers, and nonpoultry/ backyard birds.

Wild Birds: Six Canada geese carcasses were collected by MD DNR after the birds were reported as acting abnormally in Charles County. On November 20th USDA NVSL confirmed EA (Eurasian) H5N1 HPAI. A total of 31 positives have been detected in Maryland to date. Species affected include black vultures, Canada geese, mallards, American black ducks, a lesser scaup, bald eagles and a brown pelican.

Mammals: To date, no mammals have been detected in our state. To follow reports of HPAI in North American domestic and wild animals visit the USDA website: <u>https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-home/hpai</u>

RESOURCES:

HPAI-suspect free-ranging wildlife Maryland Department of Natural Resources Call Center (DNR): 877-463-6497

United States Department of Agriculture Wildlife Services (USDA)

https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/SA_Program_Overview/SA_Contact/ws-state-info? st=MD:Maryland

USDA- HPAI General Information, Recorded Webinars, Fact Sheets

https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/dtf-resources/dtf-resources

USDA – Guidance for Hunters

https://www.aphis.usda.gov/publications/animal_health/fsc_hpai_hunters.pdf

United States Environmental Protection Agency: Pesticide Registration

https://www.epa.gov/pesticide-registration/list-m-registered-antimicrobial-products-label-claims-avian-influenza

HPAI - Human Health

CDC - Centers for Disease Control and Prevention

https://www.cdc.gov/flu/avianflu/

https://www.cdc.gov/flu/pdf/avianflu/Bird-Flu-Exposure-Handout.pdf

https://www.cdc.gov/flu/avianflu/spotlights/2022-2023/h5n1-technical-report_october.htm

WHO - World Health Organization

https://www.who.int/news-room/questions-and-answers/item/influenza-avian https://www.who.int/news-room/fact-sheets/detail/influenza-(avian-and-other-zoonotic)

Canine Infectious Respiratory Disease

Reports of canine infectious respiratory disease in Oregon (and recently in a few other states), began approximately four months ago. Since that time, over 200 cases have been reported. Some dogs have tested positive for *Mycoplasma cynos*, but it is not thought to be the cause of the outbreak. With minimal response to antibiotics a viral etiology is

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Canine Infectious Respiratory Disease (continued)

suspected. The clinical syndrome ranges from an acute respiratory illness (24-26 hours) to chronic pneumonia lasting six to eight weeks.

To date, there is no evidence that this infection can spread to humans. The Maryland Department of Health, in conjunction with other local, state and federal partners, is closely monitoring the situation to ensure a One Health response in the unlikely event that human cases are identified. Veterinarians are urged to test suspect cases and to encourage clients/dog owners to keep vaccinations updated. Advice to veterinary clinics and dog owners was sent out through the MD VMA in late November (attached).

For more information on CIRD:

https://www.avma.org/news/oregon-dealing-respiratory-illness-incidents-dogs https://www.oregonvma.org/news/reports-of-severe-canine-infectious-respiratory-disease-in-oregon

REFERENCE LIST OF STATE AGENCY PHONE NUMBERS, WEBSITES

Maryland Department of Agriculture (MDA): 410-841-5810 Email: MD.Birdflu@maryland.gov Website: <u>https://mda.maryland.gov/animalhealth/pages/default.aspx</u> Avian Flu: <u>https://mda.maryland.gov/Pages/AvianFlu.aspx</u>

Maryland Department of Health (MDH)/Center for Zoonotic and Vector-borne Diseases (CZVBD): 410-767-5649 Email: mdh.czvbd@maryland.gov

Website: https://health.maryland.gov/phpa/OIDEOR/CZVBD/Pages/Home.aspx

Maryland Department of Natural Resources (DNR)/Wildlife and Heritage Service

Annapolis Headquarters: 410-260-8540 or 877-463-6497 Field office locations/phone numbers: <u>https://dnr.maryland.gov/wildlife/Pages/regionaloffices.aspx</u>

Maryland Emergency Management (MEMA): 410-517-3600 or 877-636-2872:

Website: https://mdem.maryland.gov/Pages/default.aspx

Maryland Department of the Environment (MDE): 866-633 4686

Website: https://mde.maryland.gov/Pages/index.aspx

Local Health Departments:

https://health.maryland.gov/Pages/departments.ASPX

MARYLAND ANIMAL RABIES CASES, 2023

Jurisdiction Bat Cat Cow Dog Fox Groundhog Raccoon Skunk Other Total (New) Allegany 1 4(1)1 6(1) Anne Arundel 2 1(1)8(1) 11(2) Baltimore 3 12 1 3 19 Baltimore City 2 2(1) 13(2) 17(3) Calvert 3(1) 2(1) 5(2) Caroline 1 1 2 Carroll 1 2 1 3 4(1)1 12(1) Cecil 1(1) 2(1) 1 3(2) 7(4) Charles 1(1)3 1(1)5(2) Dorchester 2 2 Frederick 1 3 12(1)11(1)2(1)29(3) Garrett 2 2 Harford 1 1 1 6 1 10 Howard 2 4(1)6(1) Kent 0 Montgomery 2(1) 1 21(4) 5(1) 13(2) Prince George's 1 3 1 4(2) 9(2) Queen Anne's 1 2 1 4 Saint Mary's 2 3 5 Somerset 1(1)1(1)Talbot 1 4(1)1 7(1) 1 Washington 1 5 5 11 Wicomico 2 1 4 7 Worcester 1 2 4 1 Total (New) 26(1)

23(3)

2

108(16)

Table 2. New (confirmed since the previous Bulletin) and Cumulative Rabies Cases, Week Ending December 9, 2023

Other: horse (1); otter (1); coyote (1)

18(3)

For complete animal rabies data:

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

1

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

21(2)

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

3(2)

202(27)



Dear MDVMA Members and supporting staff,

As many of you know, concerns about an outbreak of canine infectious respiratory disease (CIRD) have been reported in areas all over the United States. At this time, we are told several cases have been reported recently although we do not know the actual number of cases reported. We are working closely with the state veterinarian and the AVMA to monitor CIRD.

There is a lot of confusion and inconsistencies with information being reported. As such there are some things we know, but a lot that we do not know. We know that there appears to be an increase in CIRD, some of which are behaving atypically. Atypical CIRD appears to affect vaccinated and unvaccinated dogs and has resulted in negative results on PCR tests. According to the AVMA, the infectious agent is still not known but is under investigation. Cases reported appear to primarily fall within three general clinical syndromes:

- Chronic mild-moderate tracheobronchitis with a prolonged duration (6-8 weeks or longer) that is minimally or not responsive to antibiotics.
- Chronic pneumonia that is minimally or not responsive to antibiotics.
- Acute pneumonia rapidly becomes severe and often leads to poor outcomes in as little as 24-36 hours.

Patients with atypical CIRD have a range of symptoms from progressive coughing that may be accompanied by signs of ocular or nasal discharges and sneezing. Rapid progression to acute severe pneumonia with symptoms of particularly if your dog concurrently loses its appetite, has trouble breathing, is coughing continually, or is extremely lethargic.

As our offices have been inundated with calls and emails from pet owners, media and veterinarians regarding CIRD, we have compiled some resources and guidelines to aid in navigating the many aspects of this reported outbreak.

These guidelines are not exhaustive nor are they meant to restrict how you practice, this is designed with various listed resources for you to determine what is best for your patients.

The University of Florida has written an article on atypical <u>CIRD</u>¹. The following is a summary focusing on diagnostics and treatment:

While we don't have an identified cause yet, it is still recommended to perform basic diagnostics including PCR, Radiographs, bloodwork, and cultures. This helps rule out known respiratory infectious causes and can guide treatment. There is a PCR respiratory panel available from IDEXX (2524), Antech (T995), and Cornell (CRPNL). There is a SARS CoV2 add-on available from each laboratory.

While there is not a state run laboratory where canine samples can be sent; MDVMA is working with the Department of Veterinary Medicine at the University of Maryland, College Park to arrange for samples from diseased dogs to be collected and sent to their laboratory for identification.

MARYLAND VETERINARY MEDICAL ASSOCIATION

While antimicrobial stewardship is important and prior common self-limiting respiratory illness negated use, with the rise and rapid progression to pneumonia, antimicrobial use is becoming an important part of treatment at this time. The article by University of Florida reviews an algorithm related specifically for CIRD and pneumonia.

You can also review the March 2020 CIRD article from <u>Vet Clin North Am Small Anim Pract.</u>² To summarize these resources:

Doxycycline or amoxicillin-clavulanic acid for 7-10 days is still the first line treatment for nonpneumonia CIRD. For non-septic pneumonia, doxycycline is preferred for a minimum of 7-14 days. For septic pneumonia enrofloxacin with ampicillin or clindamycin for 14 days minimum but often 4-6 weeks.

While not mandatory, it is recommended to report cases of dogs not responding to treatment with negative tests to the <u>Animal Health Program at MDA Headquarters</u>.

Another component of this outbreak is reducing nosocomial spread in the hospital. We recommend reviewing and/or boosting hospital prevention and control practices. The best extensive guidelines for implementation and practice are provided by AAHA.³

Please note that while zoonosis has not been reported, hand hygiene in between patients is the best way to prevent nosocomial spread. Utilizing PPE when handling respiratory patients is an additional layer of protection for staff and patients. In addition to PPE and hand hygiene, it is recommended to increase screening questions for potential respiratory symptoms when setting up appointments, modifying intake to reduce exposure in communal areas like waiting rooms and treatment areas, and increasing cleaning of rooms in between patients.

The final aspect to navigate is the client concerns and expectations. We recommend being direct and upfront with communication around atypical CIRD. Setting expectations can help reduce client conflict and is best done starting from the call for an appointment. Advise clients of any intake protocol changes, likelihood of diagnostics and whenever possible and provide an estimate as soon as possible.

As fellow veterinarians we understand that appointments may be limited this time of year. However, the possibility of rapid progression to acute pneumonia means these dogs should be seen urgently. Do not be afraid to recommend being seen at other hospitals when you do not have availability. Once seen, be up front with what to expect with treatment and lack of improvement is possible. Communicate that if this is the atypical CIRD, first line antibiotics may not work. Note that further exams, diagnostics, and prolonged treatment are possible especially if they do not respond to first line antibiotics.

Additionally, remind owners that while their pet is under treatment they need to be isolated from all other dogs. This means they cannot go to daycare, boarding, grooming, play dates, etc. Owners that are uneasy about bringing their dog to your facility may be reassured by informing them of what your facility is doing to reduce exposure and prevent spread in hospital.

Ensure owners that maintaining preventative care is a vital aspect of keeping their dogs healthy. When asked whether humans can catch this illness from dogs, the AVMA states that in general the risk of people getting sick from dogs with canine infectious respiratory disease is extremely low. For pet owners who want more information, feel free to provide them with the guidance for owners in this email.

We will update you as further information becomes available.

Sincerely,

Ashley I. Nichols, DVM

President, Maryland Veterinary Medical Association

References:

- 1. <u>https://sheltermedicine.vetmed.ufl.edu/2023/11/27/mysterious-respiratory-disease/</u>
- 2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7132485/
- 3. <u>https://www.aaha.org/biosecurity</u>



Dear Maryland dog owners,

As many of you know, concerns about an outbreak of atypical canine infectious respiratory disease (CIRD) have been reported in areas all over the United States. This has dominated media outlets early in this holiday season. At this time, we are told several cases have been reported recently although we do know the actual number of cases reported.

The Maryland Veterinary Medical Association (MDVMA) is aware of the concerns of the citizens of Maryland. CIRD is a broad term to describe known bacterial and viral causes of lung, trachea (throat), and nasal disease. The problem with <u>atypical</u> CIRD is that it does not always respond or behave like <u>common</u> CIRD. There has been very little and consistent data reported as the definitive pathogen causing this illness. Different states are reporting different things with some known pathogens being isolated and some are not.

According to the American Veterinary Medical Association (AVMA), the infectious agent is under investigation. What we do know is that cases have three (3) general syndromes:

- Chronic mild-moderate tracheobronchitis with a prolonged duration (6-8 weeks or longer) that is minimally or not responsive to antibiotics.
- Chronic pneumonia that is minimally or not responsive to antibiotics.
- Acute pneumonia rapidly becomes severe and often leads to poor outcomes in as little as 24-36 hours.

In addition, it can affect vaccinated and unvaccinated dogs, and sick dogs are often testing negative for known CIRD agents on PCR tests. There is no reported transfer of illness to humans (zoonosis) or other species, and the continued risk of zoonosis is believed to be extremely low.

As veterinarians and pet owners we understand how scary an outbreak can be. However, there are recommendations that dog owners can follow to reduce and prevent spread.

First, it cannot be stated enough that **prevention is the best medicine**, and owners should continue to keep and attend all appointments for preventative care. This includes keeping their dog's vaccines up to date. While the existing vaccines may not specifically target this unknown infection, maintaining overall health through routine vaccinations can help support a dog's immune system in combating various infections.

Second, optimal protection against common respiratory infections includes the annual vaccine for Bordetella, Adenovirus type 2, Distemper, and Parainfluenza vaccine, combined with the injectable influenza H3N2 vaccine. Take note that full immunity isn't present until two weeks after the last dose of vaccine.

Third, it is recommended to limit exposure to dogs outside of your household. This means avoiding high traffic areas like dog parks, dog shows, parades, and holiday light events. We understand that avoiding boarding, grooming and day care is not reasonable for everyone. If your dog must go to one of these facilities, we recommend they be up to date on all vaccines two (2) weeks prior to arriving. Additionally, we recommend vetting the facilities, and only utilizing facilities that require all vaccines not just Rabies.

MARYLAND VETERINARY MEDICAL ASSOCIATION

Lastly, if you must travel with your dog to a dog show, it is recommended to have them examined by a veterinarian 24-48 hours before the show.

Monitor your pet for signs of respiratory illness. Cases have a **progressive cough with or without sneezing**, **and eye/nose discharge**. Please consult your veterinarian immediately if those clinical signs develop, particularly if your dog concurrently loses its appetite, has trouble breathing, is coughing continually, or is extremely lethargic.

At the first sign of illness, isolate your dog by keeping them indoors at home. This prevents the spread to other dogs.

Because atypical CIRD does not behave as expected, and all infectious causes appear similar on exam, it is important to expect diagnostics to be a part of your veterinary visit. Common diagnostics include, but are not limited to:

- Bloodwork
- Chest x-rays
- Special diagnostic tests like PCR and cultures

One common finding with atypical CIRD is that they require prolonged treatment, sometimes six (6) weeks or more. Through this treatment it is important to finish any medication prescribed and continue to communicate with your veterinarian. In severe or worsening cases, referral to specialty hospitals is often necessary as they have advanced therapies and can provide supervised 24-hour care.

As veterinarians we are here to work with you for the best care of your pets. As a part of monitoring and determining the cause of atypical CIRD, your veterinarian may report your dog's case to the Maryland Animal Health Program. MDVMA continues to work with the AVMA and regional state veterinary medical associations to keep our members updated on the information as it becomes available.

In the meantime, your veterinarian is your resource for knowledgeable, reliable, appropriate care. Please utilize their knowledge and recommendations.

Sincerely,

Ashley I. Nichols, DVM President, Maryland Veterinary Medical Association

The Maryland Veterinary Medical Association (MDVMA) is the leader in advancing the science and art of veterinary medicine in the Old Line State. Founded in 1886, the MDVMA combines a long-standing commitment to quality veterinary care with state-of-the-art processes to deliver the professional and personal development Maryland veterinarians need to be effective. MDVMA members include veterinarians and

technicians; small animal, equine and food animal practitioners; and private, government and academic practitioners.

The Maryland Veterinary Medical Association is dedicated to ensuring the vitality of the veterinary profession by serving as the leader and resource through communication, education, advocacy, and support for the advancement of veterinary medicine.