NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Ashwin Vasan, MD, PhD
Commissioner

2023 Veterinary Advisory #6:
Update on Highly Pathogenic Avian Influenza A H5N1 in New York City

- Highly pathogenic avian influenza (HPAI) A H5N1 continues to be detected in commercial poultry flocks, wild aquatic birds and raptors globally, including New York City.
- HPAI is a highly contagious disease among several bird species and can cause severe morbidity and mortality particularly among poultry. HPAI viruses rarely infect humans, and the risk posed by the current H5N1 2.3.4.4b clade is considered low.
- People who have direct exposure to aquatic birds, raptors, or poultry – especially those that are sick or dead – should wear personal protective equipment to minimize the risk of possible exposure to avian influenza viruses.
- Report suspicions of HPAI in poultry birds to the New York State Department of Agriculture and Markets at 518-457-3502, and in wild birds to the New York State Department of Environmental Conservation at 518-478-2203.

Please share with your colleagues in Veterinary Medicine and your staff

June 13, 2023

Dear Veterinary Colleagues,

Highly pathogenic avian influenza (HPAI) A H5N1 clade 2.3.4.4b continues to circulate globally, impacting commercial poultry flocks, wild aquatic birds, and raptors. The most recent detection in New York City occurred in June 2023.

HPAI viruses are highly contagious across a wide variety of bird species and can cause severe disease with high mortality especially among poultry. Wild aquatic birds (e.g., waterfowl and shore birds such as ducks, geese, swans, terns, and gulls) are natural hosts for HPAI virus and, when infected, can shed the virus asymptomatically. Raptors are suspected to be infected by eating infected birds. Songbirds and most other passerine species are not believed to be highly susceptible to infection. The global spread of H5N1 has led to a record number of affected species of bird and record numbers of bird deaths primarily among poultry, waterfowl, shorebirds, and raptors.

For a summary of current reports of HPAI detected in poultry and wild birds in the U.S. and New York State, see CDC H5N1 Bird Flu Current Situation Summary, USDA Animal and Plant Health Inspection Service (APHIS) 2022-2023 Detections of HPAI, and NYS Department of Agriculture and Markets (NYS AGM).

HPAI viruses, including H5N1, have rarely infected humans and the current HPAI H5N1 2.3.4.4b clade appears to be even less transmissible to humans than prior clades. The virus was detected in the nares of a person in the United States in April 2022. The person had extensive exposure to infected birds, and it is possible that detection of H5N1 virus in the person was a result of surface contamination of the nasal membrane and did not represent a true infection. Currently, HPAI does not present an immediate public health concern. No person-to-person spread has been documented in association with this outbreak. The risk to the public remains low, though people who work with sick or dead wild aquatic birds, raptors, and/or poultry may be at higher risk if they have close and prolonged unprotected contact.

HPAI viruses are known to sometimes infect other mammals. Multiple spillover events to mammal species, primarily carnivores, likely occurred after an animal ate or had prolonged contact with infected birds or were exposed to contaminated environments. However, transmission continues to be predominantly bird to bird. USDA APHIS reported HPAI H5N1 virus detections in over 30 mammalian species, including sea lions, red foxes, striped skunks, raccoons, opossum, and zoo animals such as an Amur tiger and Amur leopard. A dog and a small number of domestic cats with HPAI H5N1 have also been reported in North America. Detections of HPAI H5N1 in mammals have not been associated with enhanced transmissibility of the virus to humans.

Transmission and signs of illness in birds
HPAI H5N1 virus can be shed in the saliva, nasal secretions, and feces of infected birds. HPAI virus can quickly spread to poultry by direct contact with wild birds or a contaminated environment. People can spread HPAI virus to birds through contaminated clothing and equipment.

Signs of HPAI in poultry birds can include:

- Sudden increase in deaths without clinical signs
- Lack of energy and appetite
- Respiratory signs such as sneezing, coughing, nasal discharge, and difficulty breathing
- Diarrhea
- Neurologic signs such as torticollis, opisthotonos, incoordination, paralysis, and drooping wings
- Decreased egg production, and swelling of the head, eyelids, comb, wattles, and hocks and purple discoloration of the wattles, comb, and legs

HPAI in dogs and cats
While rare, HPAI H5N1 can infect stray or domesticated cats and dogs. Signs of HPAI in cats and dogs may be variable, and veterinarians might consider HPAI in a dog or cat with recent exposure to sick or dead birds that presents with severe respiratory or neurological disease that cannot be attributed to another etiology.

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How to report sick or dead birds

Veterinarians should report suspicions of HPAI affected poultry to the NYS AGM at **518-457-3502**. Suspicion of HPAI in wild birds should be reported to the New York State Department of Environmental Conservation at **518-478-2203**. Testing of suspect birds may be indicated and arranged by New York State. If HPAI is confirmed, the New York City Department of Health and Mental Hygiene will contact people who have been exposed and facilitate testing if they become ill.

Prevention

People and their pets should avoid direct contact with wildlife. People who handle birds and other wildlife, especially sick or dead animals, should take the following precautions:

- Use personal protective equipment, such as gloves, face masks, and eye protection. Dispose of gloves and face masks and wash hands with soap and water after touching the animal.
- Avoid touching your mouth, nose, or eyes after contact with the animal or contaminated surfaces.

Deceased birds not submitted for testing should be double-bagged and placed in the trash. Contaminated surfaces should be cleaned and disinfected.

Veterinarians should advise their clients with backyard flocks to protect their birds and review these resources: USDA APHIS Defend the Flock and Cornell Cooperative Extension Resources for Backyard Flocks.

Additional Resources

NYS AGM: HPAI Health Alerts
CDC: Bird Flu Current Situation Summary
The Center for Food Security and Public Health: Avian Influenza
Cornell University College of Veterinary Medicine AHDC

As always, we greatly appreciate your partnership and cooperation.

Zoonotic and Vector-borne Disease Unit
Bureau of Communicable Disease
ZIVDU@health.nyc.gov
347-396-2600

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Visit our webpage for information and resources for veterinarians: Zoonotic and Vector-borne Diseases: Information for Providers

If you do not receive these alerts via email and would like to be added to the distribution list, please email zivdu@health.nyc.gov

Report animal diseases to the NYC Department of Health.

- Submit online through a secure web-based reporting platform
- Call 347-396-2600
- Fax the Animal Disease Case Report form to 347-396-2753

Report upon suspicion: Anthrax, brucellosis, glanders, influenza (novel with pandemic potential), monkeypox, plague, Q fever, rabies, SARS, tularemia
Report upon laboratory diagnosis: Arboviral encephalitides, leptospirosis, psittacosis, Rocky Mountain spotted fever, salmonellosis, tuberculosis
Report within 24 hours any outbreak or suspected outbreak of any disease, condition, or syndrome, of known or unknown etiology, which may pose a danger to public health.