MINNESOTA

Influenza A(H5N1) Infection in Companion Animals:

GUIDANCE FOR VETERINARY CLINICS FROM MINNESOTA BOARD OF ANIMAL HEALTH AND DEPARTMENT OF HEALTH

This document provides animal testing and infection prevention and control guidance for veterinarians and veterinary staff who are working in close contact with companion animals that are suspected of or confirmed to be infected with avian influenza A(H5N1).

Background

- Avian influenza (AI) is caused by influenza type A virus (influenza A). Migrating waterfowl are the host species for these viruses and these animals can serve as a reservoir for infection for domestic poultry. Since 2022, the avian influenza virus influenza A(H5N1) Clade 2.3.4.4b has been associated with outbreaks in wild birds, domestic poultry, dairy cattle, and other wild and domesticated animals, such as cats. Sporadic human infections have occurred in people who have had direct contact with infected birds, dairy cattle, or other animals.

Animal Health Risk

- Avian influenza A(H5N1) infections in cats have been reported in the United States, Poland, South Korea, and France.
- The U.S. Department of Agriculture (USDA) has reported that more than 50% of infected dairy farms reported having ill or dead cats.
- Cats have presented with varying degrees of clinical signs including respiratory and neurologic signs often with fatal outcomes.
- Infections in companion animals can occur after contact with infected wild birds, bird droppings, dairy cattle or their body fluids, or clothing or equipment contaminated with influenza A(H5N1) virus (boots or clothing worn while handling infected poultry or dairy cattle).
- Consumption of raw unpasteurized milk from infected dairy cattle or feeding of raw food can also potentially transmit influenza A(H5N1) virus.

Animal Testing Considerations

- Companion animals who exhibit respiratory and/or neurologic signs that have had recent contact with another animal suspected or confirmed to be infected with influenza A(H5N1) or are owned by a person who works at or has visited a farm with known or suspected influenza A(H5N1) infections should be tested for influenza A(H5N1).
- In cases with neurologic signs where the animal is deceased or euthanized, rabies virus testing should be attempted as well.
- Many of these animals have the potential to be exposed to rabies virus animal reservoirs such as skunks or bats, and the neurologic signs from these two viruses cannot be differentiated.

- Influenza A(H5N1) and rabies testing is available at the University of Minnesota Veterinary Diagnostic Laboratory (VDL). The preferred sample for influenza virus testing is brain.
  - For deceased or euthanized animals, please submit the whole animal. The brain sample will be collected at the lab.
  - For live animals, please submit a nasal swab.
  - Samples should be refrigerated and shipped in an insulated box with ice packs.
  - Contact the VDL at 612-625-8787 for questions related to animal testing.

Human Health Risk

- Influenza A(H5N1) virus is considered low risk to the public, but there is a greater risk for those who handle and care for infected animals.
- Sick animals may be able to transmit influenza virus to people in their saliva, feces, milk, and other body fluids. Human infections can occur when the virus is inhaled or gets into a person's eyes, nose, or mouth.
- It is important that veterinary staff handling and caring for ill patients take precautions to prevent transmission of influenza A(H5N1) to other patients, staff, and themselves.

Infection Prevention and Control Precautions

- Triage questions should be asked upon scheduling veterinary patients to identify suspect influenza A(H5N1) patients. Questions to ask owners include:
  - Has the patient:
    - Been exposed to other animals who are ill including poultry, dairy cattle, or other wild or domesticated animals?
    - Experienced any clinical respiratory symptoms (sneezing, coughing, trouble breathing, snotty nose or eyes), or any neurologic symptoms (stumbling, circling, tremors)?
    - Recently consumed raw unpasteurized milk from known or possibly infected dairy cattle?
  - Has the owner been exposed to or visited a farm with known or suspected influenza A(H5N1) infections?
- Any patients with clinical respiratory symptoms or neurologic disease that have had recent contact with another animal suspected or confirmed to be infected with influenza A(H5N1) or are owned by a person who works at or has visited a farm with known or suspected influenza A(H5N1) infections need to be handled with standard and aerosol precautions while in the clinic. This includes:
  - Patients should not wait in a lobby area or mingle with other healthy patients while waiting to be seen. Have patients wait outside and then, if possible, bring them in an alternate entrance.

- House patients in an isolation area away from other patients. The isolation area should have negative airflow, if possible (air is pulled from the hallway into the room and then vented out the building).
- Wear full personal protective equipment (PPE) while handling or entering the patient environment. This includes:
  - N95 mask.
  - Goggles or protective eyewear (not eyeglasses).
  - Gloves.
  - Boot covers/dedicated footwear.
  - Head cover/bonnet.
  - Fluid resistant gown/coveralls.
  - Instructions for proper wearing, removal, and disposal of PPE can be found on the CDC: Protect Yourself From H5N1 When Working With Farm Animals information sheet (https://www.cdc.gov/flu/pdf/avianflu/protect-yourself-h5n1.pdf).
- Perform good hand hygiene before and after patient care, being in the patient environment, and after removal of PPE.
- Limit the number of staff handling the patient and entering the isolation area.
- Use patient dedicated equipment, and clean and disinfect all items removed from the isolation area. Bring into isolation only the items that you need: do not bring in boxes of supplies (i.e., bring only a few doses of meds not the entire bottle, one role of bandage material, a few blue pads, etc.). Any single-use items that cannot be cleaned and disinfected properly need to be thrown away after patient discharge.
- Limit movement or transport of the patient unless medically necessary.
- Thoroughly clean and disinfect all areas and equipment that the patient may have contacted during admission. Ensure that the disinfectant being used is appropriate to kill influenza virus and that it is left on surfaces for the entire contact time as directed on the label before wiping off.
- Wear full PPE during the cleaning and disinfection process.
- Do not allow the patient to lick you on the face and avoid any scratches or bites from the patient.
- Never eat or drink or bring food and beverages into any patient care areas.

- All veterinary staff (including kennel staff and cleaners) should change shoes and clothes prior to leaving the clinic to prevent spreading H5N1 to other pets, family members, and the community.
  - If you have ill pets or farm animals at home or have worked with any suspect influenza A(H5N1) animals at a different facility, change your clothes and shoes at arrival to the clinic and before you leave.

- All equipment or supplies that were used on a suspect or known infected patient or facility need to be properly cleaned and disinfected before bringing them to a different site. Follow all biosecurity protocols in place at other farms or facilities to prevent transmission of influenza A(H5N1).

Veterinary Staff Health Monitoring

- The Minnesota Department of Health (MDH) will reach out to any veterinary staff with exposures to an influenza A(H5N1)-positive veterinary patient to complete a short interview about interactions with the ill patient and to answer any questions.
- Having respiratory symptoms does not mean you are infected with influenza A(H5N1), as these symptoms are common in a variety of illnesses.
- If you develop symptoms, and you agree to it, MDH will help arrange for you to be tested.
- Contact MDH at 651-201-5414 and ask for the Zoonotic Diseases Unit for questions on human health risk from avian influenza and how to protect yourself.

Additional Resources

- HPAI Detections in Mammals (usda.gov)
- Highly Pathogenic Avian Influenza H5N1 Genotype B3.13 in Dairy Cattle: National Epidemiologic Brief (usda.gov)
- Considerations for Veterinarians: Evaluating and Handling of Cats Potentially Exposed to Highly Pathogenic Avian Influenza A(H5N1) Virus in Cats | Bird Flu | CDC(cdc.gov/bird-flu/hcp/animals/index.html)
- Public Health Resources for Veterinarians and Veterinary Staff Handling Animals with HPAI A(H5N1) Virus Infection on Dairy Farms | Bird Flu | CDC(cdc.gov/bird-flu/hcp/animals/resources-veterinarians-dairy.html)
- Reducing Risk for People Working with or Exposed to Animals | Bird Flu | CDC(cdc.gov/bird-flu/prevention/worker-protection-ppe.html)

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7/24/2024
To obtain this information in a different format, call: 651-201-5414.