

H5N1 Avian Influenza and Cats: Precautions for Shelters

1. The most important precaution is situational awareness

- Has H5N1 flu been documented in birds, dairy cows, poultry in your location? If so, this increases potential risk for exposed cats entering the shelter.
- The risk for H5N1-infected cats entering the shelter is very low in areas without documented virus circulation.
- At this time, there is not enough evidence to support altering normal shelter functions or stopping admission and care of cats that need to be in a shelter.
- ***The bottom line is that this is a very fluid situation and shelters should remain vigilant about the local H5N1 influenza situation and adjust policies and procedures accordingly.***

2. Assess risk factors for cats at intake

- The overall risk for H5N1 exposure and infection in cats is low, but there are factors that increase risk
- Shelter location – is there H5N1 in poultry, dairy cows, rodents, wild birds in the local community?
- Cat location – cats with outdoor access such as barn cats, dairy and poultry farm cats, yards with backyard poultry, community cats are at higher risk for exposure
- Cats transported from a shelter in a higher risk community

3. What should shelter staff and volunteers be looking out for?

- Cats infected with H5N1 generally present with severe neurological and/or respiratory disease
 - H5N1 avian flu virus concentrates in the brain with lower amounts in the lungs
- Neurological signs: disoriented, blind, wobbly or circling, difficulty standing or too weak to stand up, seizures
- Respiratory signs: copious nasal discharge, coughing, open-mouth breathing, struggling to breathe, rapid breathing
- Cats found dead with no prior disease signs
- Cats with any of these signs should be considered suspects for H5N1 flu infection if they are from high-risk situations as noted above

4. How should staff and volunteers handle suspect cats?

- Report suspect cats to a supervisor for instructions on next steps
- Wear full coverage PPE (gloves, mask, eye protection, gown) at all times when cats are handled
- Limit handling as much as possible pending medical assessment
- Relocate suspect cats to a physically enclosed isolation room pending medical decisions. Full coverage PPE required for anyone in this room.

5. What should the medical team do with suspect cats?

- Wear full coverage PPE (gloves, mask, eye protection, gown) when assessing or handling cats
- Consider more common causes of the suspect cat's clinical signs
 - Neuro signs: think about rabies first! Also, head trauma, other infectious diseases, toxins
 - Respiratory signs: herpesvirus and calicivirus are the most common causes. Also consider *Bordetella*, diaphragmatic hernia, chest trauma, etc.
 - Sudden death: panleukopenia is a common cause, especially for kittens
- Diagnosis cannot be based on clinical signs. Confirmation requires H5N1 flu PCR testing
 - Deceased cats (natural or humane euthanasia): contact the state veterinary diagnostic lab for instructions on where and how to submit the deceased cat for rabies testing and H5N1 flu PCR. Only certain labs in each state are certified for rabies testing and not all labs can test for H5N1 flu virus. There is likely a lab in each state that can do both. Colleges of Veterinary Medicine may also have a pathology staff that can handle suspect rabies and/or H5N1 flu cases
 - Live cats: contact a state veterinary diagnostic lab that offers H5N1 PCR testing. If the cat is not a safety risk, collect oropharyngeal swabs according to instructions provided by the diagnostic lab. Turnaround time for results ranges from 1 to 3 business days from receipt of the sample in the lab

Note: the University of Wisconsin Shelter Medicine Program has funding to subsidize H5N1 flu virus PCR testing. Contact uwsheltermedicine@vetmed.wisc.edu for details on sample submission.

6. What happens if H5N1 flu virus is initially detected by the lab?

- Initial diagnosis of H5N1 virus in suspect cat samples must be confirmed by testing at the National Veterinary Service Lab (USDA/Aphis)
- The first lab will send leftover sample to the NVSL for confirmatory testing.
- Turnaround time for confirmation can be several days

7. What actions should be taken if a suspect cat has confirmed H5N1 flu infection?

- Confirmed H5N1 influenza infection in any species must be reported to state veterinary and federal authorities
- The local public health department and state veterinarian should be notified
 - The health department will guide monitoring of potentially exposed shelter staff and volunteers and review biosecurity practices
 - The state veterinarian will guide next steps for the shelter, including requirement for quarantining exposed cats, further testing, etc.
- The shelter should provide transparent communication to shelter staff, volunteers, community veterinarians, other community stakeholders, and the public. This increases awareness about the risk in the community so that precautions can be implemented and averts any misinterpretations or rumors

For more information, check out the resources below.

Resources

- Recommendations for monitoring and response to possible infections with avian influenza type A (H5N1) in cats for shelters, rescues, and access-to-care clinics. <https://sheltermedicine.wisc.edu/recommendations-for-monitoring-and-response-to-possible-infections-with-avian-influenza-type-a-h5n1-in-cats-for-shelters-rescues-and-access-to-care-clinics/>
- CDC. What Causes Bird Flu in Pets and Other Animals. <https://www.cdc.gov/bird-flu/virus-transmission/avian-in-other-animals.html>
- CDC. Considerations for Veterinarians: Evaluating and Handling of Cats Potentially Exposed to Highly Pathogenic Avian Influenza A(H5N1) Virus. <https://www.cdc.gov/bird-flu/hcp/animals/index.html>
- AVMA. Avian influenza A (H5N1) in cats. <https://www.avma.org/resources-tools/animal-health-and-welfare/animal-health/avian-influenza/avian-influenza-h5n1-cats>
- APHIS/USDA. Detections of Highly Pathogenic Avian Influenza in Mammals. <https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/mammals>