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Shelter Medicine Program
College of Veterinary Medicine
https://sheltermedicine.vetmed.ufl.edu/

H5N1 Avian Influenza and Cats: Precautions for Community Cat Management Programs

Community cat management programs include shelters with return to field programs, TNR clinics, spay/neuter clinics, and community cat colony caretakers

1. **The most important precaution is situational awareness**
   - Has H5N1 avian flu been documented in birds, dairy cows, poultry in your location? If so, this increases potential risk for exposure of free-roaming community cats, including cats in "working cat" programs living in barns and farms
   - The overall risk for H5N1-infected cats entering community cat management programs is low in locations with no or low virus circulation
   - At this time, there is not enough evidence to support altering community cat management programs/clinics or decreasing the spay/neuter capacity
   - ***The bottom line is that this is a very fluid situation and community cat programs should remain vigilant about the local H5N1 avian influenza situation and adjust policies and procedures accordingly***

2. **Assess risk factors for community cat exposure to H5N1 flu virus**
   - The overall risk for H5N1 exposure and infection in cats is low, but there are factors that increase risk
   - Program location – is there H5N1 in poultry, dairy cows, rodents, wild birds in the local community?
   - Cat location –barn cats, dairy and poultry farm cats, community cat colonies are at higher risk for exposure, especially in location "hotspots"
   - Cats in areas where bird-die offs have occurred, or in colonies where cat die-offs have occurred

3. **What biosecurity precautions should cat trappers, including animal control officers, take in the field?**
   - Regardless of the H5N1 exposure risk in the area, trappers should wear gloves when handling traps with cats.
   - Trappers should not remove cats that look sick or injured from the trap.
   - All traps should be covered by sheets or towels for transport from the field, during overnight holds, and during return to the field
   - Traps with sick or injured-appearing cats should be housed separately from others pending assessment by a medical professional

4. **What biosecurity precautions should clinic staff and volunteers take?**
    - Clinic staff/volunteers should wear gloves when handling traps with cats and during administration of anesthetics, surgical prep, surgery, and postop recovery. Gloves should be changed between sick cats. This is best practice for prevention of zoonotic disease and reducing spread of cat diseases.

5. **What clinical signs should clinic staff and volunteers look 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 described above

6. **How should suspect cats be handled?**
    - Leave suspect cats in their covered trap.
    - Wear full coverage PPE (gloves, mask, eye protection, gown) when cats are handled
    - Relocate the traps to a separate room away from other cats and people
    - Report suspect cats to a clinic supervisor for instructions on next steps

7. **What should the medical team do with suspect cats?**
    - Wear full coverage PPE (gloves, mask, eye protection, gown) when assessing the cats in their traps
    - No sick cats should be handled unless they are anesthetized!
    - During assessment, consider more common causes of the 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 in community cat colonies
    - If the suspect cat is in distress from neurological or respiratory disease, the best outcome is humane euthanasia to end pain and suffering.
    - H5N1 infection cannot be diagnosed by clinical signs. Diagnosis requires H5N1 flu PCR testing
        - <u>Deceased cats</u> (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
        - <u>Cats with milder clinical signs:</u> contact a state veterinary diagnostic lab that offers H5N1 PCR testing.
            - 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
- The cat should be held in isolation pending test results. Consider whether this is humane for the cat and the safety for staff/volunteers caring for it.

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.

8. **What happens if H5N1 flu virus is detected by the lab?**
   - H5N1 avian flu infection in any species is a reportable disease
   - The local public health department and state veterinarian should be notified
     - The health department will guide monitoring of potentially exposed staff and volunteers
     - The state veterinarian will advise on next steps for the cat
     - Euthanasia is likely the best outcome for the cat's welfare, prevention of exposure of other cats, and prevention of exposure of colony caretakers
   - The clinic should provide transparent communication to the colony caretaker, 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

9. **What should happen to other cats in the colony or farm where infected cats were living?**
   - Public health and state veterinarian authorities may provide guidance
   - Otherwise, continue monitoring the other cats and provide safe food sources (no raw milk or raw poultry-based foods)

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