



STEVE SISOLAK
Governor

STATE OF NEVADA

DEPARTMENT OF WILDLIFE

6980 Sierra Center Parkway, Suite 120

Reno, Nevada 89511

Phone (775) 688-1500 • Fax (775) 688-1595

TONY WASLEY
Director

BONNIE LONG
Deputy Director

JACK ROBB
Deputy Director

June 16th, 2022

Recommendations for the care and rehabilitation of wildlife during the HPAI outbreak

To Whom it May Concern,

Highly Pathogenic Avian Influenza (HPAI) virus (H5N1 Eurasian strain or EA H5) has been detected in multiple species of wild birds in all waterfowl flyways in North America since December 2021. In addition, several cases of HPAI in skunks and foxes have occurred. No known human infections have been detected in the US, however this strain of HPAI has the potential to infect people, birds, and some mammals. Transmission to multiple wild mammalian species from birds held in isolation in a wildlife rehabilitation center has been reported.

As of 6/7/22, HPAI has NOT been detected in wild or domestic species in Nevada. However, the disease has occurred in the neighboring states of Utah, Oregon, and Idaho and elsewhere in the west. Thus, this document serves as guidance for facilities to operate with an abundance of caution to protect their personnel and the animals under their care. Some facts to keep in mind when handling avian species or answering questions to the public in your communities.

Background:

Avian influenza is a type A influenza virus that affects a wide variety of domestic and wild birds and mammals. They are classified based on the severity of disease or pathogenicity, low pathogenicity (LPAI; mild symptoms) or high pathogenicity (HPAI; severe symptoms and death).

Avian species and individual animals may be infected with EA H5 HPAI without showing clinical signs (asymptomatic). Thus, caution should be given regarding basing a preventative program on clinical signs.

When present, clinical signs are not specific to HPAI and could be due to other causes. Clinical signs of HPAI in birds are highly variable and any typical "sick bird" signs. However, more common clinical signs may include one or more of the following:

- Respiratory (sneezing, coughing, ocular & nasal discharge, periorbital edema)
- Neurologic (abnormal position of head or neck, ataxia, circling)
- Dermatologic (limb edema, patchy erythema)
- Gastro-intestinal (diarrhea, green discoloration to feces).
- Weakness, lethargy, depression.
- Sudden death

Most EA H5 HPAI infections have been detected in waterfowl and other aquatic birds, raptors, gallinaceous birds, and scavengers (gulls, ravens, crows), but all avian species should be considered susceptible. In addition, cases have occurred in various mammal species and all mammals should be considered potentially susceptible.

HPAI is shed at high levels through all respiratory secretions, saliva, and feces. It can also remain infective in the environment, especially in water or under wet conditions. The virus is highly transmissible to domestic chickens, ducks, turkeys, or other poultry, and current field data indicates high transmission rates in wild birds. Game birds raised in captivity may be especially at risk for outbreaks with high mortality. Contact between domestic and wild birds, especially waterfowl, raptors, and game birds, should be prevented.

The current strain of H5N1 appears to pose a low risk for human infection, but those who work with wild birds, especially waterfowl, are at higher risk of exposure and should wear appropriate personal protective equipment (PPE).

Facilities that hold captive wild birds, such as rehabilitators and zoos, may be at risk for receiving infected species and incidentally promoting transmission because of close contact among species and caregivers. This could result in spillover to species that might otherwise not be exposed in a natural setting. The wide breadth of species that can be affected and the variation in clinical signs make it difficult to triage high-risk HPAI candidates. Wildlife rehabilitators and others that hold captive producers need to be aware that intake of infected animals may put other patients and educational animals at risk.

HPAI is a reportable disease and testing is required to diagnose HPAI.

Report any bird die-offs, unusual mortality events, and birds suspected of having HPAI within your facility by contacting the USDA (866) 536-7593 or NDA state veterinarian Dr. Amy Mitchell at amitchell@agri.nv.gov.

Report mortalities or suspect illness of wild birds not in your facility to the Nevada Department of Wildlife at 775-688-1500.

If you suspect HPAI at your facility:

Do not take in or release any birds or mammals until you receive clearance to do so from state animal health officials.

Dead or euthanized birds suspected of having HPAI should be double-bagged (disinfect the outside of the bag) and saved frozen until further guidance is provided by local authorities.

NDA and/or NDOW may conduct a foreign animal disease investigation and will also decide how to manage the facility

Clean and disinfect the facility, removing organic material with soap before applying disinfectant

If you have concerns about potential human exposure to HPAI, please contact the Nevada Department of Public Health at 775-684-4200. Suspect human cases **MUST** be reported.

For questions or concerns regarding HPAI reporting and guidance, please contact the Nevada Department of Wildlife at 775-688-1500 or at ndowinfo@ndow.org.

Intake Guidance

Sick birds or mammals should not be imported from outside the state. Susceptible birds that are healthy or have physical injuries only should be tested for HPAI prior to entry and this information included in the import permit request.

Contact should be eliminated or significantly reduced between birds in your care and free-ranging birds, especially waterfowl and vultures. Cover pens to prevent fecal contamination from roosting wild birds. Separate staff should care for hospitalized patients than those caring for educational or other captive birds. Ideally the rehabilitation of orphaned passerines should be in a separate facility and performed by dedicated staff separate from hospitalized sick/injured adult patients.

- HPAI testing (oropharyngeal and cloacal swabs in the same vial) should be done on all animals considered for release, as well as before transfer to or from your facility
- Waterfowl, raptors, or scavengers with unexplained neurologic or respiratory symptoms should be immediately euthanized without being admitted into the facility

Any birds that come from an area of a recent HPAI outbreak should be immediately euthanized.

We recommend immediate euthanasia of waterfowl, raptors, or scavengers with unexplained neurologic or respiratory signs. If you choose to care for these birds, see “quarantine and biosecurity” below.

Carcasses from euthanized or natural mortality birds that are suspect for HPAI either due to clinical signs or source should be double-bagged (disinfect the outside of the bag) and stored in a refrigerator or freezer and not used for food (for people or other wildlife patients). Report them to the Nevada Department of Wildlife at 775-688-1500 for testing.

Protection of Human Health

Wash hands appropriately (> 20 seconds) after handling birds, touching contaminated surfaces or materials. Do not eat, drink, or smoke while treating affected birds or cleaning/disinfecting cages.

Wear PPE (at minimum an N95 mask, eye protection, and gloves) when handling or working around birds with suspect illness. Eye protection, gloves, dedicated clothing, and appropriate footwear should be worn around healthy birds.

Staff should consider vaccination for seasonal influenza to reduce the risk for seasonal flu. Currently there are not H5 vaccines approved in the United States for humans or animals; however, individuals working with wild or domestic birds should receive their annual influenza vaccine to lower risk of reassortment with seasonal flu strains in people.

If rehabilitation staff develop flu-like symptoms, they should seek prompt medical care and let the provider know that there has been regular contact with wildlife including wild birds.

Quarantine and Biosecurity

Rehabilitators holding suspect avian cases should follow the recommendations below to lower risk of transmission and contamination. Infection control with suspect HPAI cases in rehabilitation settings is extremely difficult to manage and may be beyond the facility and staff capacity. The following measures should be implemented to increase biosecurity.

Quarantine suspect cases in a room or building away from other birds and mammals. A separate building or location with a separate entrance and separate HVAC system or ventilation is best. If you receive a suspect bird, contact NDOW at 775-688-1500 to organize testing.

- HPAI testing must occur close to admission, followed by a 2-week quarantine
- Testing should be repeated prior to release or movement out of quarantine. Suspect birds **MUST NOT** be released unless they have tested negative.
- Admissions for a given period can be quarantined together and tested together. If one bird tests positive all will need to be euthanized.

Having a positive bird in a rehabilitation facility can risk infection to all avian and some mammalian patients in the facility and may result in depopulation of the facility pending an investigation by the USDA or Nevada Department of Agriculture.

Provide adequate air exchange and air filtration. Be aware that transmission can occur through aerosols and airborne particles so try to avoid situations where this may occur such as rooms where air circulates between rooms or spaces holding susceptible species.

Use footbaths with appropriate disinfectant at the entrance/exit to all quarantine areas where sick birds are housed.

Rehabilitation staff should have dedicated clothing and PPE for working with quarantined birds.

Wash cages thoroughly (removing organic debris) before disinfecting.

Disinfect cages after use with a 10% bleach solution or hospital grade virucide for disinfection. Allow adequate contact time (see bottle for instructions).

Contaminated cage liners/supplies/materials should be double bagged for disposal.

Designated personnel should treat and care for quarantined birds. If staffing limitations preclude this measure, then treatment and care for quarantined birds should occur last.

When caring for quarantined birds and cleaning cages, wear appropriate PPE (personal protective equipment such as gloves, Tyvek suits if available or coveralls, disposable N95 respirator, eye protection, and boots). N-95 masks should be universal and fit tested. Change all PPE between patients to limit virus transmission.

Rehabilitation staff treating or caring for affected or suspect birds should not handle or have contact with domestic poultry in any setting (e. g. facility, home, neighbor, farm).

Helpful Links:

USDA poultry biosecurity recommendations: https://www.aphis.usda.gov/publications/animal_health/fsc-all-npip-collateral-english.pdf.

Map of Current Cases: <https://www.usgs.gov/centers/nwhc/science/distribution-highly-pathogenic-avian-influenza-north-america-20212022>.

HPAI updates for wild birds: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022/2022-hpai-wild-birds>

HPAI updates for poultry: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022/2022-hpai-commercial-backyard-flocks>

OSHA: <https://www.osha.gov/avian-flu/control-prevention>

CDC Guidance for PPE: <https://www.cdc.gov/flu/avianflu/h5/worker-protection-ppe.htm>).