

Highly Pathogenic Avian Influenza



Highly pathogenic avian influenza (HPAI) virus was confirmed in wild geese in Northeastern Colorado on March 24, 2022. Colorado Parks and Wildlife (CPW) is working with the Colorado Department of Agriculture, the United States Department of Agriculture, and other agencies to monitor and respond to additional cases of highly pathogenic avian influenza.

What is Avian Influenza?

Avian influenza is an infectious disease of birds caused by a group of influenza viruses. These viruses naturally circulate in wild birds, such as waterfowl and shorebirds, which can carry the virus without showing any signs of disease. There are many strains of avian influenza, which are classified into two categories: low pathogenic (LPAI) strains which typically cause little or no clinical signs in any birds, and highly pathogenic (HPAI) strains which can cause severe disease and potentially high mortality in some birds species, particularly domestic poultry.

New HPAI Strain in 2021-2022

In the winter and spring of 2021-2022, an outbreak of HPAI involving a new strain of H5N1 emerged in North America. Unlike prior strains of HPAI in North America, this particular strain is causing widespread mortality in some species of wild birds, particularly in snow geese, raptors, and vultures. This strain has also caused mortality in several mammal species, especially in skunks and foxes.

Does Avian Influenza cause disease in wild birds?

Previous HPAI strains caused minimal disease in wild bird populations. However, the current strain does cause disease in many species including swans, gulls, geese, grebes, pelicans, raptors, vultures, cranes, some species of ducks, turkeys, and possibly other game bird species. Typical symptoms include swimming in circles, moving slowly, incoordination (may appear drunk), and head tilt or inability to lift the head. Most affected birds are seen on the ground, but occasionally sick birds may be seen flying low and alone.

Can humans be infected?

Although rare, some HPAI strains can infect people so it is important to protect yourself. The main protection for the general public is to avoid handling sick or dead birds and keep your distance from wildlife. See the [CDC web-site](#) for more information on protective actions for people.

What to do if you find sick or dead birds?

If you find three or more dead wild birds in a specific area within a two week period OR if you see live birds showing clinical signs of disease, please contact your local Colorado Parks and Wildlife office. CPW will not be able to respond to all calls and is focusing responses based on surveillance and management priorities.

Hunter precautions:

- Do not handle or eat wildlife found sick or dead.
- Do not eat, drink, or put anything in your mouth while cleaning or handling game.
- Wear rubber or latex gloves when handling and cleaning game.
- Wash hands thoroughly and disinfect knives, equipment, and surfaces that come into contact with game.
- Keep wild bird carcasses away from domestic poultry
- Cook all game thoroughly to an internal temperature of 165°F



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Recommendations for Individuals Who Handle Wild Birds

Wildlife professionals and individuals licensed to handle wild birds in areas where HPAI is active should wear protective gear such as gloves, a face mask and eye protection when handling wild species with a high risk for carrying avian influenza or birds found sick or dead. Be sure to wash your hands and disinfect equipment after handling. There are many [disinfectants](#) suitable for use against avian influenza viruses. Ensure that equipment and surfaces are cleaned with soap and water prior to applying disinfectants. Disinfectants require a specific amount of contact time to kill the virus. Follow the manufacturer's instructions for the product that you use.

Recommendations for Falconers:

Avian influenza virus can be transmitted to birds of prey from feeding on infected birds. As a precaution, we advise falconers to avoid hunting wild avian species and not to feed wild species (particularly waterfowl) to raptors during this HPAI outbreak. Minimize contact with wild birds, enhance cleaning and biosecurity practices and consult with a veterinarian immediately if any of your birds show signs of illness.

Recommendations for Game Bird Facilities:

Game birds such as pheasants, turkeys, grouse, and quail may be susceptible to HPAI. The main way to protect your birds is to maintain good sanitation and biosecurity, limit bird movement, and minimize contact with wild birds. See the below link to CDA guidance for more information on biosecurity practices.

Recommendations for wildlife rehabilitators:

- All birds, even apparently healthy ones, should be quarantined before mixing with resident birds. Avoid mixing species and unnecessary bird-to-bird contact.
- Consider [foot baths](#), dedicated footwear or other biosecurity measures to limit introduction of viruses into the facility.
- Consider limiting or stopping admissions of wild species with high risk for carrying avian influenza viruses during this HPAI outbreak.
- If birds in your facility show signs of illness, consult with a veterinarian immediately to facilitate testing.

Additional information on avian influenza can be found at the following:

- USDA APHIS: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai>
- Centers for Disease Control: <https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>
- Colorado Department of Agriculture: <https://ag.colorado.gov/animals/reportable-diseases/avian-influenza>
- Utah State University – Disinfection Guidelines: https://extension.usu.edu/poultry/files/036_AG_Poultry_2015-01pr.pdf
- USDA guidance for hunters: https://www.aphis.usda.gov/publications/animal_health/fsc_hpai_hunters.pdf
- CDC guidance for protecting workers from avian influenza: <https://www.cdc.gov/flu/avianflu/h5/>



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