



# Prevention of Highly Pathogenic Avian Influenza (HPAI) in Pastured Poultry

by Amy Barkley, Livestock Specialist, CCE SWNY Dairy, Livestock, and Field Crops Program

## **Background:**

Highly Pathogenic Avian Influenza is a contagious poultry virus that has caused significant financial losses to the U.S. poultry industry and disruptions to the nation's supply of eggs and poultry meat. The highly pathogenic strain, H5N1, has been circulating in the U.S. since February 2022 resulting in the death and euthanasia of over 190 million birds in over 2,000 commercial and backyard flocks. This is the nation's largest animal health emergency.

Waterfowl, both wild and domestic, act as the primary carriers, which can spread the virus to other wild bird and domestic poultry populations. Wild waterfowl populations are monitored, and hunters have the option to send their harvested birds in for testing. Wild waterfowl regularly carry low-pathogenic strains of the virus, but it can easily mutate to a highly pathogenic strain, as we've seen with this outbreak. The disease has spread to mammalian and avian scavengers that feed on the carcasses of dead, infected wild waterfowl. It has also been found to spread to poultry from infected dairy cattle.

## **Symptoms of HPAI**

Birds infected with HPAI may show one or more of the following symptoms:

- Sudden death without clinical signs
- Lack of energy and appetite
- Decreased egg production or soft-shelled or misshapen eggs
- Swelling of head, comb, eyelid, wattles, and hocks

- Purple discoloration of wattles, comb, and legs
- Nasal discharge, coughing, and sneezing
- Discoordination
- Diarrhea

A large number of death losses without any clinical signs or indication of predation or weather impacts is known to be an almost sure sign of the virus. In some cases, expect the majority of the flock to die within a few days. Regardless of how the disease presents, a large portion of the birds in a flock will be affected.

## **Keeping your birds safe:**

While most biosecurity protocols during outbreaks of HPAI recommend keeping birds indoors and under solid cover, this is not an option for many who raise their poultry either on open pasture or in semi-covered mobile coops. However, the guidelines below can be incorporated into biosecurity plans to help keep your birds safe.

- Protecting against exposure to wild birds or water or ground contaminated by wild birds.

Make common-sense decisions about where pastured and free ranged poultry are housed. Fields or other open areas that are frequented by wild birds, especially waterfowl, are going to be a higher risk than those areas that aren't.

Keep your birds away from streams/ponds/lakes or other water sources that wild birds frequent.

## **Keeping your birds safe, continued:**

Keep feed and water inside to limit wild bird and rodent access. Rodents don't become infected but can carry contamination on their bodies. Wild birds have the potential to both be infected and transport the virus on their bodies.

- Closing bird areas to nonessential personnel or vehicles to limit the number of people potentially bringing disease onto the property.
- Providing bird caretakers with clean clothing and disinfection facilities and directions for their use. This is especially important if they have poultry or dairy cattle at home or work at another poultry or dairy facility. Clean and sanitized shoes are especially important. If this can't be done, boot covers are helpful.
- Purchasing poultry from an NPIP (National Poultry Improvement Plan) source. Parent flocks on these farms are routinely tested for diseases, including Avian Influenza, and these farms have biosecurity plans in place. The full list of NPIP participant hatcheries and farms by state can be found at <http://www.poultryimprovement.org/statesContent.cfm>
- Establishing an "all-in, all-out" flock management policy, if possible. This means that all birds on a property should be the same age, with no new birds being brought in until the first set is out. If this isn't possible, birds of differing ages should be kept separate.
- Thoroughly cleaning and disinfecting equipment and vehicles, including tires and undercarriage, when entering or leaving the farm.
- Not borrowing or lending farm equipment or vehicles. If this must be done, equipment and vehicles should be thoroughly cleaned and disinfected, using one of the many disinfectants

that can be used against HPAI (<https://www.epa.gov/pesticide-registration/list-m-registered-antimicrobial-products-label-claims-avian-influenza>).

- Stopping visits to other poultry farms, exhibitions, fairs, sales, or swap meets. If visits must occur, direct poultry caretakers to change footwear and clothing upon their return.
- Banning bringing birds from slaughter channels (auctions, live bird markets, processing facilities) to the farm.

Many of these tips can be found through the USDA-APHIS Defend the Flock Program: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/defend-the-flock-program>

## **What do if I think I have the disease on my property?**

Report it! If a large number of your birds are sick or dying, it's important to report it immediately so that we can stop the spread to any other flocks. You can call:

NYS Department of Agriculture & Markets:  
**518-457-3502**

USDA (United States Department of Agriculture):  
**866-536-7593**

Your local Cornell Cooperative Extension Office  
<https://cals.cornell.edu/cornell-cooperative-extension/local-offices>

For more information, please contact [the NYS Department of Ag and Markets](#) at:  
**518-457-3502**

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