Avian Influenza

Avian influenza, or "bird flu," is a contagious viral disease of domestic and wild birds. It's a major threat to the poultry industry, animal health, trade, and the economy worldwide.

Caused by influenza type A viruses, the disease varies in severity depending on the strain and species affected. Highly pathogenic avian influenza (HPAI) strains are
deadly to domestic poultry and can wipe out entire flocks within a matter of days. Low pathogenicity avian influenza (LPAI) strains typically cause few or no signs of illness. They occur naturally in wild birds around the world. However, some LPAI strains can become highly pathogenic in poultry.

*Note: Avian influenza A viruses rarely infect people. For more information on human health and avian influenza, visit the [Centers for Disease Control and Prevention](https://www.cdc.gov/).*

### What To Look For

#### Highly Pathogenic Avian Influenza

- Sudden death without any prior symptoms of illness
- Lack of energy and appetite
- A drop in egg production or soft-shelled, misshapen eggs
- Swelling of the eyelids, comb, wattles, and shanks
- Purple discoloration of the wattles, comb, and legs
- Gasping for air (difficulty breathing)
- Nasal discharge, coughing, sneezing
- Twisting of the head and neck (torticollis)
- Stumbling or falling down
- Diarrhea

#### Low Pathogenicity Avian Influenza

LPAI-infected poultry usually don't show any signs of illness. If they do, you may see mild to severe respiratory distress, lack of energy and appetite, decreased egg production, and diarrhea.

### How To Prevent This Disease

Avian influenza viruses spread through direct, bird-to-bird contact. They can also spread via contaminated surfaces or materials, such as manure; egg flats, crates, or other farming materials and equipment; and people's clothing, shoes, or hands.
Biosecurity is key to protecting your flock. Learn more about the simple steps you can take:

- Defend the Flock
- Protect Your Poultry From Avian Influenza (8.95 MB)
- Poultry Owners: Report Sick Birds! (915.95 KB)
- Prevent Avian Influenza at Your Farm: Improve Your Biosecurity With Simple Wildlife Practices (765.65 KB)

**How It Is Treated**

**Highly Pathogenic Avian Influenza**

There is no treatment for HPAI. The only way to stop the disease is to depopulate all affected and exposed poultry.

If your farm is ever affected by HPAI, you’ll need to know what to expect during the response process. We put together a series of materials to help you understand the steps we’ll take and your responsibilities at each stage.

- Stop Avian Influenza Outbreaks (380.36 KB)
- Highly Pathogenic Avian Influenza: What To Expect at the Start of an Outbreak (747.3 KB)
- Highly Pathogenic Avian Influenza: Indemnity and Compensation When Your Flock Is Infected (790.63 KB)
- Highly Pathogenic Avian Influenza: Restocking Your Poultry Flock (554.54 KB)

**Low Pathogenicity Avian Influenza**

Because LPAI does not typically kill poultry the way HPAI does, there may be control options beyond depopulation. For example, quarantine or controlled marketing may also be appropriate.

If your farm is ever affected by LPAI, Federal and State officials will work with you to determine what options are available.
Report Signs of Animal Disease

Producers or owners who suspect an animal disease should contact their veterinarian to evaluate the animal or herd. Find an accredited veterinarian.

Animal health professionals (veterinarians; diagnostic laboratories; public health, zoo, or wildlife personnel; and others) report diagnosed or suspected cases of nationally listed reportable animal diseases to APHIS District Offices and to the State animal health official as applicable under State reporting regulations.

Controlling Avian Influenza

Current Status

Detections of Highly Pathogenic Avian Influenza

APHIS' Response

APHIS works closely with States and the poultry industry to prevent avian influenza from becoming established in the U.S. poultry population. Our work takes place on a number of fronts.

Prevention and Control

APHIS cooperates with States, industry, and others to carry out avian influenza prevention and control programs. These programs provide uniform standards to prevent and control H5/H7 avian influenza in flocks of all sizes, including commercial flocks, household flocks, and live bird markets. APHIS coordinates the programs and provides resources to help States implement standards.

Emergency Preparedness and Response

We respond quickly to contain and eliminate avian influenza when findings occur. With LPAI detections, APHIS provides expertise, funding, and support personnel to States. Each U.S. State and Territory should have an Initial State Response and Containment Plan (sometimes referred to as an ISRCP or Low Path Plan) that
indicates procedures for responding to an LPAI detection. Information regarding the ISRCP can be obtained by working with a Poultry Health or National Poultry Improvement Plan team member.

With HPAI detections, APHIS coordinates the emergency response, working closely with Federal, State, Tribal, and industry partners.

Visit HPAI Emergency Response for more information.

**Import Restrictions**

APHIS maintains trade restrictions on the import of poultry and poultry products from countries and/or regions affected by avian influenza. We also work closely with the U.S. Department of Homeland Security (DHS) to monitor for illegally smuggled poultry and poultry products. In addition, APHIS quarantines and tests all imported live birds* to ensure they are free of avian influenza before entering the country.

*Except from Canada, which must have appropriate permits

**Surveillance in Domestic Poultry**

APHIS works closely with Federal, State, and industry partners to monitor U.S. poultry populations for avian influenza. Our surveillance targets several key areas: the live bird marketing system, commercial breeding and production flocks, and backyard flocks.

- National Poultry Improvement Plan

Surveillance for Avian Influenza in Wild Birds

Because wild birds can carry avian influenza and not appear sick, APHIS works with other Federal and State partners to conduct surveillance testing on wild birds. These tests tell us whether any HPAI viruses—or influenza viruses that could mutate into highly pathogenic strains—are found in the wild bird population.

**Wild Bird Plans**

- 2023–2024 Implementation Plan for Avian Influenza Surveillance in Waterfowl in the United States
• U.S. Interagency Strategic Plan for Early Detection and Monitoring for Avian Influenzas of Significance in Wild Birds

To learn more, visit our National Wildlife Disease Program and Wild Bird Avian Influenza Surveillance dashboard.

Send an email to aphisweb@usda.gov to request copies of Wild Bird Avian Influenza Surveillance Data reports and HPAI Findings in Wild Birds reports produced between 2015 and 2021.

Information for Cooperators

The documents below provide basic guidance for any type of avian influenza response.

• VSG 8601.2: Development and Approval of Initial State Response and Containment Plans (5.94 MB)
• VSG 8602.2: Response, Communication, and Investigation of H5/H7 Avian Influenza in Domestic Poultry (365.48 KB)
• VSG 8603.2: Procedures for Indemnity and Compensation Claims in Cases of H5/H7 LPAI in Poultry (2.16 MB)
• Public Health Monitoring Plan for USDA/APHIS Responders to Detections of Avian Influenza Virus in Poultry (352.13 KB)
• HPAI Virus Elimination: Per-Cubic-Yard Flat Rates for Table Egg Laying Bird Barns and Per-Square-Feet for Table Egg Storage and Processing Facilities (320.37 KB)
• HPAI Virus Elimination: Per-Square-Foot Flat Rates for Floor-Raised Poultry (275.85 KB)
• HPAI Preparedness and Response

Resources for Producers

Webinars

• Avian Influenza in the Forecast: Are You Ready?
• U.S. Poultry Industry Stakeholder Update: H5 HPAI in North America
• USDA Confirms HPAI in a Commercial Turkey Flock in Dubois County, Indiana
- **HPAI Around the World and Efforts on the Homefront to Protect Producers**  
  (video passcode: g#dCTX7G)
- **Update on HPAI Detection in Wild Birds**

### Factsheets

- **Producers: You Can Prevent the Spread of Highly Pathogenic Avian Influenza**
- **Manage Wildlife To Prevent Avian Influenza**
- **Hunters: Protect Yourself and Your Birds From Avian Influenza**
- **Improving Biosecurity With Wildlife Management Practices: Preventing Access to Barns and Other Facilities**
- **Improving Biosecurity With Wildlife Management Practices: Protecting Food Resources**
- **HPAI: Challenges in Implementing Biosecurity Practices for Commercial Turkey and Table Egg Producers**  (February 2024)
- **HPAI: Table-Egg Layers Case-Control Study Preliminary Findings**  (May 2023)  
  - Hallazgos Preliminares Del Estudio de Control de Casos de Influenza Aviar Altamente Patógena en Gallinas Ponedoras de Huevos  (Mayo de 2023)
- **HPAI: Turkey Case-Control Study Preliminary Findings**  (May 2023)  
  - Hallazgos Preliminares del Estudio de Control de Casos de Influenza Aviar Altamente Patógena en Pavos  (Mayo de 2023)
- **HPAI: Table Egg Layers Case-Control Study Updated Findings**  (August 2023)
- **HPAI: Turkey Case-Control Study Updated Findings**  (August 2023)

### Reports and Assessments

- **2022-2023 Highly Pathogenic Avian Influenza Outbreak - Summary of Depopulation Methods and the Impact on Lateral Spread**
- **Epidemiologic and Other Analyses of Avian Influenza Affected Poultry Flocks Second Interim Report**  (June 2023)
- **HPAI Epidemiological Interim Report Summary**  (May 2022)
- **Epidemiologic and Other Analyses of HPAI Affected Poultry Flocks Interim Report**  (July 2022)
- **Epidemiologic and Other Analyses of Avian Influenza Affected Poultry Flocks Report**  (September 2020)
• Finding of No Significant Impact (FONSI) for Avian Influenza Control in Commercial Poultry Operations in North and South Carolinas  (April 2020)
• Notice of Intent To Prepare an Environmental Impact Statement for Highly Pathogenic Avian Influenza Control in the United States  (January 2023)

**Historical Information**

- 2019 LPAI Epidemiological Analysis
- 2018 LPAI Epidemiological Analysis
- 2017 HPAI/LPAI Epidemiological Analysis
- 2016 HPAI/LPAI in Indiana Epidemiological Analysis
- 2017 Highly Pathogenic Avian Influenza
- 2016 HPAI and LPAI H7N8 in Indiana
- 2014–2015 HPAI Outbreak