

## What Is Bird Flu?

*Avian influenza (AI), or "bird flu," is a virus that infects domestic poultry, such as chickens, turkeys, quail, and geese, and wild birds such as shorebirds and waterfowl.*

**AI viruses are divided into two groups**—highly pathogenic (HPAI) and low pathogenic (LPAI)—based on the ability of the virus to produce disease and the severity of illness it can cause. HPAI spreads rapidly and has a high death rate in birds. LPAI causes only minor illness and occurs naturally in migratory waterfowl. The concern is that some LPAI virus strains are capable of mutating into HPAI viruses.

**HPAI viruses** are considered exotic or foreign to the United States because they do not occur naturally here. HPAI has been detected and eradicated by the U.S. Department of Agriculture (USDA) three times: in 1924, 1983, and 2004. The 1983 outbreak resulted in the deaths of about 17 million chickens, turkeys, and guinea fowl in Pennsylvania and Virginia. Managing this outbreak cost nearly \$65 million and caused retail egg prices to increase by more than 30 percent.

## What Are the Signs of Bird Flu?

*HPAI can strike quickly and spread rapidly without any warning. When infected birds do show signs, here's what to look for:*

- Lack of energy and appetite
- Decreased egg production and/or soft-shelled or misshapen eggs
- Swelling of the head, eyelids, comb, wattles, and hocks
- Purple discoloration of the wattles, combs, and legs
- Runny nose, coughing, sneezing
- Stumbling or falling down
- Diarrhea
- Sudden death without any clinical signs



*USDA file photo*  
**Purple discoloration of the comb could indicate HPAI.**



*USDA file photo*  
**Birds affected by HPAI could show swelling of the head, wattles, combs, and face.**



*USDA file photo*  
**Hemorrhaging of the skin and legs is just one of the signs birds might exhibit when infected with the HPAI virus.**



*USDA file photo*  
**Nasal discharge (a runny nose) can be a sign of HPAI.**

**Biosecurity For Birds** is an outreach and education campaign to raise awareness among backyard poultry owners about the steps they can take to prevent AI and other infectious poultry diseases and what to do if they suspect a disease outbreak.

## More Information

For information on keeping your birds healthy, visit USDA's Biosecurity For Birds Web site:  
<http://healthybirds.aphis.usda.gov>



For information about HPAI, contact:  
USDA/APHIS/Veterinary Services  
National Center for Animal Health  
Emergency Management  
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Important Information for Backyard Poultry Owners

## Protect Your Birds From Avian Influenza (Bird Flu)



## How Does Bird Flu Spread?

*HPAI spreads quickly by direct, bird-to-bird contact. The disease can also spread indirectly, for example, when birds come in contact with contaminated surfaces or materials.*

Migratory waterfowl (i.e., wild ducks and geese), smuggled poultry and poultry products, and the movement of poultry, poultry equipment, and people are potential sources for introducing the disease to domestic birds. The bird flu virus can travel on manure, egg flats, crates, other farming materials/equipment, and people who have picked up the virus on their clothing, shoes, or hands.



USDA file photo

*Allowing backyard flocks to come in contact with wild birds could put them at risk for infectious poultry diseases such as HPAI.*



Polly Berkenstock

*Fencing your bird area can help keep your flock safe from predators and from contact with other birds that could spread disease.*



Deanna Stinnet

*Don't share equipment, tools, or poultry supplies with neighbors or other bird owners. If you must, disinfect these items before bringing them home.*



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*Migratory waterfowl could potentially introduce HPAI to your birds. So be sure they don't share a water source with your birds, and keep your birds' food protected.*

# How Can You Protect Your Birds?



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## Six simple steps can help keep your birds—and those of your neighbors—free of disease.

- 1. Keep your distance.** Restrict access to your property and your birds. If visitors have birds of their own, do not let them near your birds. Your birds should not have contact with wild birds and migratory waterfowl because they can carry germs and diseases.
- 2. Keep it clean.** Wash your hands thoroughly before and after working with your birds. Wear clean clothes and scrub your shoes with disinfectant. Clean and disinfect equipment, including cages and tools, that comes in contact with your birds or their droppings. Remove manure before disinfecting equipment. Properly dispose of dead birds.
- 3. Don't haul disease home.** Buy birds from reputable sources so you know you're getting healthy birds. Keep new birds separate from the rest of your flock for at least 30 days. If your birds have been to a fair or exhibition, keep them separated from your flock for 2 weeks after the event.
- 4. Don't borrow disease from your neighbors.** Do not share garden equipment or poultry supplies with your neighbors or other bird owners. If you do bring these items home, clean and disinfect them before they reach your property.
- 5. Know the warning signs.** Early detection can help prevent the spread of disease. While it may be hard to tell if your bird has AI, when you check your birds frequently, you may be able to tell if something is wrong.
- 6. Report sick birds.** Don't wait. If your birds are sick or dying, call your local cooperative extension office, your veterinarian, or the State Veterinarian or State animal/poultry diagnostic laboratory. Or call USDA toll free at **1-866-536-7593**, and we'll put you in touch with a local contact who can help you.

## How USDA Works To Keep HPAI Out of the Country

*HPAI is a threat to U.S. poultry. The United States is the world's largest producer and exporter of poultry meat and the second largest egg producer.*

Total U.S. poultry production is valued at nearly \$32 billion annually. A major outbreak of HPAI would be costly to the poultry industry, consumers, and taxpayers and could harm backyard flocks as well.

To protect the U.S. poultry population, USDA quarantines and tests live birds imported into the United States to ensure that they do not have any foreign animal diseases such as HPAI. USDA also maintains trade restrictions on poultry and poultry products from countries and/or regions where HPAI has been detected in commercial or traditionally raised poultry.

Surveillance is another important part of USDA's efforts to protect the health of U.S. flocks. USDA monitors for illegally smuggled poultry and poultry products through an anti-smuggling program in coordination with the U.S. Department of Homeland Security's Customs and Border Protection. In addition, USDA works with a nationwide network of Federal and State partners, university personnel, USDA-accredited veterinarians, and industry members to monitor for HPAI in key areas of the country's bird population. These areas include live bird markets, commercial flocks, backyard flocks, and migratory birds.