



Highly Pathogenic Avian Influenza

Understanding and Protection

Avian influenza (AI) is a disease caused by a virus that infects domestic poultry and wild birds (primarily geese, ducks and shorebirds). Each year, there is a bird flu season just as there is for humans and, as with people, some forms of the flu are worse than others.

AI strains are divided into two groups based on the pathogenicity of the virus—the ability of the virus to produce disease.

Low Pathogenicity Avian Influenza (LPAI)

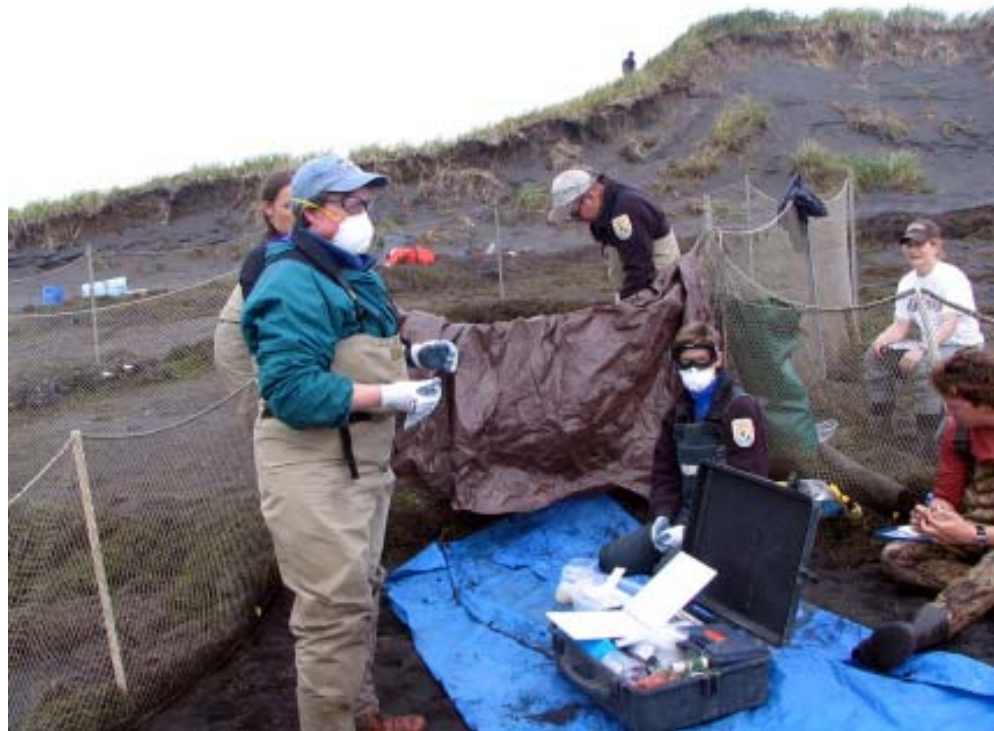
Most AI strains are classified as low pathogenicity and cause few clinical signs in infected birds. LPAI generally does not pose a significant health threat to humans. However, LPAI is monitored because two strains of LPAI—the H5 and H7 strains—can mutate into highly pathogenic forms.

High Pathogenicity Avian Influenza (HPAI)

This type of avian influenza is frequently fatal to birds and easily transmissible between susceptible species. The strain that is currently of concern in Asia, Europe, the Middle East and Africa is the H5N1 HPAI virus.

Currently, the highly pathogenic strain of H5N1 avian influenza is *not* present in the United States. It is possible that the highly pathogenic strain of H5N1 avian influenza will spread to this country, and the U.S. Government is taking steps to prepare for and minimize the potential impact of the occurrence of this disease in the United States.

Most avian influenza viruses have been isolated from wild waterfowl (ducks, geese, and swans) shorebirds (wading birds), gulls, and terns. With rare exception, the thousands of flu isolates found in wild birds have been low pathogenic avian influenza and have rarely caused signs of illness.



USFWS photo by Tyrone Donnelly

The U.S. Fish and Wildlife Service is part of a major governmental effort to monitor wild migratory birds in the United States and to test statistically significant samples of populations of various migratory bird species for the early detection of highly pathogenic avian influenza.

There are a number of ways that highly pathogenic H5N1 could potentially reach the United States—wild bird migration, illegal smuggling of birds or poultry, travel by infected people or people traveling with virus-contaminated articles from regions where H5N1 already exists.

Monitoring Bird Health in the U.S.

The U.S. Department of the Interior and U.S. Department of Agriculture are part of a major interagency effort to monitor wild migratory birds in the United States and to test statistically significant samples of populations of various migratory bird species for the early detection of highly pathogenic avian influenza.

USDA and Interior's agencies, including the U.S. Geological Survey (USGS) and the U.S. Fish and Wildlife Service, have been working for the past several months with State of Alaska biologists to strategically sample live birds, hunter-killed birds, sentinel flocks (healthy domestic birds placed in an area where wild birds congregate and monitored to see if they get the virus) and the environment used by these populations for highly pathogenic H5N1 avian influenza in Alaska. The Interagency Strategic Plan for monitoring wild birds focuses on Alaska because it is a flyway crossroads for migratory birds.

Testing also is being carried out in the Pacific Islands, elsewhere in the Pacific flyway and in other migratory bird



USFWS photo by John and Karen Hollingsworth

The Service will continue to monitor birds imported into the country for signs of disease, including the highly pathogenic strain of H5N1 avian influenza.

flyways in cooperation with state and local agencies. This enhanced monitoring program is designed to provide an early warning to the agriculture, public health, and wildlife communities should migratory birds be found to carry the highly pathogenic H5N1 virus.

Working together, Interior agencies, USDA and state cooperators plan to collect 75,000 to 100,000 samples from wild birds in 2006. Those samples will be tested at the USGS National Wildlife Health Center in Madison, Wisconsin and other National Animal Health Laboratory Network facilities across the country. Suspected findings of highly pathogenic avian influenza will then be sent to the USDA testing center in Ames, Iowa for confirmation.

The Fish and Wildlife Service also works with U.S. Customs and Border Protection and USDA's APHIS at major U.S. air and seaports to inspect, examine and regulate wild birds imported for the pet trade, research and other purposes. Interior land management agencies, including the National Park Service, Fish and Wildlife Service, Bureau of Land Management, Bureau of Indian Affairs and Bureau of Reclamation, are educating their employees and working with stakeholder and support groups, and preparing

protocols to protect visitors and employees on public lands. Many of these lands provide nesting, migration and wintering habitat for waterfowl and other migratory birds.

Bird import restrictions

As a primary safeguard, USDA maintains trade restrictions on the importation of poultry and poultry products from all affected countries. No birds can be imported from a country found to have the highly pathogenic H5N1 strain avian influenza in the commercial poultry population. In addition, all imported live birds must be quarantined for 30 days at a USDA facility and tested for avian influenza before entering the U.S. This requirement also covers returning U.S.-origin pet birds. The U.S. Fish and Wildlife Service works with USDA to communicate these trade restrictions to the pet bird trade community and incorporates them into decisions on permits it issues for wild bird trade. Additionally, USDA has increased its monitoring of domestic commercial markets for illegally smuggled poultry and poultry products.

Guidance for handling wildlife

The USGS National Wildlife Health Center has issued guidance to follow

routine precautions when handling wild birds. The Center recommends that people handling wild birds:

- Do not handle birds that are obviously sick or birds found dead.
- Wear rubber or disposable latex gloves while handling and cleaning game, wash hands with soap and water (or with alcohol-based hand products if the hands are not visibly soiled), and thoroughly clean knives, equipment and surfaces that come in contact with game.
- Do not eat, drink, or smoke while handling or cleaning birds.
- Cook all game meat thoroughly (155 to 165 degrees) to kill disease organisms and parasites.

Additional Information

For more information on avian influenza, including information on public health and food safety, visit the following Web sites:

- <http://www.usda.gov/birdflu>
- http://www.nwhc.usgs.gov/research/avian_influenza/avian_influenza.html
- <http://www.pandemicflu.gov>

U.S. Fish & Wildlife Service
1 800/344 WILD
<http://www.fws.gov>

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