



## U.S. Poultry Industry Questions and Answers on Avian Influenza (“Bird Flu”)

### Q. What is avian influenza?

- A. Avian influenza (AI) -- the bird flu -- is a virus that infects wild birds (such as ducks, gulls, and shorebirds) and domestic poultry (such as chickens, turkeys, ducks, and geese). There is a flu for birds just as there is for humans and, as with people, some forms of the flu are worse than others.

AI viruses are divided into two groups based upon the ability of the virus to produce disease in poultry: low pathogenic avian influenza (LPAI) and highly pathogenic avian influenza (HPAI).

LPAI, or “low path” avian influenza, naturally occurs in wild birds and can spread to domestic birds. In most cases it causes no signs of infection or only minor symptoms in birds. These strains of the virus pose little threat to human health. LPAI H5 and H7 strains have the potential to mutate into HPAI and are therefore closely monitored.

HPAI, or “high path” avian influenza, is often fatal in chickens and turkeys. HPAI spreads more rapidly than LPAI and has a higher death rate in birds. HPAI H5N1 is the type rapidly spreading in some parts of the world.

### Q. What are the differences between seasonal flu, avian influenza, and pandemic influenza?

- A. *Seasonal (or common) flu* is a respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available.

*Avian influenza* is caused by influenza viruses that occur naturally among wild birds. The HPAI H5N1 variant circulating overseas is deadly to domestic fowl and can be transmitted from birds to humans. There is no human immunity to HPAI H5N1 and no vaccine is available.

*Pandemic flu* is virulent human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person. **Currently, there is no pandemic flu.**

**Q. How can people become infected with avian influenza?**

A. Although the HPAI H5N1 virus does not usually infect people, more than 240 human cases have been reported since 2004. Most people who have become sick or died from HPAI H5N1 have had extensive, direct contact with infected poultry. Broad concerns about public health relate to the potential for the virus to mutate, or change into a form that could easily spread from person to person, a characteristic that could result in a human influenza pandemic. There is no evidence that this is occurring. Strains of AI that have been detected in U.S. poultry, including LPAI and HPAI; have caused no known human illnesses.

**Q. Can you get avian influenza by eating chicken, turkey or other poultry products, or by handling meat from an infected chicken or turkey?**

A. There is no evidence that anyone has become infected with the HPAI H5N1 virus by eating properly prepared and cooked eggs and poultry.

**Properly prepared and cooked poultry is safe to eat – you have the power to protect yourself.** Eating properly handled and cooked poultry and eggs is safe. Cooking poultry to an internal temperature of 165°F kills the AI virus as it does other bacteria and viruses. Cooking eggs until they are firm throughout kills the AI virus.

AI is not transmissible by eating properly prepared and cooked poultry and eggs. If HPAI were detected in the United States, the chance of infected poultry or eggs entering the food chain would be extremely low because of the rapid onset of symptoms in poultry as well as the safeguards in place, which include testing of flocks, and Federal inspection programs.

According to the World Health Organization (WHO): “The World Health Organization reconfirms that, when poultry products are safely handled and properly cooked, humans are not at risk of acquiring H5N1 infection through food.” Instructions for safe handling and cooking are printed on every package of chicken and turkey sold in the United States.

No chickens or turkeys known or suspected to be infected with the HPAI H5N1 strain are processed for sale as raw meat in the United States.

**Q. What can I do to ensure the safety of the poultry that I eat?**

- A. Cooking poultry, eggs, and other poultry products to the proper temperature and preventing cross-contamination between raw and cooked food is the key to safety.

You should:

- Wash hands with warm water and soap for at least 20 seconds before and after handling raw poultry and eggs;
- Prevent cross-contamination by keeping raw poultry and eggs away from other foods;
- After cutting raw meat, wash cutting board, knife, and countertops with hot, soapy water;
- Sanitize cutting boards by using a solution of 1 tablespoon chlorine bleach in 1 gallon of water;
- Use a food thermometer to ensure poultry has reached the safe internal temperature of at least 165°F to kill foodborne germs that might be present, including the AI viruses;
- Cook eggs until the yolks and whites are firm. Casseroles and other dishes containing eggs should be cooked to 160°F; and
- Use either shell eggs that have been treated to destroy *Salmonella* by pasteurization or another approved method, or pasteurized egg products for recipes that call for eggs that are raw or undercooked when the dish is served. Some examples of these kinds of dishes are Caesar salad dressing and homemade ice cream. Treated shell eggs are available from a growing number of retailers and are clearly labeled. Pasteurized egg products are widely available.

**Q. Do we have avian influenza in the United States?**

- A. LPAI naturally occurs among wild birds. Evidence of LPAI H5N1 has been found in wild birds in the United States in recent years and is not closely related to the more severe HPAI H5N1 circulating overseas.

HPAI has been detected three times in U.S. poultry: in 1924, 1983, and 2004. No human illness resulted from any of these outbreaks.

The 1924 HPAI H7 outbreak was contained and eradicated in East Coast live bird markets.

The 1983-84 HPAI H5N2 outbreak resulted in humanely euthanizing approximately 17 million chickens, turkeys, and guinea fowl in Pennsylvania and Virginia to contain and eradicate the disease.

In 2004, the U.S. Department of Agriculture (USDA) confirmed an HPAI H5N2 outbreak in chickens in Texas. The disease was quickly eradicated thanks to close coordination and cooperation between USDA and State, local, and industry

leaders. HPAI H5N1 has NOT occurred in the United States.

**Q. What happens when there is an outbreak of AI in the United States?**

- A. The policy of the poultry industry and the government is to eradicate the disease as quickly as possible by destroying any flocks in which the highly pathogenic virus is found. The animals are all humanely euthanized and disposed of through environmentally sound methods.

In the event of an HPAI outbreak in the United States, USDA would work with states and industry to respond quickly and decisively following these five basic steps:

- Quarantine – restrict movement of poultry and poultry-moving equipment into and out of the control area;
- Eradicate – humanely euthanize;
- Monitor region – broad area of testing;
- Disinfect – kills virus; and
- Test – confirm that the poultry farm is AI virus-free.

**Q. Why is it necessary to destroy all the birds in an infected flock?**

- A. Like all other living things, viruses continue to change and evolve. It is possible that the viruses that cause mild avian influenza could evolve into a more dangerous form. This is apparently what happened in Pennsylvania in 1983 and 1984, when a low-pathogenic strain turned into a highly pathogenic strain. Flocks are killed to prevent the virus from evolving and spreading.

**Q. What is done to protect people in the event of an outbreak?**

- A. The people involved in destroying flocks wear gloves, masks, and protective clothing. People who have no reason to be on a farm involved in the outbreak are kept away.

**Q. What is done to protect healthy animals and prevent the spread of disease?**

- A. Poultry companies and farmers practice strict “biosecurity” at all times, and it is heightened during any avian influenza outbreak.

Biosecurity practices are precautions taken to minimize the risk of introducing an infectious disease into an animal population. These practices include hosing down trucks and equipment carrying feed, personnel wear protective clothing and plastic boots and go through footbaths, farmers stay away from community

gatherings, and farmers generally keep their farms locked down until the problem has passed.

For more information about protecting poultry from avian influenza, visit <http://www.usda.gov/birdflu>.

**Q. How is HPAI H5N1 being kept out of the United States?**

**A.** The United States has multiple lines of defense against HPAI H5N1:

**Wild bird monitoring:** The U.S. government, in partnership with the states, regional Flyway Councils and academic institutions, has an extensive national interagency wild bird monitoring program to screen for HPAI H5N1. Thousands of samples have been tested in Alaska, where migratory North American birds commingle with migratory Asian birds during the spring breeding season. To date, more than 13,000 wild migratory birds were sampled for HPAI H5N1 in Alaska. HPAI H5N1 has NOT been detected in any of the Alaska samples. As the southerly fall migration begins, sampling and testing for HPAI H5N1 also is being conducted throughout the lower 48 states and Hawaii. This wild bird monitoring program serves as an early warning system for any possible introduction of the HPAI H5N1 virus in North America via migratory birds.

**Import Restrictions:** USDA maintains trade restrictions on the importation of poultry and poultry products originating from countries and/or regions where the HPAI H5N1 strain has been detected in commercial or traditionally raised poultry. USDA regulations require that import permits accompany properly sanitized poultry products, such as raw feathers.

Additionally, USDA has increased its monitoring for illegally smuggled poultry and poultry products through an anti-smuggling program in coordination with the U.S. Department of Homeland Security - Customs and Border Protection.

USDA quarantines and tests live birds imported into the United States to ensure that they do not have any foreign animal diseases such as the HPAI H5N1 virus.

All imported live birds and returning U.S.-origin pet birds (except from Canada) must spend 30 days at a USDA quarantine facility where they are tested for the AI virus before entering the country.

**International assistance:** USDA is working closely with international organizations such as the World Organization for Animal Health (OIE), the United Nations Food and Agriculture Organization (FAO) and the World Health Organization to assist HPAI-affected countries and other countries with disease prevention, management, and eradication activities. By helping these countries prepare for, manage and eradicate HPAI outbreaks, USDA can help to slow the

spread of the virus. Some efforts include:

- Training sessions for veterinarians and poultry disease experts from H5N1-affected and at-risk countries to teach testing protocols.
- Professional expertise and funding to help the FAO in Rome develop a new Crisis Management Center, to respond rapidly and effectively to avian influenza outbreaks in poultry worldwide.
- Assistance to H5N1-affected countries, including laboratory equipment, reagents, and sample shipping containers to bolster AI testing and diagnostic programs.
- In collaboration with FAO and OIE, USDA has deployed expert scientists, veterinarians, and animal health emergency managers to H5N1-affected countries to test and diagnose AI; advise on surveillance and vaccination programs to protect poultry; and advise on emergency contingency plans.

**Surveillance:** USDA works with Federal and State partners and industry to monitor U.S. bird populations. Surveillance is conducted in four key areas: live bird markets, commercial flocks, backyard flocks, and migratory bird populations.

Extensive testing occurs in live bird markets and commercial flocks. Additionally, birds that show signs of illness are tested.

Through a backyard flock biosecurity program, USDA encourages backyard and small poultry producers to strengthen biosecurity practices in order to prevent the introduction of AI into their flocks. Biosecurity refers to practical management practices that help to prevent diseases.

USDA recommends that owners of backyard flocks follow these six tips to prevent poultry disease:

- keep your distance (restrict access to your property and your birds);
- keep it clean (clean and disinfect your clothes, shoes, equipment, and hands);
- don't haul disease home (if you have been near other birds or bird owners, clean and disinfect poultry cages and equipment before going home);
- don't risk disease from your neighbor (do not borrow lawn and garden equipment, tools, or poultry supplies from other bird owners);
- know the warning signs (sudden increase in bird deaths, sneezing, coughing, nasal discharge, watery or green diarrhea, lack of energy, poor appetite, drop in egg production, swelling around the eyes, neck, and head, and purple discoloration of wattles, combs, and legs); and
- report sick birds (call your local or State veterinarian, or USDA toll-free at 1-866-536-7593).

**Q. Is it true that the type of intensive animal production practiced in the United States contributes to the development of avian influenza?**

- A. The modern type of animal production used in the United States is actually more protective of birds and their health than more traditional systems. In the United States, chickens and turkeys are usually raised in enclosed buildings called growout houses. More than 20,000 chickens or 4,000 turkeys are placed in a single building. Yet the health of the poultry flocks today is probably better than it has ever been. This is because of improvements in poultry housing, selective breeding for disease resistance, protection from potential disease carriers such as wild birds and continuous health oversight by poultry veterinarians. In contrast, the “village chickens” in Southeast Asia are raised in the traditional manner that has changed little in hundreds of years. They are fully exposed to the environment and to potential disease carriers, and they have minimal or no access to veterinary medical care.

**For more information, visit <http://www.avianinfluenzainfo.com>**

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