

**U.S. Poultry Industry  
Questions and Answers  
On Avian Influenza ("Bird Flu")**  
*Prepared by National Chicken Council*

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**Q. What is avian influenza?**

**A.** Avian influenza (AI) is a disease of birds that is caused by a virus. It is also known as “bird flu,” especially when it afflicts humans.

**Q. Does avian influenza pose a serious health threat?**

**A.** There are several types of avian influenza. The milder forms, known as Low Pathogenic Avian Influenza or LPAI, do not pose a significant threat to humans. They occur occasionally around the world. The more serious form, known as Highly Pathogenic Avian Influenza (HPAI), is much more severe and results in high mortality in poultry flocks. In a very limited number of cases, it has posed serious health risks (including death) to some humans who have had very close contact with infected birds. The strains of AI with the greatest concern are the H5 and H7 strains, which can change from low pathogenic forms to highly pathogenic forms. The type now occurring in Asia is specifically called H5N1 HPAI. The designation of H5N1 comes from the arrangement of proteins on the surface of the virus that causes the disease.

**Q. Can humans contract H5N1 HPAI? How?**

**A.** Unfortunately, yes. A small number of people in Thailand, Cambodia, Vietnam, Indonesia, China and Turkey have developed a human form of the disease, nearly all of them from direct, very close contact with live, infected poultry. **Never have any cases of H5N1 HPAI been detected in the U.S.—not in poultry or humans.** The influenza virus lives mainly in the respiratory system and internal organs of the bird and is spread through droplets of moisture and other secretions.

**Q. What are humans doing in close contact with infected, live birds?**

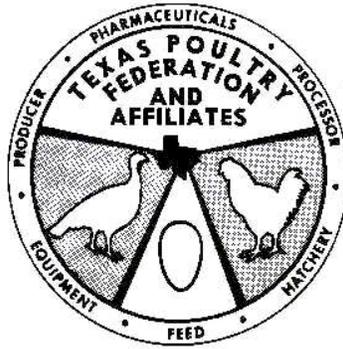
**A.** Chickens, ducks and other poultry in affected areas are often allowed to run at large in the villages in which people live. Children and other family members tend small flocks of birds to provide eggs and meat. Nearly all of the human cases are associated with these types of “village chickens.”

**Q. What are the symptoms of avian influenza in humans?**

**A.** Symptoms of AI may vary depending on the specific strain and subtype but can generally include a range of typical human influenza-like symptoms such as fever, chills, sore throat, muscle aches, and nausea to more severe symptoms of eye infections, pneumonia and severe respiratory difficulty.

**Q. What are the symptoms of avian influenza in birds?**

**A.** Birds that are infected with LPAI generally demonstrate mild symptoms: decreased food consumption, signs of respiratory distress (coughing and sneezing), and decreased egg



production. Increased mortality is also noted, but it often remains relatively low. Birds that are infected with the more severe HPAI strains have a greater level of sickness. Mortality in the flock can be very high.

**Q. Can human infection from infected live animals be prevented?**

A. Yes. With proper precautions and gear such as gloves, masks and protective clothing, it is easy to prevent infection from live animals. In fact, millions of chickens, ducks and other birds have been culled by soldiers and other workers with no ill effects.

**Q. Can avian influenza be transmitted through human-to-human contact?**

A. According to scientific research, the ability to transfer the avian influenza virus through human-to human contact is extremely rare. Scientists say that the H5N1 HPAI virus has not yet developed the ability to pass easily from human to human.

**Q. How can human-to-human transmission be prevented?**

A. Individuals taking care of persons with confirmed H5N1 HPAI infection should practice normal hygienic precautions. On a broader level, should a strain of the AI virus be detected it is important to deny the virus the opportunity to change to a more dangerous form by eradicating it out as soon as it occurs. In Southeast Asia, officials have aggressively destroyed poultry flocks infected with H5N1 HPAI as soon as the virus is confirmed.

**Q. Can you get any type of avian influenza by eating poultry or other poultry products?**

A. Studies have shown that the low-pathogenic virus is not found in the meat of infected birds. In all cases, however, the U.S. Department of Agriculture confirms that proper handling and cooking of poultry provides protection against any AI virus that may be present. The heat of normal cooking destroys the virus that causes AI. Microorganisms of all kinds are inactivated when the product reaches an internal temperature of 160 degrees Fahrenheit.

**Q. What about handling meat from infected poultry?**

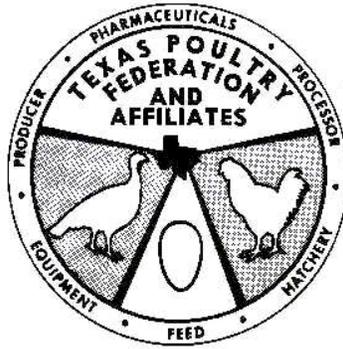
A. There are no known cases in which human infection is believed to have resulted from handling poultry meat. However, as a normal precaution, you should wash your hands and all cooking surfaces and utensils after handling raw poultry.

**Q. Do we have “bird flu” in Texas or other parts of the U.S.?**

A. The H5N1 HPAI virus has never been detected in the U.S. and we do not have any cases now. We had low-pathogenic AI as recently as 2004. The H5N2 outbreak in one flock was designated as highly pathogenic on the basis of a laboratory test, but a more definitive test failed to confirm high pathogenicity. The last major outbreak of highly pathogenic AI in the U.S. was in Pennsylvania and Virginia in 1983 and 1984. The virus was H5N2 (not H5N1). No known human illness or infections resulted from the outbreak.

**Q. What steps will be taken to control an outbreak should avian influenza be detected in the U.S.?**

A. If H5 or H7 strains of AI are found in the U.S., strict controls are in place to provide for immediate eradication. These controls include destroying and disposing, through



environmentally sound methods, any flock in which dangerous strains of avian influenza are found or through controlled slaughter and strict quarantines—in keeping with recommendations of the World Organization for Animal Health.

**Q. Why is it necessary to eradicate 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 change into a more pathogenic form. This is apparently what happened in Pennsylvania in 1983 and 1984, when a low-pathogenic strain turned into a highly pathogenic strain. Once identified, avian influenza must be quickly eradicated in order to prevent the virus from spreading and possibly changing to a more dangerous form.

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

A. The people involved in destroying flocks wear gloves, masks and protective clothing. Anyone who develops respiratory symptoms reports to a doctor to be checked out. People who have no reason to be on a farm involved in the outbreak are kept away.

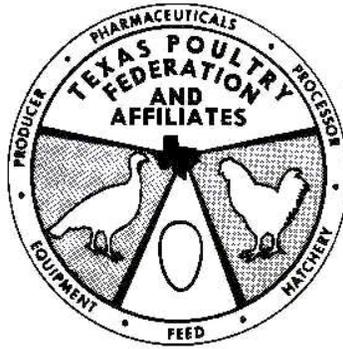
**Q. What is currently being done to protect healthy animals and prevent the spread of disease?**

A. The government and the U.S. poultry industry have developed extensive testing and surveillance programs to provide early detection and isolate any outbreak that should occur. Further, poultry companies and farmers practice strict biosecurity at all times and it is heightened during any outbreak of avian influenza. The trucks carrying feed are hosed down, 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.

In Texas, all testing is done at the Texas Veterinary Medical Diagnostic Laboratory (TVMDL) under the supervision of Executive Director Dr. Lelve Gayle. TVMDL operates three poultry labs in the state located in College Station, Gonzales, and Center. TVMDL is at the forefront for identifying and helping prevent the spread of animal diseases, including avian flu. As one of five hubs in the U.S. Department of Agriculture's National Animal Health Laboratory Network (NAHLN) established after the terrorist attacks of September 2001, the TVMDL has upgraded its facilities, trained more people and purchased state-of-the-art robotic equipment. In addition, the College Station facility added a Bio-Safety Level 3 capability veterinary diagnostic lab in 2004. Since Texas implemented its voluntary testing program in 1995, the industry has tested over 200,000 samples per year. In fiscal year 2005 alone, over 366,665 tests for avian influenza were conducted.

**Q. How is Asian H5N1 highly pathogenic avian influenza being kept out of the U.S.?**

A. The U.S. government has instituted multiple safeguards to protect against the introduction of H5N1 HPAI in the U.S. Transmission from live animals: The importation of live poultry from countries affected by avian influenza is prohibited from the U.S. government. Transmission from poultry products: Countries with confirmed cases of AI in Asia are prohibited from exporting poultry and poultry products to the U. S. Virtually all of the poultry sold in the U.S. is produced



in the U.S., with the exception of a small amount that comes down from Canada. Transmission via humans: The H5N1 HPAI virus has not yet developed the ability to pass easily from human to human. If it ever does, that will be considered a public health emergency and appropriate steps will be taken, presumably including restrictions on travel from the affected areas. No one who has been to the affected areas in Southeast Asia will be allowed to set foot on a poultry farm in the U.S. In addition, President Bush has taken the precaution of adding this type of avian influenza to the list of diseases for which a person can be quarantined while attempting to enter the U.S.

**Q. Does the U.S. have a system in place for early detection of avian influenza?**

A. H5N1 HPAI is the form of the virus that is of the greatest concern. However, other milder forms do exist and are considered a long-term threat to the poultry industry. The U.S. Congress appropriated \$23 million in fiscal year 2005 for the U.S. Department of Agriculture to begin implementation of a long-term strategy and allocated \$28.3 million for fiscal year 2006. To reduce the risk of disease spreading overseas to the U.S., the U.S. Department of Agriculture, United Nations Food and Agriculture Organization, and the World Health Organization are working with HPAI affected countries to help prepare for, manage and eradicate HPAI outbreaks.

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

A. The modern type of animal production used in the U.S. is actually more protective of birds and their health than more traditional systems. In the U. S., chickens and turkeys are usually raised in enclosed buildings called growout houses. 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.