

AVIAN INFLUENZA (AI) Q&A

What is Avian Influenza?

Avian Influenza (AI) is a disease caused by an influenza type A virus. It can infect both poultry and wild birds. AI is classified by the combination of proteins they display, and further classified by the virus's ability to produce disease in domestic birds. Low pathogenicity (LPAI) strains occur naturally in wild bird populations, which show no signs of the disease. LPAI also creates little or no signs of illness in domestic poultry.¹ Highly pathogenic AI (HPAI) strains are very infectious, and often fatal to domestic poultry, but wild birds may not show signs of disease. HPAI also spreads rapidly from flock-to-flock.

How is AI spread?

Many domestic poultry flocks are raised inside under strict biosecurity protocols, so these flocks are at a low risk for becoming infected with AI.² However, if not protected from wild birds, their feces, or contaminated water, AI can spread from wild birds to domestic poultry via feces, secretions, or if the virus is introduced via a fomite, such as contaminated vehicles, boots, or coveralls.³

Does AI exist in the United States?

Both HPAI and LPAI outbreaks occur in poultry from time to time in the United States.⁴

Low pathogenicity AI exists in the United States in infected wild bird populations. United States poultry producers use special preventive measures, such as stringent biosecurity protocols, to keep LPAI out of the domestic poultry population. When LPAI is found in a domestic flock, the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) works with the producers to help prevent the spread of the disease to other flocks in the area.⁵

High pathogenicity AI is much less common and occurs much less frequently than LPAI. If an HPAI outbreak occurs in the United States, APHIS works with federal, state, and local industry partners to quickly respond to an outbreak, quickly contain, and eradicate the disease. APHIS has specific emergency response procedures in place for responding to HPAI, and those procedures have protected both human health and trade relationships in the United States.⁶

Why is AI a concern to the U.S. poultry industry?

Avian Influenza, especially HPAI, is a concern to the U.S. poultry industry because it can be a trade-limiting disease, and because it is highly contagious and often fatal to domestic poultry.

Does AI pose a risk to humans?

Avian Influenza viruses do not normally infect people, but sporadic infections have occurred in the past. Illness in humans depends upon the strain of the virus, and can cause no symptoms at all or mild to severe flu symptoms. Human infections most commonly occur after contact with infected birds or their feces/excretions.⁷

The United States Centers for Disease Control and Prevention (CDC) recommends that people avoid wild birds, avoid contact with domestic birds that appear ill or have died, and avoid contact with surfaces contaminated with bird feces. While there are no cases of AI in humans that have been directly linked with eating poultry products, the CDC recommends washing hands after handling raw poultry and cooking poultry products properly, as proper cooking kills influenza viruses.⁸ Safe handling instructions for poultry can be found at the USDA's Food Safety and Inspection Services website.⁹

References:

¹ United States Department of Agriculture's Animal and Plant Health Inspection Services (USDA APHIS) Avian Influenza website: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/ai>. Accessed June 18, 2019.

^{2,3} American Veterinary Medical Association: Avian Influenza: Veterinarians. <https://www.avma.org/KB/Resources/FAQs/Pages/avian-influenza-FAQs-veterinarians.aspx>. Accessed June 18, 2019.

⁴ Centers for Disease Control and Prevention: Avian Influenza Current Situation Summary. <https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>. Accessed June 18, 2019.

⁵ USDA APHIS Website on LPAI: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/defend-the-flock-lpai-info>. Accessed June 18, 2019.

⁶ USDA APHIS Website on HPAI: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/defend-the-flock-hpai>. Accessed June 18, 2019.

^{7,8} United States Centers for Disease Control and Prevention. <https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>. Accessed June 18, 2019.

⁹ USDA FSIS Food Safety Education website: <https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education>. Accessed June 18, 2019.