AVIAN INFLUENZA: FREQUENTLY ASKED QUESTIONS

What is avian influenza (AI)?
Avian influenza (AI) is a highly contagious viral disease that can affect many species of birds, including chickens, turkeys, quail, guinea fowl, pets, and wild birds.

Why do AI virus names include H and N and numbers?
AI viruses are classified by a combination of two groups of proteins on their surfaces: hemagglutinin (H proteins 1 through 16) and neuraminidase (N proteins 1 through 9). There are therefore 144 possible combinations, from H1N1 to H16N9. The H5, H7 and H9 viruses are of most concern because they have caused most human infections.

What is the difference between LPAI and HPAI?
AI viruses are also broken into two groups based on their ability to produce disease in poultry: low pathogenic AI (LPAI) and highly pathogenic AI (HPAI). LPAI naturally occurs in wild birds and can spread to domestic birds when they contact surfaces contaminated with infected droppings. In most cases, it causes no signs of infection or only minor signs in birds. However, LPAI H5 and H7 subtypes have the potential to mutate into HPAI and cause serious disease outbreaks.

What are the signs of AI in birds?

<table>
<thead>
<tr>
<th>Low-path AI</th>
<th>High-path AI</th>
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<tbody>
<tr>
<td>Nasal or eye discharge</td>
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<tr>
<td>Ruffled feathers</td>
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<tr>
<td>Swelling below the eyes</td>
<td>Swollen combs or wattles</td>
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<td>Open mouth breathing/difficulty breathing</td>
<td>Bluish comb, wattle, or legs</td>
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<td>Decreased egg production</td>
<td>Tilted head</td>
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<td>Decreased appetite or water intake</td>
<td>Lack of coordination</td>
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<td>No signs at all</td>
<td>Depression and lethargy</td>
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<td></td>
<td>Blood-tinged nasal or eye discharge</td>
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<td>*Sudden death or high death rate in flock</td>
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</tbody>
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*Note: When poultry are infected with HPAI, they may die before signs appear.*
Can people get AI?
Normally, animal influenza viruses do not infect humans. However, AI viruses can sometimes cross this barrier and directly affect humans. This was demonstrated in 1997, when an outbreak of an AI virus (H5N1) infected domestic poultry and humans in Hong Kong, leading to 18 hospitalizations and 6 deaths. Since then, other outbreaks of AI have occurred and affected people (H5N1 in 1997, H9N2 in 1999, H7N2 in 2002, H7N7 in 2003, H5N1 in 2004, and H5N1 in 2014-2015). To date, no AI virus has contained the three attributes needed to cause a human pandemic:
- easily transmitted from birds to humans
- easily transmitted between humans
- deadly to humans

For more information about AI in humans, visit the Centers for Disease Control (CDC) website.

Why should I care about AI?
Both backyard and commercial bird owners should care about AI because it can sicken or kill their birds, reduce egg production, and cost money to control and recover from an outbreak. A national outbreak would result in massive losses to commercial egg and broiler producers, huge financial impacts on tax-funded federal and state animal health agencies, interference with international trade, and higher egg and meat prices for consumers. Even a localized and quickly contained outbreak can cause millions of dollars in losses.

How can I protect my birds from AI?
1. **Keep your distance.**
   a. Restrict access to your poultry and your birds.
   b. Only let caretakers have access to your birds. Your caretakers should not attend bird shows or other events where birds are present.
   c. If you must have visitors, give them clean and disinfected footwear, booties, or insist they clean and disinfect their footwear before and after their visit.
   d. Game birds and migratory waterfowl should not have contact with poultry flocks.
2. **Keep it clean.**
   a. Keep a pair of shoes and a set of clothes to wear only around your birds.
   b. Remove mud, manure, etc. from footwear. Clean with soap and water, rinse well, then apply an effective disinfectant for the required contact time.
   c. Wash hands thoroughly with soap and water before and after handling each group of birds.
   d. Control flies, rodents, wildlife, and pets; reduce or eliminate their contact with your birds.
3. **Don't haul disease home.**
   a. If you travel to places where other birds or bird owners have been—even feed stores—clean and disinfect vehicle tires and other items that travelled with you.
   b. Quarantine new or show birds for at least 30 days. Designate separate clothing, footwear, equipment, and tools for quarantined birds. Care for the quarantined birds last and monitor their health closely.
4. Don’t borrow disease from your neighbor.
   a. Don’t share birds, equipment, tools, or poultry supplies with your neighbors or other bird owners.
   b. If you must borrow equipment, disinfect it before and after use.
5. Know the warning signs of infectious bird disease.
   a. Monitor your birds daily for signs of illness.
   b. Vaccinate against diseases of concern when possible or recommended.
   If you believe your birds are showing signs consistent with AI or your flock is experiencing sudden illness or increased death losses, contact the state veterinarian’s office at 360-902-1878 or the Washington State Department of Agriculture Avian Health Program’s sick bird hotline at 800-606-3056.

Quick response to the first case of AI in a new outbreak is essential to minimize the scope of the outbreak, numbers of birds lost, and economic impact from sick/dead birds and disease containment costs. Backyard and commercial producers must be knowledgeable about bird diseases, observe their birds closely every day, and understand the critical need to protect the poultry industry by reporting concerns promptly.

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