

Avian Influenza – What is it?

Avian influenza, commonly known as “bird flu,” is an infectious disease of birds caused by type A Influenza viruses. The disease is carried by many wild bird species including migratory waterfowl like ducks and geese, which show few if any clinical signs of the disease. Influenza in birds is very contagious and can cause severe illness and death in domestic species such as chickens and turkeys.

What do the N and H mean?

There are many different subtypes of the influenza type A virus. The virus has two types of proteins that project from the surface of the virus. These proteins are called Hemagglutinin (H) and Neuraminidase (N). With 16 different types of H proteins and 9 different types of N proteins, many different combinations of H and N proteins are possible. The avian influenza virus in the chickens in Scott County is classified as an H7N7.

How infectious is it?

The virus is also classified by pathogenicity -- the ability to cause disease in domestic chickens. There are two types of pathogenicity: low and high. Low pathogenic viruses usually do not cause illness whereas highly pathogenic viruses spread rapidly and cause high mortality in poultry. The types of Influenza viruses of greatest concern are the highly pathogenic and any H5 and H7 virus, since they have the ability to change from low pathogenic to high pathogenic.

Symptoms

Avian Influenza has a variable incubation period in birds depending on the virus dose, poultry species infected, route of exposure, and several other factors. The symptoms exhibited by an infected bird also vary and depend on the pathogenicity of the virus. Some of the possible symptoms are: depression, diarrhea, dehydration, appetite loss, weight loss, huddling, a drop in egg production and respiratory symptoms such as cough, sneeze, and sinusitis.

Lesions that could be observed include: a bloody nasal discharge, facial swelling, blue discoloration of the face, under-the-skin hemorrhaging, tracheal inflammation, nasal inflammation and hemorrhages on the shanks and in the proventriculus, which is part of the bird's digestive system. There is no acceptable or practical treatment for poultry infected with high pathogenic avian influenza.

Avian influenza viruses do not usually affect people; however, rare cases of human infection from certain strains of Avian Influenza viruses have been reported.

Biosecurity Practices for flock owners

The potential losses and costs associated with Avian Influenza outbreaks make it extremely important for the poultry producer and small poultry flock owner to protect their flocks against AI and other diseases by utilizing Biosecurity practices such as those listed below:

1. Keep "**No Visitors**" and/or "**Restricted**" signs posted at the road entrance of the farm.
2. **Do not allow** visitors on the farm or in the poultry houses.
3. **All farm personnel should wear separate clothing** (including shoes, boots, hats, gloves, etc.) on the farm. Clothes used on the farm should **stay** on the farm.

4. **Completely change all clothing** after caring for the flock, and wash hands and arms thoroughly before leaving the premises.
5. **Do not visit** other poultry farms or flocks or have contact with any other species of birds.
6. Keep all poultry houses securely locked. Lock all houses from the inside while working inside.
7. All equipment, crates, coops, etc. should be **thoroughly cleaned and disinfected** before and after use.
8. **All essential visitors** (owners, feed delivery personnel, poultry catchers and haulers, service men, etc.) are to wear protective outer clothing, such as coveralls, boots, and headgear prior to being allowed near the poultry flock or farm.
9. **Monitor all vehicles** (service, feed delivery, poultry delivery or removal, etc.) entering the premises to determine if they have been **properly cleaned and disinfected. This includes disinfection of the tires and vehicle undercarriage.**
10. Sick and dying birds should be submitted to a diagnostic laboratory for proper diagnosis of the problem. All commercial growers should contact their flock supervisor and follow their instructions.
11. **Dead birds** are to be **properly disposed** of by burial, incineration or other approved method.
12. Any person handling wild game (especially waterfowl) **must** completely change clothing and shower or bathe before entering the premises.
13. **Do not** borrow equipment, vehicles, etc. from another poultry farm.
14. **Do not visit** areas where avian influenza is a problem.
15. Remember to use **basic hygiene** to prevent contracting any influenza virus. This includes covering your mouth when you cough and/or sneeze and then washing your hands with soap and water afterwards.
16. **Properly handle and cook** all poultry for consumption to an internal temperature of at least **165 degrees Fahrenheit.**

If you have poultry on your farm that are sick and/or dying, see any unusual signs in your poultry, or have questions concerning Avian Influenza contact your local county agent, veterinarian, or livestock inspector, the University of Arkansas Cooperative Extension Service poultry veterinarian (479-957-4245) or the Arkansas State Veterinarians office (501-907-2400).

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