Avian Influenza (AI)

What is Avian Influenza?
Avian influenza is a viral infection of birds caused by a group of influenza viruses (type A influenzas). These viruses naturally circulate in wild birds and are maintained in populations largely through fecal-oral contact. Like all influenza viruses, avian influenza can change rapidly by mixing its genetic components to form different virus subtypes. Certain subtypes are associated with severe disease in domestic poultry (highly pathogenic).

What does highly pathogenic mean?
Avian influenza viruses are divided into two main groups based on their ability to cause disease in poultry.

1. Low pathogenic avian influenza (LPAI) occurs naturally in wild birds. While it can be spread to domestic poultry, it generally causes minimal or no clinical signs in birds. These subtypes are common in the US and around the world.

2. Highly pathogenic avian influenza (HPAI) is often fatal in domestic poultry and can spread rapidly. Viruses with H5 and H7 surface proteins are highly pathogenic.

Which wild birds are affected?
Avian influenza viruses have been found in many bird species; however, they are most often found in migratory waterfowl (especially mallards) with shorebirds being the second most common carriers. Other wild birds where influenza has been found include: raptors, gulls, quail, pheasants and ratites.

Does Avian Influenza cause disease in wild birds?
While most influenza viruses rarely cause illness in wild birds, occasionally HPAI can cause disease and mortalities in wild birds. Some wild birds that may be more likely to develop disease or mortality from AI include: All swans, diving ducks (especially Aythyinae family), wood ducks, northern shovelers, gulls, Canada geese, greater white-fronted geese, grebes, American wigeon, terns and other charadriiformes.

What are some clinical signs of disease?
Signs of avian influenza are not well characterized in wild birds, but some sources indicate that signs associated with the central nervous system may be more common in wild birds such as: swimming in circles, head tilt and lack of coordination. Other signs could include: edema or swelling of the head, respiratory signs, diarrhea or general depression and inappetence.

Can humans be infected?
Avian influenza viruses do not typically infect humans; however, there have been certain instances where highly pathogenic subtypes have been associated with disease in humans (H5N1, H7N9). The subtypes recently identified in the US have not been associated with human disease.
Information for Hunters:

Please advise hunters not to handle or eat sick birds, and use the following precautions when handling birds:

- Wear rubber or latex gloves when handling and cleaning game.
- Wash hands thoroughly and clean knives, equipment and surfaces that come into contact with game.
- Do not eat, drink, smoke or chew when handling game.
- Cook all game thoroughly before consumption (inner temperature of meat should reach 165 F).

Information for Falconers:

The avian influenza virus can be transmitted to birds of prey from all ducks, geese, swans, seabirds, cranes and herons. As a precaution, we are advising falconers avoid hunting wild avian species and particularly waterfowl during this HPAI outbreak. We also recommend against feeding waterfowl or other dead wild birds to captive raptors.

Information for Game Bird Farms:

Game birds such as pheasants, partridges and quail may be highly susceptible to HPAI. The main way for you to protect your birds is to maintain good sanitation and biosecurity and minimize contact with wild birds, particularly migratory waterfowl.

For additional information on AI or any other wildlife disease, please contact the WGFD Wildlife Health Laboratory at 307-745-5865.