

What is Avian Influenza / Bird Flu?

- Avian Influenza = AI = Avian Flu (“Bird Flu”)
- It is caused by a virus – Influenza Type A (this group includes avian, swine, equine and human influenzas)
- Affects many avian species, including chickens, turkeys, game birds, ratites, waterfowl and wild birds, but disease problems are usually seen in domesticated poultry. Avian Influenza is an extremely rare disease in pet and exotic birds.
- Typically, avian flu virus infects birds; swine flu virus infects pigs, etc. Sometimes influenza viruses can cross species = swine flu infects turkeys, swine flu infects humans, equine flu infects dogs. It is uncommon for avian flu to infect humans.

Are all Avian Flu’s the same?

- No, all avian influenza viruses are not created equal. There are many different types of AI: some produce no signs, some mild signs and others produce severe signs in poultry.
- The different subtypes: H5N1, H1N1, H7N2, etc. H and N named after the surface proteins on virus. Even an H5N1 may not be the same virus as another H5N1.
- Low-Path vs. High-Path: pathogenicity (ability to cause disease). Low-Path (LP) viruses may cause no to mild signs. High-Path (HP) viruses cause severe disease symptoms in birds: severe respiratory/nervous signs, high death rate.
- H5 and H7 are two subtypes of concern in poultry. These subtypes can change from Low to High-Path.
- The “Asian Bird Flu” is caused by a HP H5N1 avian flu virus. Important to remember that this current Avian Flu is a bird disease; it is not easy for people to get it.

Do we have AI in United States now?

- The Asian strain (H5N1) is not in the U.S. currently.
- Yes, we have other types of AI in the U.S. There are occasional cases of LPAI with mild signs in poultry, but these do not seriously affect humans.
- Just because you hear about an AI outbreak in the U.S., doesn’t automatically mean it is the HP H5N1 strain.
- The last large HPAI outbreak in U.S. poultry was in 1983.
- Wild waterfowl are “natural reservoirs” of many types of AI (they can carry the viruses without getting sick). They normally carry LPAI types, rarely HPAI.

How does AI spread in birds?

- Chickens, ducks and other poultry do not spontaneously erupt with avian influenza. This is a virus, just like other influenza viruses, that needs to be spread around to infect



other birds. The virus is found in nasal secretions and feces of infected birds.

- The spread is through movement of infected birds or movement of virus contaminated coops, equipment, vehicles, boots, etc. that can infect new birds.
- The virus can be killed with disinfectants, heat and drying; but if protected by organic material (manure, feathers, egg debris, etc.) it can survive for weeks.

What are the signs of AI in birds?

- AI is primarily a disease problem in poultry-type birds (chickens, turkeys, etc.).
- Disease signs are variable (depends on the type) ranging from



– no symptoms or mild to severe: respiratory signs, nervous signs, decreased egg production, low to high death rate.

- These signs are seen in quite a few other diseases, so a proper laboratory diagnosis is needed.

What about sick birds or large die-offs?

- An occasional dead bird found is not an unusual occurrence in either wild or domesticated flocks.
- FDACS, Division of Animal Industry investigates unusual poultry illness or death to help owners and veterinarians determine the cause of illness or death.
- Large numbers of birds dying or found dead (wild or domesticated) need to be reported. Domestic birds to the State Vet’s Office: 850-410-0900. Wild birds to your local FWC office or <http://MyFWC.com/bird>. State specialist will determine if further investigation or testing will need to be performed if they suspect an emergency type disease.

Can people get AI?

- Since 1959, there have been reports of people infected with HPAI types, but with no serious illness or deaths.
- 1997 in Hong Kong – was the 1st time it was confirmed that HPAI (H5N1) caused disease and death in some people. These people had very close contact or ate raw/undercooked infected poultry. Humans are still considered to be resistant to this current bird virus.

Can you get AI from eating poultry or eggs?

- AI is not considered a food-borne illness in the U.S. Any HPAI infected poultry would not go into the food chain – they would be destroyed.
- Properly cooked poultry meat and eggs are safe to eat.

Why do we worry about a human pandemic from H5N1?

- Currently there is no pandemic because the H5N1 virus does not spread easily from person to person.
- The bird virus would have to change in order to easily infect and spread from human to human; this has not happened yet.
- However, the longer the current bird HP H5N1 virus exists in the poultry populations in Asia, then the greater the risk this change will have time to occur.

What about migrating waterfowl and hunters?

- There is no indication of HPAI currently in the U.S. wild bird population.
- Basic hygiene (hand-washing after handling wild animals or carcasses) is always recommended, along with proper food preparation and thorough cooking.
- For further guidance please visit: <http://myfwc.com/bird/avianinfluenza.htm>

Will H5N1 come to the U.S. or Florida?

- No one knows if, when, or how it might come.
- Possible routes include legal and illegal movement of infected birds or poultry products, infected migratory waterfowl, or an intentional introduction (Agroterrorism).
- Firewalls are in place: U.S. bans all birds from countries affected by HPAI and there is increased surveillance in U.S. poultry and wild waterfowl.
- Even if U.S. migratory fowl get the H5N1 strain, it is still a low risk to commercial poultry, since these birds are sheltered and kept separated from wild birds.
- Backyard flocks owners also need to keep their birds separated from wild birds.
- Strict Biosecurity is the best way for all poultry growers (commercial and backyard) to protect their flocks from all diseases, including AI.
- Even with the worst case scenario of a HPAI infection in U.S. poultry, the average person will not get “Bird Flu” from birds. People working with infected flocks will wear protective gear as a safety precaution.
- FDACS and the USDA are prepared to respond with early detection, rapid diagnostic procedures and experience in aggressive quarantine/depopulation/clean up actions.

How do I protect my flock from AI?

- **Practice Biosecurity** – disease prevention management:

- **People** – Avoid visiting other poultry farms, bird shows and markets. If you do, shower, change clothing and footwear before working with your birds. Have visitors wear protective clothing and footwear and visa versa.
- **Equipment** – Do not loan or borrow equipment or vehicles from other farms. If you do, wash and disinfect all equipment before and after use. Wash and disinfect your vehicle/trailers/crates (including tires and undercarriage) after leaving a poultry farm, show or market. Keep your bird houses, pens, equipment and work areas clean and sanitary.
- **Birds** – Keep a closed flock. Do not bring new birds from poultry shows and markets back into the flock – this is a great way to introduce any disease. Separate new birds away from the flock for 4 weeks to see if they show any signs of disease. Keep your birds separate from wild birds and from lakes or ponds that may be used by wild water fowl. Take sick or dead birds to a diagnostic lab to determine cause of illness.
- **Rodents, wild birds** – keep rodents and wild birds away from your poultry buildings and pens. Use rodent bait stations, keep the grass cut, pick up garbage piles and don't allow wild birds to nest near your poultry.

What about vaccinating poultry for AI?

- Vaccinating poultry for AI would only be considered during an outbreak to control the spread.
- Vaccination is not routinely used since it could interfere with surveillance testing, since both an infected bird and a vaccinated bird can give a positive test.
- Vaccination may not prevent the birds from being infected or spreading the virus, but it can help reduce clinical disease and death loss.
- The best protection against AI is practicing Biosecurity measures to protect your birds.

What about international travel?

- The big concern is accidentally bringing back a foreign animal disease through contaminated clothing; hides, feathers, food products, etc. back to your animals.
- If you have contact with foreign livestock or poultry, you should not even go near any types of livestock or birds after returning home for at least 5 days.
- Thoroughly clean all travel clothing, shoes and equipment after returning home.



What type of poultry surveillance is being done now?

- AI has been a concern to the poultry industry long before the HP H5N1 strain appeared. Monitoring in the U.S. for AI is routine and will be continued.
- In FL, through FDACS, testing is performed on commercial and backyard poultry and necropsies are performed on all poultry submission to the laboratories.
- Surveillance is performed at small animal sales, live bird markets and at fairs and exhibitions.
- A new national AI program will sample commercial broiler, turkey and egg layer flocks.

What happens to an AI infected flock?

- The farm is quarantined by the State Veterinarian to stop movement of birds, eggs and equipment.
- Mandatory Biosecurity measures are implemented for people and vehicles to exit the farm.
- Depending on AI type, the infected flock may be depopulated and disposed of to reduce spreading the disease. The buildings and equipment are disinfected, the litter heated/composted to kill the virus.
- Surveillance testing of surrounding poultry premises conducted to determine the spread of disease.
- Repopulation of birds with permission from State Vet.

Does FL have a plan to deal with AI?

- Yes, FDACS has a State Response and Containment plan for Avian Influenza.
- In any influenza epidemic or pandemic effecting people it would be a human issue. The Florida Department of Health has a plan to respond to a human pandemic.



For more information

- http://www.doacs.state.fl.us/ai/main/avian_flu_main.shtml
- <http://myfwc.com/bird/avianinfluenza.htm>
- <http://www.myfloridaeh.com/>



DACS-P-01317

Avian Influenza

“Bird Flu”



Division of Animal Industry

Florida Department of Agriculture and Consumer Services

Charles H. Bronson, Commissioner