

Avian Influenza

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What is avian influenza (AI)?

AI, caused by a virus, is a respiratory disease of wild and domestic fowl. There are many different strains organized into two classifications, based on the severity of the disease—a low-pathogenic (LPAI) and a high-pathogenic avian influenza (HPAI).

Is the disease a foreign or emerging/endemic disease?

LPAI is endemic to the U.S., but HPAI is a foreign animal disease.

What animals are affected?

AI affects many bird species such as chickens, turkeys, pheasants, quail, ducks, geese and guinea fowl. Migratory waterfowl are the natural reservoir for the virus.

How is it transmitted?

Infected birds carry the virus in their intestines and shed it, infecting other birds. Susceptible birds that come into contact with the saliva, feces or nasal excretions of infected birds become infected themselves. Studies have shown that 1 gram of manure contaminated with the HPAI strain can contain enough virus to infect 1 million birds. The virus can also be spread by contact with contaminated equipment, vehicles, egg flats, crates and people (clothing, shoes, etc.).

What is the incubation period of the disease?

The incubation period of the virus is 1 to 7 days.

What are the symptoms?

With either strain birds can show a variety of symptoms or none at all. Symptoms include sudden death without clinical signs; lack of energy or appetite; decreased egg production; soft-shelled or misshapen eggs; swelling of the head, eyelids, comb, wattles and hocks; purple discoloration in wattles, comb and legs; nasal discharge; coughing and sneezing; incoordination; and diarrhea. Most birds that contract the LPAI strain have few if any symptoms.

Can people be infected?

LPAI is not infectious but some strains of HPAI, such as H5N1, can possibly be infectious to humans. This strain causes high mortality in birds. People who are at most risk are those who work in the poultry industry and handle the birds on a daily basis.

Is there a vaccine?

No. There is an experimental vaccine that is not yet approved by FDA.

Is this disease preventable?

Yes. The best way to prevent AI is to implement biosecurity protocols such as disinfecting coops, crates, machinery, people and clothes on a regular or daily basis; limiting exposure by not allowing the flock manager or workers to visit any other poultry flocks; keeping clothes that are worn on the grounds separate from those that are worn off the premises; reporting any sick or dead birds to the manager and properly disposing of carcasses.

Is this a reportable disease?

Yes. It should be reported immediately to state or federal animal health officials.

Who should be contacted if AI is suspected?

Immediately contact a private veterinarian or the state or federal animal health regulatory agency.

For more information:

Texas AgriLife Extension Service—Veterinary Medicine:
<http://extensionvetmed.tamu.edu>

The Center for Food Safety and Public Security:

<http://www.cfsph.iastate.edu/DiseaseInfo/default.htm>

USDA-APHIS:

http://www.aphis.usda.gov/publications/animal_health

CIDRAP:

<http://www.cidrap.umn.edu/cidrap/content/influenza/avianflu/biofacts/avflu.html>