



Avian Influenza Factsheet

Definition

Avian influenza is a highly contagious viral disease affecting the respiratory, digestive and/or nervous system of many species of birds. It is caused by a Type A influenza virus. There are two types of avian influenza virus, low pathogenicity (LPAI) and high pathogenicity (HPAI).

History And Spread Of The Disease

A highly pathogenic form of avian influenza was known as "fowl plague". It first appeared in Italy more than 100 years ago (around 1878). Pathogenic avian influenza was first recognized in the United States in 1924-25.

It occurred again in 1929. It was eradicated both times. Non-pathogenic and mildly pathogenic influenza A viruses occur world-wide. Highly pathogenic avian influenza A (HPAI) viruses of the H5 and H7 HA subtypes have been isolated occasionally from free-living birds in Europe and elsewhere.

Outbreaks due to HPAI were recorded in the Pennsylvania area, USA, in the years 1983-84.

More recently outbreaks have occurred in Australia, Pakistan, Hong Kong, Italy, Chile and Mexico. A serious outbreak of avian influenza in the Netherlands in 2003, spreading to Belgium and Germany, affected some 250 farms and necessitated the slaughter of more than 28 million poultry.

Another serious epidemic of this disease affected Japan, South Korea and south-east Asia early in 2004. This outbreak is still ongoing in China and parts of South East Asia. There is evidence that H5 viruses of low pathogenicity may mutate and become highly pathogenic.

There were also a small number of cases of avian influenza in the USA and Canada early in 2004. The USA strain in Texas was, however, typed as H5N2, not the same as the strain in South-East Asia.

More recently there have been reports of infection of birds in Asia; Africa and Europe including some EU member states.

Most Recent GB Outbreak

In 1991 avian influenza was confirmed in a flock of turkeys in Norfolk. Sudden mortality occurred in a single house containing approximately 8,000 18-week old turkeys.

A 10 km infected area was declared. This prohibited movement of poultry from within the infected area except for slaughter until, following extensive surveillance, the infected area restrictions were withdrawn.

Clinical Signs

Typically the disease presents suddenly with affected birds showing oedema of the head, cyanosis of the comb and wattles, dullness, lack of appetite, respiratory distress, diarrhoea and drop in egg production. Birds may often die without any signs of disease being apparent.

However, there can be considerable variation in the clinical picture and severity of the disease.

Transmission

- Direct contact with secretions from infected birds, especially faeces
- Contaminated feed, water, equipment and clothing
- Clinically normal waterfowl and sea birds may introduce the virus into flocks.
- Broken contaminated eggs may infect chicks in the incubator.

Main Aspects Of Disease Control

- **Infected Premises:** Prohibition on movements of animals, litter and vehicles into or out of the infected place. Cleansing and disinfection of premises and vehicles. Schedule 3 of the Animal Health Act 1981 provides for the compulsory slaughter of diseased poultry and poultry which is suspected of being infected or which has been exposed to the infection of disease. Eggs must also be destroyed.
- **Infected Area:** Movement restrictions on Poultry and Hatching Eggs within a 3 km and 10 km radius. Poultry must be kept in their living quarters. Markets, Fairs and Shows are prohibited.
- **Waste Disposal:** Used litter or poultry manure may not be removed or spread.
- **Transport:** Cleansing and disinfection of any vehicle used for the conveyance of poultry, carcasses, poultry offal or feathers, or eggs.

Minimum Duration Of Controls

An infected premises may not be re-stocked until at least 21 days after disinfection.

Protection zone controls apply for at least 21 days after the cleansing and disinfection of the infected premises and then becomes part of the surveillance zone.

Surveillance zone controls apply for at least 30 days after cleansing and disinfection.