Preliminary Outbreak Assessment

Low Pathogenicity Avian Influenza, H7N9 in Netherlands

13th June 2016  Ref: VITT/1200 LPAI H7N9 Netherlands

Disease Report

Netherlands has reported an outbreak of avian influenza in domestic laying hens in Friesland region. Over 48,000 birds were present on the premises in two production systems with outside access of 16,000 free range birds and 32,000 organic birds. The virus was reported as H7N9 low pathogenicity (OIE, 2016; see map) with only very mild clinical signs observed of slight egg drop and dullness. Disease control measures have been put in place, and the birds are being culled. There are no other premises in the 1km zone. Initial information suggests this is a European strain.

Situation Assessment

The last time this virus was detected in the EU was in 2009 in the Czech Republic. Domestic breeding geese were tested as part of routine surveillance activities. No clinical
signs were observed. A case occurred in domestic ducks in France also in 2009. It is highly possible it has been circulating in wild birds in the intervening years.

As with this latest outbreak in the Netherlands was in laying hens, it is important that mild clinical signs, such as egg drop, are reported quickly, so testing can take place. This type of production system provides a suitable environment for viral circulation to take place and possible mutations to occur which lead to highly pathogenic viruses. Rapid, reactive control measures reduce the risk of these viruses spreading widely.

The strain is not the same as the Asian H7N9 LPAI strain circulating in poultry in China. It is a distinct classical European lineage virus consistent with the large reservoir of related viruses of multiple subtypes in European wild birds (Promed, 2016). The distinct lineage of Asian origin virus has been responsible for nearly 800 human cases and over 300 deaths since February 2013 (FAO, 2016). That particular strain is a result of multiple re-assortments of H9N2 and H7N3 viruses from domestic poultry, and H7N9 wild bird viruses. These re-assortment events take place in domestic poultry, possibly in live bird markets as well as poultry farms and there is continual evolution of these viruses over time, which is why vigilance and surveillance is important. However, in the three years since the virus was first reported in China, the Chinese authorities have carried out a high level of testing and surveillance in poultry as well as wild and captive birds and the virus has remained on the whole restricted to poultry in China. Very occasionally human cases have occurred in other countries, but these have all been associated with people who have travelled in China. There appears to be no wild bird reservoir for this strain of H7N9 virus which is well adapted to gallinaceous poultry and therefor domestic waterfowl are more refractory to infection.

Public Health England has confirmed the risk to the general public is very low.

According to the EU Trade notification system, there has been no recent trade in either live poultry or hatching eggs from the region to the UK.

**Conclusion**

Our risk level remains the same, low but heightened, as there are several strains of avian influenza viruses which have been reported in recent months across Europe.

We would like to remind all poultry keepers to maintain high standards of biosecurity, remain vigilant and report any suspect clinical signs promptly and in addition using the testing to exclude scheme for avian notifiable disease where appropriate for early safeguard.

For more information, please see [www.defra.gov.uk/ahvla-en/disease-control/nad](http://www.defra.gov.uk/ahvla-en/disease-control/nad)
Authors
Dr Helen Roberts
Professor Ian Brown

References


© Crown copyright 2016

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.2. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2/ or email PSI@nationalarchives.gsi.gov.uk

This publication is available at https://www.gov.uk/government/collections/animal-diseases-international-monitoring

Any enquiries regarding this publication should be sent to us at iadm@apha.gsi.gov.uk