Situation Assessment #5

Avian Influenza (H5N8) in Bulgaria

9 November 2018     Ref: VITT/1200 HPAI in Bulgaria

Disease report

The Bulgarian authorities have now reported 24 outbreaks of HPAI H5N8, including 9 outbreaks in October (OIE, 2018). These outbreaks in October have been reported in commercial premises with laying hens (39,000) and ducks (between 1,000 birds and 16,000 birds), small commercial farms (fewer than 500 birds) and one very large commercial premises (130,000 birds). Four regions have been affected to date (see map, below).

Situation assessment

Eradication and control measures according to the Council Directive 2005/94/EC have been put in place, including 3km protection zones and 10 km surveillance zones around each infected premises, a ban on live poultry markets and exhibitions of live birds, and
biosecurity measures at infected premises. In addition to these measures, there has been enhanced active surveillance at all commercial breeders, layers and waterfowl premises since May, where poultry have been sampled and serological testing has been performed every 21 days for a period of three months, followed by a final sampling visit 50 to 60 days later. Of those sampled, 25 duck farms to date have been H5N8 HPAI sero-positive, but virus could not be isolated from these farms (PAFF, 2018). Interestingly, recent data reported in the EFSA scientific overview for May to August 2018 documents the latest scientific research on the H5N8 HPAI viruses from the 2016 epizootic, concluding that the virus is avian adapted with increased virulence for waterfowl and higher rates of oropharyngeal rather than cloacal shedding (EFSA, 2018). However over time these viruses naturally attenuate in domestic waterfowl (but retain their HP phenotype in galliforme species) and result in milder disease signs which provides an explanation for the detection of serologically positive flocks in the absence of virus being isolated.

Bulgaria is a producer of duck foie gras (mainly in the Plovdiv region) therefore it is possible that one of the transmission pathways includes sharing equipment, which would be particularly effective for an oropharyngeal infection when gavage feeding takes place. Other potential pathways include poor biosecurity on farm; movement of birds, movement of fomites including workers; outdoor poultry with high level of contact with wild migratory waterfowl in Dobrich region (PAFF, 2018). The main migratory wild waterfowl flyway for Bulgaria is the Black Sea / Mediterranean flyway, whereas the UK is located within the East Atlantic flyway which means these outbreaks in Bulgaria are of note, as it signals a continual presence of H5N8 HPAI in waterfowl (domestic) but it does not necessarily mean there will be a large numbers of wild birds from this area entering the UK in coming months. It also important to note that H5N8 HPAI is currently absent in European wild bird populations. During the last 12 months H5N6 HPAI has been detected on a frequent basis in such populations but with only very limited poultry incursions.

According to TRACES, the EU Electronic Trade Notification System, there has been no recent trade of live poultry, hatching eggs or day old chicks from the affected regions in Bulgaria to the UK. Meat and table eggs are lower risk commodities and provided they are not diverted from the human food chain do not represent a risk to poultry.

According to the European Centre for Disease Control, “no transmission to any person exposed to an infected bird has been described in Europe. Avian influenza virus transmission to humans is a rare event overall and the risk is considered very low for viruses with an avian-adapted genetic makeup” (EFSA, 2018). The international reference laboratory for avian influenza at APHA closely monitors these viruses for human tropism and the current strains retain a strongly avian affinity (pers comm IRL APHA).

Conclusion

The EU/OIE/FAO international reference laboratory/UK national laboratory at Weybridge has the necessary ongoing diagnostic capability for these strains of HPAI virus.
Overall, it is considered that the likelihood of any notifiable avian disease in wild birds in the UK remains **LOW**, however this will be kept under review and may change as the migration season is now underway along the East Atlantic flyway – the risk to the UK will depend on the presence of AI in wild birds and the westward movement along this route, which is affected by the weather. H5N6 HPAI is still circulating in the wild bird fauna of this flyway, but H5N8 HPAI has not been reported since 2017.

The presence of H5N8 HPAI in Bulgaria does not change the risk level for the UK at present. There is no trade in high risk commodities and the migratory wild waterfowl flyways are different.

Nevertheless, we recommend that all poultry keepers stay vigilant and make themselves aware of the latest information on gov.uk, particularly about recommendations for biosecurity and how to register their flocks using the simplified forms now available.

We will continue to report on any updates to the situation and in particular any changes in disease distribution or wild bird movements which may increase the risk to the UK.


We ask that the public use the **Defra helpline (Tel: 03459 33 55 77)** to report findings of dead wild birds where there are three or more of wild ducks, wild geese, swans, gulls, or single birds of prey or where there are more than five birds of any other species found dead in the same location.

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**References**

