Disease report

There have been relatively few highly pathogenic avian influenza (HPAI) virus events in Europe this winter when compared to H5N6 last winter and the exceptional H5N8 epizootic in the winter of 2016/17. Our last outbreak assessment (dated 1 November 2018) provided an update on the ongoing H5N8 outbreak in Bulgaria in October involving nine commercial premises across four regions. Prior to that, there was interest in a number of H5 outbreaks in western Russia (see our POA dated 17 August 2018) and in particular an outbreak of H5N2 HPAI in a commercial farm of nearly 500,000 birds in Kostromskaya region, northwest Russia. Here we update the situation in Russia, Bulgaria and western Europe since 1 November 2018 in response to recent reports of two cases of H5N6 in wild birds in Denmark (see map).
Denmark

In 2018, there were a few H5N6 outbreaks in wild birds in Denmark with a case in a Northern eider (Somateria mollissima) in July, two cases in August (mallard duck (Anas platyrhynchos), common pheasant (Phasianus colchicus) and mute swan (Cygnus olor)), three outbreaks in September (mute swan, mallard duck, Northern eider, greylag geese (Anser anser) and common pheasant). These could represent the long tail end of the winter 17/18 H5N6 outbreak that primarily affected wild birds. Then three months later on 22 December 2018, a white-tailed eagle (Haliaeetus albicilla) was found dead near Naestved and tested positive for H5N6. White-tailed eagles both hunt and scavenge waterfowl and this case suggests H5N6 is present in waterfowl in eastern Denmark. On 4 January 2019, a common buzzard (Buteo buteo) was found dead in Rørvig, municipality of Odsherred, in east Denmark and tested positive for H5N6. Buzzards scavenge and could have been infected through an infected waterfowl carcase.

Russia

In June, 27 H5 outbreaks were reported in commercial poultry across several regions of western Russia with a further 40 in August making a total of 67. An H5 outbreak occurred in a large poultry farm with 342,000 birds in Voronezhskaya Oblast, just to the east of Ukraine, on 31 October 2018. Then on 4th January 2019, an H5 outbreak was reported in a large turkey farm in Rostovskaya Oblast, again just east of Ukraine (see map above).

Bulgaria

From our previous assessment for Bulgaria published in November 2018, nine outbreaks of HPAI H5N8 were reported in domestic poultry in October. Since then, the Bulgarian authorities have reported five outbreaks of HPAI H5N8 in November, and one in mid-December. Of the five in November, three were in poultry farms, including one large farm of 40,000 birds. The outbreak in December occurred in a village in Bregovo in the extreme north-west of Bulgaria and involved a backyard flock of 350 pigeons, 50 hens and 3 pheasants (PAFF, 2019). This appears to represent a significant geographical jump west (see above map) and the outbreak is near to the border with Serbia and Romania. The Bulgarian authorities attribute this to spread via environment or fomites (PAFF, 2019) and not new primary introductions from wild birds.

Situation assessment

With regard to the cases in wild birds of prey in Denmark, no EU MS can impose bans on the trade in poultry and poultry commodities in response to notification of the presence of avian influenza virus in birds other than poultry. In Bulgaria, 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. According to TRACES, the EU Electronic Trade Notification System, there have been no recent imports of live poultry, live day old chicks, birds’ eggs (table or hatching) or poultry meat products from Denmark, Bulgaria or the Russian Federation to the UK.

Bulgaria is a producer of duck foie gras. Therefore it is probable 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 fomites including workers; and, outdoor poultry with high level of contact with wild migratory waterfowl (PAFF, 2018). However, no commercial poultry holdings are within the protection and surveillance zones for the backyard H5N8 outbreak in Bregovo in north-west Bulgaria (PAFF 2019).

**Conclusion**

The OIE/FAO international reference laboratory/UK national laboratory at Weybridge has the necessary ongoing diagnostic capability for these strains of virus, whether low or highly pathogenic AI.

The cases in wild birds of prey in Denmark demonstrate that H5N6 HPAI is still circulating in the wild bird fauna in the East Atlantic flyway and around the Baltic in particular but likely at lower levels than in 2017/18. The main risk route to the UK is through wild water birds from Denmark and/or the Netherlands and northern Germany, if the virus has been maintained there at low level during the winter period. It is worth noting that the main migration of waterfowl into the UK took place in October/November and that by December/January when the outbreaks occurred in wild birds in Denmark, the bulk of the migration to the UK and indeed westward through the Baltic Sea would have been completed. Furthermore, active monitoring of at risk populations has been maintained through UK surveillance during 2018/19 winter period and all birds tested have been negative for H5 HPAI. The presence of H5N8 HPAI in Bulgaria does not change the risk level for the UK at present as there is no trade in high risk commodities. Overall, it is considered that the likelihood of avian influenza in wild birds in the UK still remains **LOW**, however this will be kept under review and may change particularly in view of the cold weather in continental Europe which could drive wildfowl to fly west into the UK.

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.

Further information is available here: [https://www.gov.uk/guidance/avian-influenza-bird-flu](https://www.gov.uk/guidance/avian-influenza-bird-flu) including updated biosecurity advice for poultry keepers for

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References

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