

Updated Situation Assessment #6

Highly pathogenic avian influenza in Europe

19 July 2019

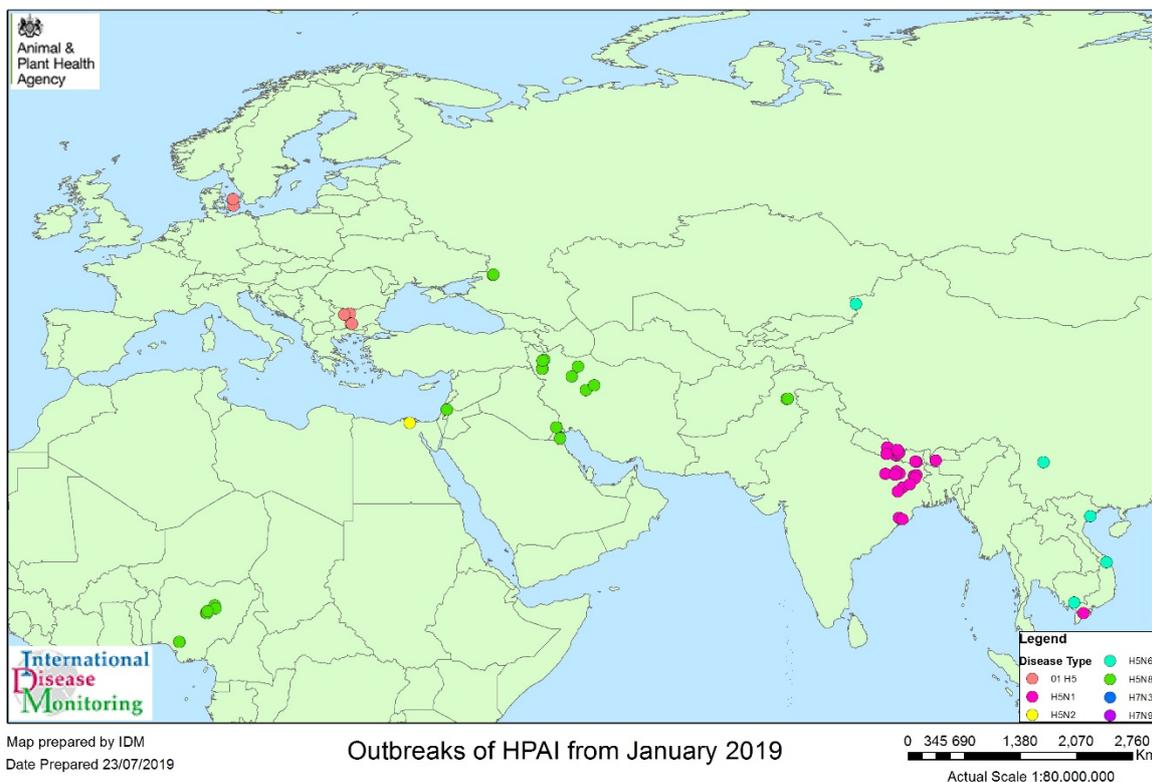
Ref: VITT/1200 HPAI in Europe

Disease report

Although there have been no new outbreaks reported in Europe in the past month, or indeed since April, here we update the situation in Russia, Bulgaria and Europe since January 2019 with a summary of the outbreaks in the Middle East and central Asia.

There were relatively few highly pathogenic avian influenza (HPAI) virus outbreaks in Europe this last winter (2018/19) when compared to H5N6 in the winter of 2017/18 and the exceptional H5N8 epizootic in 2016/17. Indeed, between October 2018 and January 2019 there were only 18 HPAI outbreaks in poultry in Europe (15 in Bulgaria and three in west Russia) and just two wild bird events, both involving birds of prey in Denmark.

Our last outbreak assessment (dated 21 January 2019) provided an update on the ongoing H5/H5N8 outbreaks in Denmark, Russia and Bulgaria.



Denmark

No recent outbreaks. There have been no more HPAI events in wild birds in Denmark since early January. Denmark is currently considered to be free of HPAI.

Russia

No recent outbreaks. Since our last report in 21 January 2019, there has been one outbreak in domestic poultry in west Russia (January), when HPAI H5N8 was reported in a large turkey farm with 16,000 birds, just east of Ukraine in Rostovskaya Oblast (see map above).

Bulgaria

No recent outbreaks. Since our last report on 21 January 2019, there have been five outbreaks of HPAI outbreaks reported in domestic poultry in Bulgaria. Two were H5N8 in the Lovec region. Of these one was on a small poultry farm in early April and the other on a poultry farm in mid-March. There was a possible epidemiological link between both outbreaks with a private vet and also a transport company used to move livestock to the slaughterhouse (PAFF, 2019a). The other three outbreaks were also H5N8 in two poultry farms and one backyard premises in early April. One farm was large with 170,000 birds. The backyard outbreak in April involved the same village as where HPAI H5N8 was confirmed in a backyard premises in November 2018 (PAFF 2019a). The Bulgarian authorities previously attributed HPAI H5N8 to spread via environment or fomites (PAFF, 2019b) and not new primary introductions from wild birds.

Middle East and central Asia

Apart from the ongoing H5N2 outbreaks in Taiwan, the only HPAI outbreaks last month in Asia were H5N1 in Nepal and H5N6 in Vietnam. The last HPAI outbreak in the Middle East was H5N8 in Israel in April.

Situation assessment

In the period year to date there has been a very low level of activity in Europe and primarily associated with within sector spread and not through new primary introductions from wild birds. However the dynamics of threat from new incursions to Europe primarily mediated through wild birds is a constant, but carries uncertainties hence variability from one season to another. HPAI events can occur throughout the year in Europe including in the summer months, but detection is only possible where there is clinical disease or high mortality. HPAI viruses remain endemic in many parts of south-east Asia and some strains could be present in the wild bird breeding areas in northern Russia, where some intermingling could occur with water bird species that will winter in western Europe this autumn. In particular, there is overlap of the East Atlantic, Central Asian and East Asian bird migration flyways in the summer breeding sites in northern Russia. Thus, there is a

pathway from the HPAI-endemic regions of south-east Asia to western Europe (Lee et al. 2015).

The outbreaks in the Middle East and central Asia likely represent spread with commercial poultry and although the wild bird risk may well be very low still, these outbreaks may be relevant to Europe.

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 high pathogenicity AI and continually monitors changes in the virus.

Currently the risk of HPAI in wild birds in the UK is **LOW** (i.e. no change). Although there have been no HPAI outbreaks in the UK this year and only a few in Europe (namely Bulgaria in April), this cannot be taken as reassuring regarding the risk for incursions this coming winter. This can be linked to the fact that there may be now more limited immunity in the wild bird population to H5 viruses, with a large susceptible population of hosts in the form of juvenile birds migrating to the UK every autumn. Furthermore, as can occur every year, the current virus strains are continually evolving especially in central and eastern Asia where they circulate more freely and may be changing to escape the existing immunity at population level. Spread of such viruses amongst migratory waterfowl whilst on their breeding grounds in the far north of Russia in the summer is a mechanism that is well defined and could reoccur during 2019. The north-east migration pathway to Europe and the UK is of key importance and it is possible that H5N6 could re-emerge this autumn in western Europe. The diversity of strains and virus genetic mixing events together with weather conditions and wild bird immunity make predictions on HPAI spread risk not possible at the present time.

However taking historical events into account years/seasons of relatively low activity can be followed by those of high activity. Therefore, 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> including updated biosecurity advice for poultry keepers for England; <http://gov.wales/topics/environmentcountryside/ahw/poultry/bird-gatherings-advice/?lang=en> for Wales and; <http://gov.scot/avianinfluenza> for Scotland.

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