

Updated situation assessment #7

Highly pathogenic avian influenza (H5N8) in Europe

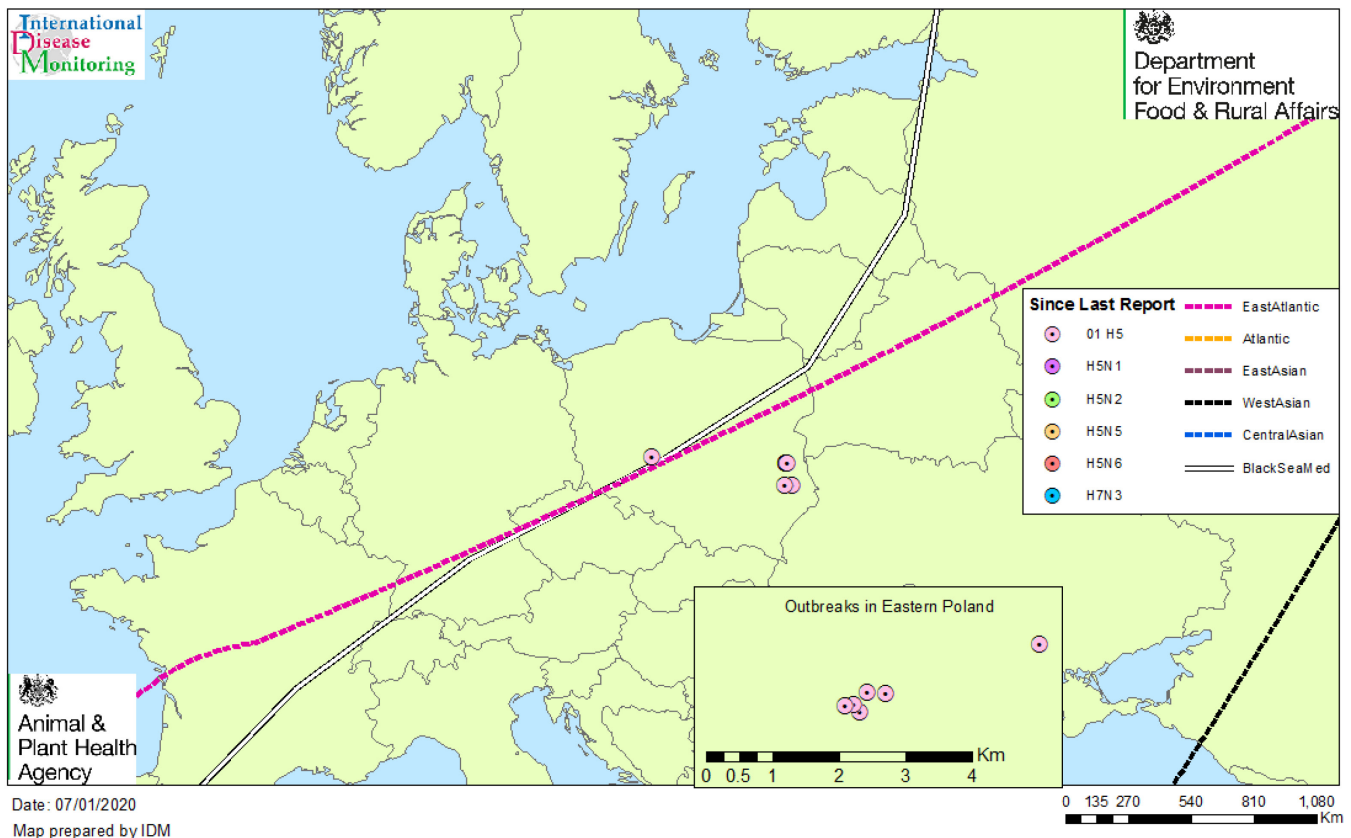
07 January 2020

Ref: VITT/1200 HPAI in Poland

Disease report

Nine outbreaks of H5N8 HPAI have been reported in Poland (OIE, 2020). This is the first report of H5N8 HPAI in Europe this winter season, with the last reported outbreak in 2019 occurring in Bulgaria, in April (OIE, 2019).

The first outbreak was reported to ADNS on 31 December 2019. The first of the reported outbreaks was located in Eastern Poland in the Lubelskie region (map below) involving over 12,000 poultry (turkeys) showing increased mortality. HPAI was detected by using EU approved RT-PCR. Five more outbreaks were then reported in poultry premises in the same village (four turkey, one guinea fowl), involving a further 80,000 birds. The fifth outbreak was reported on 03 January 2020 in poultry (laying hens) in the western region of Ostrowski, over 300km away, involving 36,000 birds. A further two outbreaks were reported in backyard holdings 80km south of the first outbreak, affecting poultry (laying hens, ducks and geese). All birds at each of the premises have now been culled. Measures in accordance with Council Directive 2005/94/EC have been implemented, including killing of the birds, and disposal of the carcasses in the rendering plant. Protection and Surveillance Zones around the infected premises have been established. H5N8 HPAI was last reported in poultry in Poland in March 2017.



Highly pathogenic avian influenza in Europe December 2019 - January 2020

Situation assessment

Our last outbreak assessment (dated 19 July 2019) provided an update on the situation in Russia, Bulgaria and Europe between January and July 2019. Prior to that there were relatively few highly pathogenic avian influenza (HPAI) virus outbreaks in Europe in winter 2018/19, when compared to H5N6 in the winter of 2017/18 and the exceptional H5N8 epizootic in 2016/17. However, it should be noted that level of surveillance and information is limited from across the Middle East region where H5N8 HPAI may be widespread, and where vaccination has been used to control, for example in Iran. The epidemiology in the region and the potential ongoing genetic variation in these viruses creates continuous risk for Europe.

Furthermore, the levels of surveillance in wild birds across Europe and beyond is uncertain, but likely reduced compared to previous risk periods (International Reference Laboratory-Weybridge, personal communication). Indeed, it is likely that levels of wild bird surveillance are lower in Eastern Europe than they are in Western Europe. In 2018, Poland tested 36 wild birds (via passive surveillance) compared with 1,711 and 1,282 in Germany and the UK respectively (EFSA, 2019). This in turn may reduce effectiveness of early warning of new incursions via this route. However, the UK is currently maintaining levels of wild bird surveillance consistent with previous winters (no major changes since 2017).

In this winter season to date there have been no other reports of HPAI in domestic poultry or wild birds in Europe, although there has been an outbreak of H5N3 LPAI in the UK in Suffolk in December 2019. At present it is difficult to comment on the significance of this outbreak in Poland, which will depend on its likely source and any epidemiological linkages between cases, however, we will continue to monitor the situation.

The dynamics of the threat of new incursions to Europe primarily mediated through wild birds is a continual, albeit variable, risk, with a level of uncertainty. Hence, we see variability from one season to another (Alarcon et al, 2018). HPAI viruses remain endemic in many parts of Central and south-east Asia and some strains could be present in the wild bird breeding areas, where some intermingling could occur with water bird species from different flyways 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 to Western Europe (Global Consortia, 2016).

According to the data available on TRACES, we do not import live birds or eggs from the areas surrounding the outbreaks in the eastern part of Poland. We have imported hatching pheasant eggs from an area close to the outbreak in the west of the country (20-30km), the last of which was in June 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 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 these outbreaks in Poland are the first reports of HPAI in Europe so far this winter (in either domestic poultry or wild birds), this cannot be taken as reassuring regarding the risk for incursions to UK. Due to the lower numbers of H5 HPAI outbreaks observed in 2018/19, there may now be more limited immunity in the naive 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. This creates uncertainty as to the epidemiological picture; and the 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 2019-20.

The timing of such incursions via wild birds to Europe whilst normally starting in late autumn, carries such uncertainties that introductions later in the winter cannot be excluded, especially if migratory waterfowl movement is influenced by periods of very cold

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weather. Therefore, we recommend that all poultry keepers stay vigilant and make themselves aware of the latest information on www.gov.uk, particularly about recommendations for biosecurity and how to register their flocks.

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; <https://gov.wales/avian-influenza> for Wales and; <http://gov.scot/avianinfluenza> for Scotland.

Authors

Dr Lauren Perrin

Dr Francesca Gauntlett

Dr Helen Roberts

Prof Ian Brown

Joe Bowen

Dr Paul Gale

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