

Updated Outbreak Assessment #17

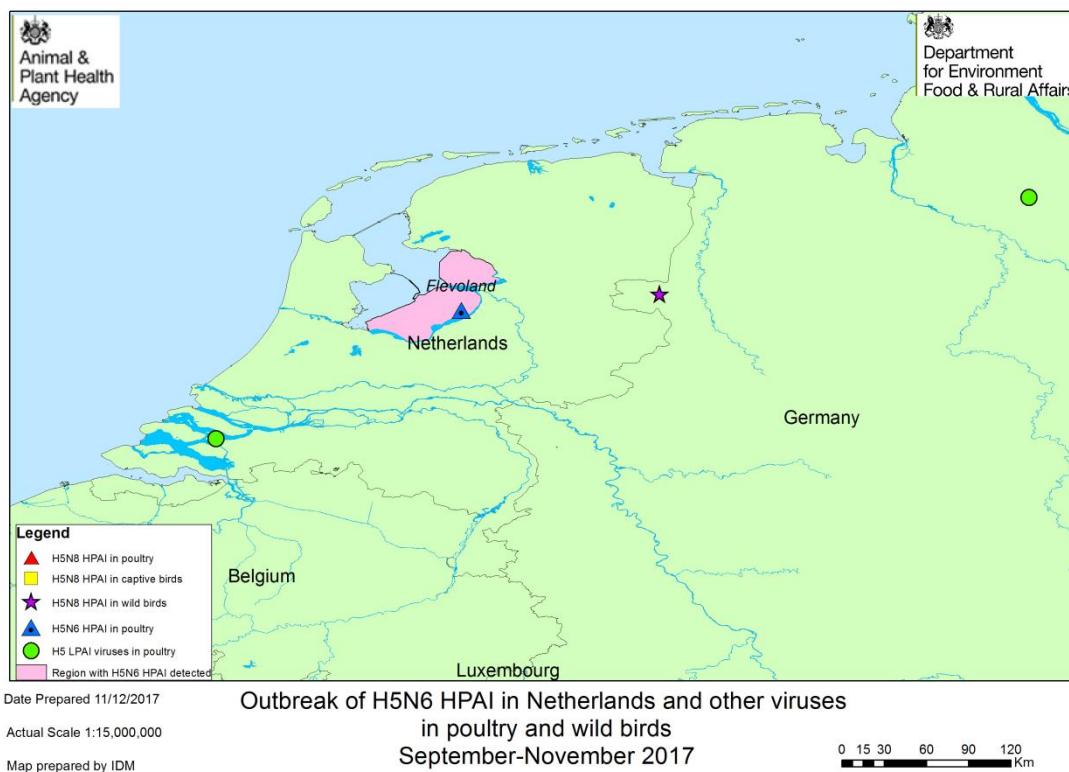
Highly Pathogenic Avian Influenza in Europe

11th December 2017

Ref: VITT/1200 Avian Influenza in Europe

Disease report

On the 8th December, Netherlands reported an outbreak of H5 Highly Pathogenic Avian Influenza (HPAI) in ducks in Flevoland. The virus has since been confirmed as H5N6 HPAI a probable new incursion to Europe since the only previous report of this virus subtype was in February 2017 in a single poultry outbreak in Greece. According to the national reference laboratory, the farm was also infected last year, with H5N8 HPAI. Further definitive analyses of the virus is awaited to identify precise origins and possible zoonotic risk but preliminary genetic analysis shows this virus is not closely related to sporadic zoonotic H5N6 HPAI strains which have been circulating in poultry and wild birds in Eastern Asia, instead this is a reassortant between H5N8 and a low pathogenicity H5N6 virus (Wageningen University, 2017).



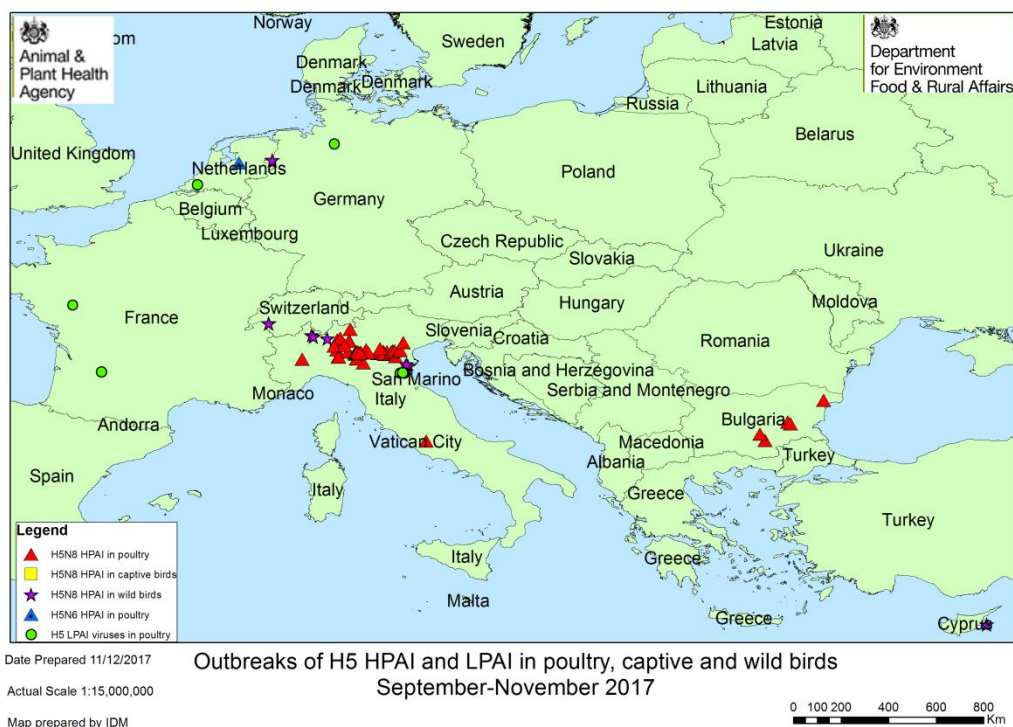
Sixteen thousand meat ducks (both 4-week-old and 4 day old) were present at the premises and disease control measures have been put in place including stamping out, cleansing and disinfection and 3 /10 km restriction zones. Other premises in the 3km zone

were immediately tested and all results are negative. In addition, the Dutch Authorities have required all commercial poultry premises to house birds, for owners of hobby and captive birds to prevent contact with wild birds and for additional biosecurity for transport (including a ban in the 10km zone for movement of poultry products, manure or live birds) and other potential risk pathways. There is also a ban on the shows and exhibitions of ornamental poultry and waterfowl. The map above also indicates the major water sites in the region where wild waterfowl are likely to congregate.

Situation assessment

Since our last update on 22nd October 2017 reports of H5N8 HPAI in Europe have continued albeit at a reduced rate in just four countries including Russia. Italy has been most affected with 27 more outbreaks of H5N8 HPAI in November, 18 of which were in a cluster in Brescia. The majority of these outbreaks were in the north of Italy, but one was further south in central Italy (Roma) involving a flock of backyard layers. In all cases, disease control measures were rapidly put in place. The two cases in Ferrara involved wild birds, including a Greylag goose (*Anser anser*), a feral pigeon (*Colomba livia*) and a kestrel (*Falco tinnunculus*). More information on the individual infected premises can be found at the website of the Italian national laboratory (IZSV, 2017).

Germany last reported H5N8 HPAI on the 23rd October with a finding in a wild Mallard near the border with the Netherlands. Encouragingly no further cases have been reported. Bulgaria reported three more outbreaks in commercial ducks in November. Russia reported an outbreak of H5N8 HPAI in village birds in Rostov (just east of the Ukraine) in mid-November (not within the scale of the map below).



Many of the wild migratory waterfowl have now arrived to overwinter in northern Europe and the UK from their breeding grounds in Central and North Eurasia. Indeed many wigeon started arriving in the UK in September. Compared to the situation at this time in 2016, the outlook for H5N8 in Central Europe is much more favourable with relatively fewer cases in wild birds. With the exception of the wild duck case in Germany on the 23rd October, all the wild bird outbreaks (and poultry outbreaks) reported in Europe since the last report are south of the main migratory waterfowl flyway to the UK (see map). Thus, on this basis, it appears less likely that wild birds will bring H5N8 to the UK from these southerly regions of Europe. However we cannot rule out that the wild birds are succumbing to infection but outcomes such as high mortality (as observed last year) is not occurring because many birds in the population are likely to have been exposed last year and survived infection.

Although new incursions of H5N8 HPAI through wild bird migration to Europe remain a continuous risk up until February, the increase in detections anticipated since the last report has not materialised in November at least but other factors such as cold weather movement also need to be considered. It is possible that local maintenance of H5N8 virus could still be occurring at sites in northern Europe from October and spread via other routes such as ongoing outbreak locations in Italy and Bulgaria. The latest case of H5N6 in the Netherlands is a significant new event that merits close monitoring of any developments. Furthermore, a cold winter in Central Europe would encourage more waterfowl to migrate west and into the UK up until February and freezing temperatures in the UK (as being experienced at present) could mean waterfowl move away from coastal sites to more sheltered inland areas.

Conclusion

The EURL at Weybridge has the necessary diagnostic capability for this strain of virus.

Given the uncertainty in the distribution and prevalence of H5N8 in wild birds in northern Europe and the new evidence of a single outbreak with H5N6, it is appropriate to keep the risk level at **"MEDIUM"** for the present but keep under continuous review. The risk for poultry remains **"LOW"** for introduction of infection onto individual premises, but will depend on levels of biosecurity which we recommend should be increased, particularly for seasonal fattening farms of poultry.

We strongly recommend that all poultry keepers (including backyard keepers) review their biosecurity measures and business continuity plans now, as the risk level may well increase in the coming weeks. They should familiarise themselves with government guidance on good biosecurity and how to report suspicion of disease appropriately.

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

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

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References

IZSV (2017) Avian Influenza in Italy: updates. <http://www.izsvenezie.com/avian-influenza-italy-updates/>

Wageningen University (2017) Bird flu in Biddinghuizen [in Dutch]. <https://www.wur.nl/nl/Expertises-Dienstverlening/Onderzoeksinstituten/Biovetinary-Research/show-bvr/Vogelgriep-in-Biddinghuizen.htm>



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