Disease report

An emerging reassortant H5N6 highly pathogenic avian influenza (HPAI) virus has been circulating in wild birds in NW Europe in recent months (Defra, 2018). This is an update on the current findings for HPAIV H5N6 in the UK and Europe, and also includes an assessment of a number of outbreaks of low pathogenicity avian influenza virus (LPAIV) reported recently in poultry across France.

It is important to note that to date there have still been no detections of H5N6 HPAI in poultry, either the commercial or non-commercial sectors in the UK. The UK is therefore still officially free of HPAI.

The only outbreak in commercial poultry was detected in Netherlands in December 2017 and was swiftly controlled with no secondary spread.

This report is to inform readers of the ongoing likelihood of more findings in wild birds and the need for strong biosecurity to continue to prevent incursions into poultry farms and backyard poultry.
Situation assessment

Previously there have been six findings of HPAIV H5N6 in wild birds in England, but none in Wales, Scotland or Northern Ireland, despite widespread testing of wild birds. Since the last report (January 2018), there have been a further five outbreaks in wild waterbirds in England. The recent findings are:

1. The River Thames at Windsor, Berkshire – five (out of seven) mute swans (Cygnus olor)
2. Hampton Water in Surrey – two unspecified avians
3. Thames river at Kingston, Greater London – one mute swan
4. Rye Mead RSPB site, Hertfordshire – one tufted duck (Aythya fuligula)
5. Napton Reservoir, Warwickshire – one mute swan
6. Lake near Uffington, Oxfordshire - one mute swan

This takes the current total of events with HPAI H5N6 in wild birds in England to 12. As with the previous wild bird events, these findings are at sites with high numbers of waterfowl and other water birds. To date preliminary results indicate that a single strain of H5N6 HPAI is associated with these infections.

The wild waterfowl migration to the UK will now have peaked for this winter in terms of numbers of overwintering waterfowl although the birds will remain at their wintering sites till next month at least, before returning to their breeding grounds in late March/April.

Wild bird surveillance continues and the map below shows the locations of samples taken for testing from found dead wild birds. These are locations rather than individual birds and therefore there may be more than one bird sampled at each location.

In addition the first finding of H5N6 HPAI has been reported in Ireland in a white tailed sea eagle (Haliaeetus albicilla) found dead on the shore of Lough Derg in County Tipperary on 31 January 2018. The bird had been part of a re-introduction project and its tracking data suggests that it had been in the immediate area where it was found dead since 23 January. This area holds large numbers of waterbirds (wildfowl and waders) in winter. The dead eagle
was a juvenile female hatched at a nest near Mountshannon, Co. Clare, in July 2017. White-tailed eagles both hunt and scavenge waterbirds and could have been infected through this route. The Republic of Ireland Government have advised the poultry industry to increase biosecurity measures, but are not considering compulsory confinement of birds at this time, although the situation will be reviewed over the next few days.

Between December and February, five cases of H5N3 LPAI and four of H5 LPAI were reported in commercial duck farms in Gers, Loire Atlantique, Lot and Garonne, Morbihan and Vendee regions, and two H5N3 LPAI in turkey breeding farms in Maine et Loire, west and southwest France. The infected ducks did not present any clinical signs, the infection being detected by screening prior to moving into a gavage unit. In addition, a case of H5N2 LPAI was also detected in fattening ducks in the Landes region. These latest detections show that the surveillance in France is working: early detection of LPAI virus strains in regions of high poultry density where there are multiple contact routes is important to limit incursions and maintenance of LPAI in these wider regions.

Mutation of H5 LPAI to HPAI is a relatively rare event, but further virus diversity may arise through LPAI viruses reassorting with HPAI strains (especially in wild waterfowl populations), where both are circulating, as suggested for the emergence of the H5N6 HPAI strain in Europe, also making the early detection of LPAI virus strains a critical tool in controlling these risks.

Conclusion

The EURL at Weybridge has the necessary diagnostic capability for these strains of virus, whether low or highly pathogenic.

Given that HPAIV H5N6 infection is now present in wild birds at a number of sites across England, the probability that further events will occur in wild birds in the UK is assessed to remain as “HIGH”. It is not possible to be certain at what time point in the H5N6 epidemic curve these current wild bird cases represent. Thus, further outbreaks could include as yet undetected ongoing infections at other sites in the UK and also future infections through movement of birds from currently-infected sites to new sites. Since the wild waterbird migration has peaked it is now less likely that H5N6-infected birds will be entering the UK from Europe but local movement between sites may be influenced by colder weather. Indeed, as the birds start to migrate north next month, some cases may occur further north in the UK. The presence of LPAIV in western France currently presents a “LOW” risk of entry to the UK through wild birds. This is because LPAIV has not yet been detected in wild birds in France and birds will not be migrating north from France until April/May.

On the basis of the presence of multiple H5N6-infections in wild birds, and the HIGH risk of further wild bird findings, Avian Influenza Prevention Zones are now in place across England and Wales meaning that poultry keepers must maintain enhanced biosecurity (excluding housing, but using every other means to prevent contact with wild birds). The risk of introduction of infection onto individual poultry premises in the UK remains “LOW”
for those poultry farms which have strong biosecurity measures in place, but “MEDIUM” for those with poor biosecurity.

We strongly recommend that all poultry keepers (including backyard keepers) should familiarise themselves with government guidance on good biosecurity and how to report suspicion of disease appropriately.


We ask that the public use the Defra helpline (Tel: 03459 33 55 77) to report findings of dead wild birds. In particular, reports of wild ducks, wild geese, swans, gulls or birds of prey should be reported to Defra.

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References


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