Department for Environment, Food and Rural Affairs

Updated Outbreak Assessment #4

High pathogenicity avian influenza (HPAI) in Great Britain and Europe

30 October 2024

Disease report

Since our previous outbreak assessment on 7 October 2024, there have been no new reports of high pathogenicity avian influenza (HPAI) H5 clade 2.3.3.4b in domestic poultry in Great Britain (England, Scotland and Wales). There have, however, been 15 more HPAI H5 clade 2.3.3.4b events involving 26 “found-dead” wild birds in Great Britain. Of these, 25 were HPAI H5N5 with 1 case of HPAI H5N1. The majority of the H5N5 cases were found at coastal locations in Scotland and northern England. However, further to the H5N5 case in released pheasants in Worcestershire reported previously, more cases of H5N5 have been reported in wild birds in the south in locations such as Carmarthenshire, Norfolk, Lincolnshire and Worcestershire (see Map 1 for wild bird cases since 1 October 2024). Although there have been no confirmed Infected Premises (IPs) since mid-February 2024, there have been significant changes in the disease process which support increasing the risk of HPAI H5Nx incursion in wild birds in Great Britain from medium to high. These changes include the first report this season of HPAIV H5N1 in Great Britain, in a found-dead wild goose (a non-migratory species) at an inland site in Yorkshire, and an increase in the number of wild bird cases of HPAIV H5N5 in Great Britain, with spread to non-marine wild bird species (mallards and scavenging bird of prey species) at inland sites together with the ongoing inbound autumn migration of Eurasian ducks, geese and swans through continental areas where HPAI H5N1 positive reports have increased significantly in the last month.

At this time of year, it is considered that the increase in the wild bird risk from medium to high, naturally increases the risk of HPAI H5 incursion to poultry. The risk level for HPAI H5 incursion in poultry:

- with stringent biosecurity is increased from very low (very rare but cannot be excluded) to low (rare, but does occur) with low uncertainty and
- with non-stringent or suboptimal biosecurity is still low (rare but does occur) but heightened and with high uncertainty.

Across Europe, HPAI H5 reports in wild birds have broadly increased with a sharp increase from 29 cases in Week 40 to 54 cases in Week 42. There have also been cases reported in captive birds in Europe, in Czechia, Austria, France, Moldova and Slovenia. In

addition to wild bird cases and reports in captive birds, there have been outbreaks of HPAI H5 in poultry in coastal areas of France and outbreaks of HPAI H5N1 in poultry reported in Austria, Bulgaria, Czechia, Hungary, Italy, Poland and Slovakia.

There have been no further reports of HPAI H5 in mammals in Europe.

Situation assessment

Here, an HPAI H5Nx event refers to a report of HPAI in poultry, or a location with at least one HPAI H5Nx positive wild bird. Individual HPAI H5Nx positive wild birds are referred to as cases.

Great Britain

Since last outbreak assessment on 7 October 2024 (to 30 October 2024), there have been no infected premises (IP) confirmed with HPAI H5Nx in poultry in Great Britain. The last IP in Great Britain was confirmed on 14 February 2024.

Wild birds

Between 7 October 2024 and 30 October 2024, HPAI H5N5 has been reported in 25 found-dead wild birds in Great Britain across 15 locations in 11 counties. These are presented by county in Table 1 with locations shown in Map 1. There are cases in the three administrations of England, Scotland and Wales. The majority of these HPAI H5N5 wild bird cases are still at coastal locations, though there are now two inland cases in England.

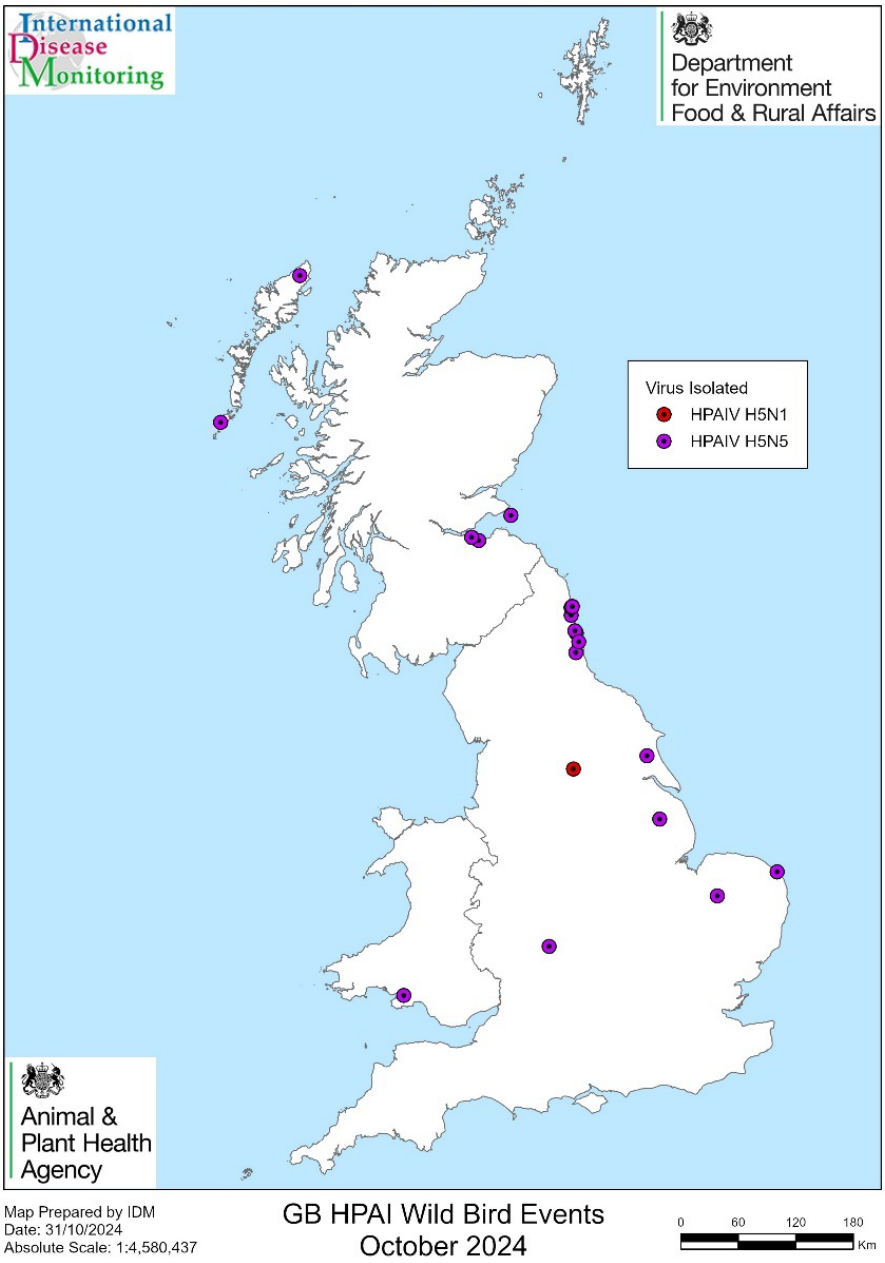
Additionally, there has been one report of HPAI H5N1 in a greylag goose at an inland site in West Yorkshire (Table 1, Map 1). Genomic analysis has shown the HPAI H5N1 case to be a new detected genotype in Great Britain and considered likely to be due to a new incursion of the virus from the European continent.

Table 1 – Summary of wild bird species with HPAI H5 by county from 7 October 2024 to 30 October 2024 in Great Britain. All are HPAI H5N5 except the greylag goose in West Yorkshire, which is HPAI H5N1.

County	Bird species
Lincolnshire	Common buzzard (1)
Northumberland	Black-head gull (3), Great black-backed gull (2), Herring gull (6)
Yorkshire	Greylag goose (1)

County	Bird species
Worcestershire	Common buzzard (2)
Norfolk	Red kite (1), Cormorant (1)
Eileanan an Lar	White-tailed eagle (1), Great black-backed gull (2)
Lothian	Gannet (2)
Tyne and Wear	Herring gull (1), Black-headed gull (1)
Fife	Great black-backed gull (1)
East Riding and North Lincolnshire	Herring gull (1)
Carmarthen	Mallard (1)

Although the majority of the wild bird cases found dead were single wild birds, some were single birds sent in from mortality events with between 3 and 28 birds.



Map 1. Wild bird positive cases for HPAI H5Nx across Great Britain from 01 October 2024 to 30 October 2024.

It should be noted that there is a variable lag period between the collection of found-dead wild bird and the reporting of results due to sampling and testing.

It is important to note that these surveillance figures for Great Britain are based on passive surveillance of found dead birds reported to Defra by the general public and as such, may be affected by several factors including frequency of visiting areas with bird populations, the potential for immunity in the wild bird population (which may result in fewer birds developing clinical disease and or dying with HPAI), variable surveillance system sensitivity, as well as the size, location and accessibility of carcasses, meaning that this

wild bird surveillance does not necessarily capture all of the cases that occur. We will continue to monitor the situation closely. For further details, please see the report (updated weekly) on findings of HPAI in wild birds in Great Britain and HPAI in wild birds in Northern Ireland.

Europe

Over the summer, the number of positive reports of HPAI H5 in Europe was relatively low at about 3 to 4 per week (EURL Avian Flu Data Portal (izsvenezie.it)). From early-September (week 36), the number of reports per week steadily increased to 25 to 29 per week with a marked increase in mid-October (week 42) when there were 54 positive reports across Europe (Figure 1). These positive reports are roughly half wild birds and half poultry and captive bird outbreaks. The number of reports dropped in week 43 to 23 (Figure 1), although there can be a variable lag period with processing reports and this number may change.

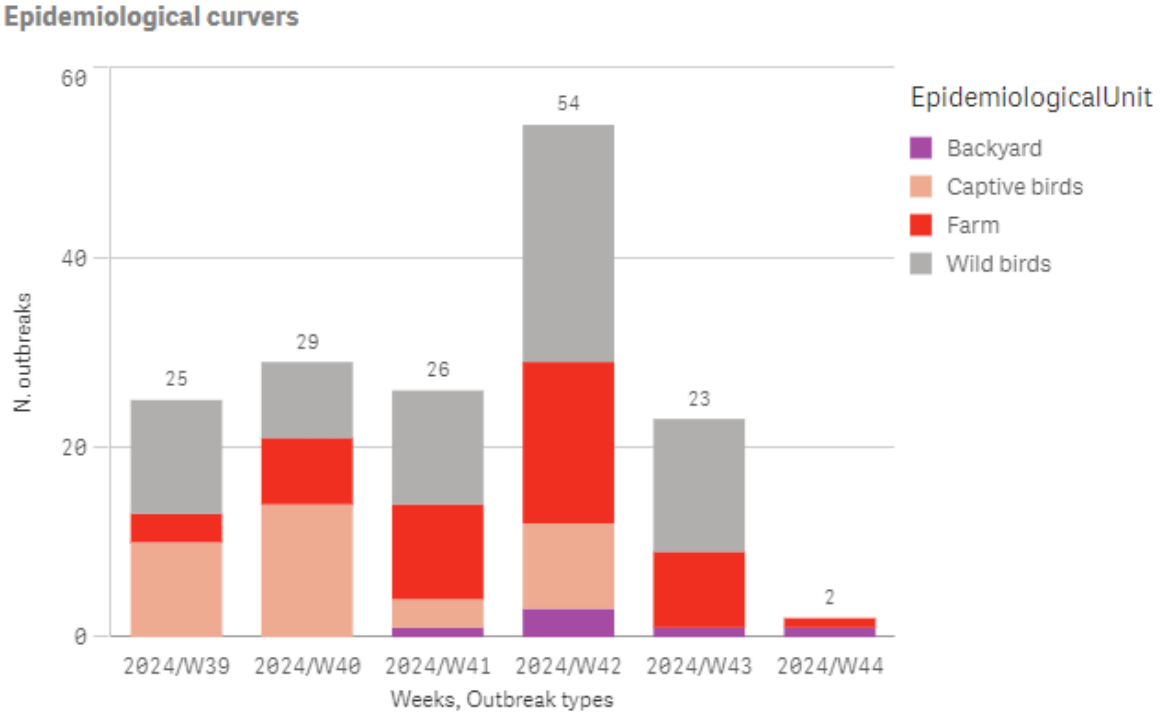
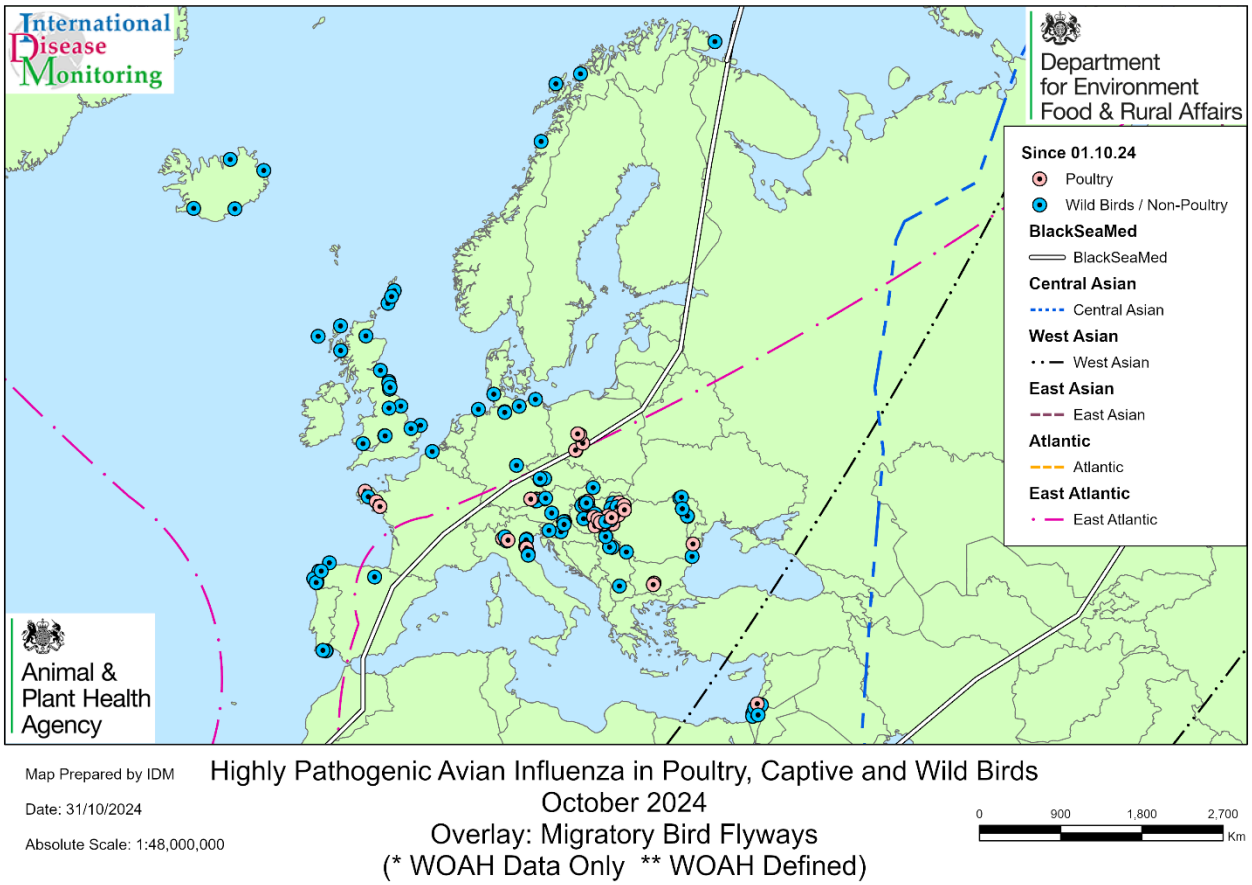


Figure 1. Weekly outbreaks of HPAI in poultry and captive birds and cases in wild birds reported across Europe between week 39 (Late September 2024) and week 44 (Late October 2024) (IZSVe, 2024).

Compared to 2023 (HPAI in Europe #48), there were only 6 positive reports in Europe for week 42 compared to 54 for week 42 in 2024 (Figure 1). In 2023 the number of positive reports peaked at 67 in week 46 falling to just 9 in week 50. The geographical distribution of wild bird and poultry cases in Europe from October 2023 to December 2023 was similar to that currently in 2024 with positive reports across the Balkans, into Austria and north-

east Italy, also along the north coast of Poland, Germany and Denmark, southern Norway and Sweden and in the Iberian Peninsula (HPAI in Europe #48). This year there are generally more reports than at the same time in previous years, and there are fewer wild bird cases this year in southern Scandinavia compared to last year. While H5N5 was decreasing in Scandinavia and Iceland by December 2023, the trajectory this year is not clear.



Map 2. Map showing HPAI events in domestic poultry and wild birds in Europe reported by WOAH between 1 October and 30 October 2024 (WOAH, 2024) cases and outbreaks are observed across Europe, as described in the main body of this report.

Between 7 October 2024 and 30 October 2024, there were a total of 159 HPAI H5 events reported by WOAH in domestic poultry, captive birds and non-poultry including wild birds across Europe. The majority of these occurred in central and eastern Europe. In total, there were 71 reports on WOAH in wild birds. These were seen mainly in gulls, geese and swans. All species are set out in Table 2.

Table 2: Wild bird cases of HPAI H5 in Europe reported on WOAH since 07 October 2024 (to 30 October 2024). Number of cases in parentheses.

Country	Wild bird species (WOAH data only)
Austria	Mute Swan (5) Greylag Goose (1).
Belgium	Mew Gull (2)
Germany	Anatidae (unidentified) (17), Swan (unidentified) (12), Pelican (incognita) (2), Alcidae (unidentified) (1), Laridae (unidentified) (1),
Hungary	Greylag Goose (8), Mute Swan (8), Eurasian blackcap (1), Mallard (1)
Iceland	Common raven (3), Black-headed gull (4)
Italy	Mallard (3), Eurasian Teal (8), Eurasian Wigeon (1)
Norway	Herring gull (3), White-tailed Eagle (1), Great Black-headed Gull (1)
Portugal	White Stork (3), Yellow-legged Gull (1)
Romania	Mute Swan (1)
Serbia	Mute Swan (11)
Slovakia	Grey Heron (1), Mute Swan (15)
Slovenia	Mute Swan (12)
Spain	Herring Gull (3), Yellow-legged Gull (19),

Since 7 October 2024 to 30 October, there have been 62 reports of HPAI H5 in domestic poultry farms in Europe on WOAH. HPAI H5N1 has been reported in Austria (1), Bulgaria (2), Czech Republic (1), Germany (1) Hungary (38), Italy (8), Poland (8), Romania (1), Slovakia (2). HPAI H5Nx has been reported in poultry in France (4).

Outbreaks of HPAI H5N1 in non-commercial, non-poultry* have been reported in France (1), Austria) (1), Czech Republic (3), Moldova (15), North Macedonia (1) and Slovenia (1)

(1) and France (1). Only the reported case in France is located near to coastal areas, predominately cases have occurred in central and eastern Europe.

France has raised their risk level to 'Moderate' from 'Negligible' since our last update. As a result, prevention and biosecurity measures for poultry farms are being reinforced. The reasoning behind this change was the increased detection of HPAI in Europe in both wild and farmed birds. Mandatory vaccination has begun again on holdings of more than 250 ducks in October. In Germany, the entry, spread and further spread of HPAI H5 viruses in waterfowl populations is assessed as 'High'. Some areas of Germany are considered to be high risk and low uncertainty in areas of the Baltic Coast, Hamburg and eastern and southeastern Germany.

There have been no new cases of HPAI reported in mammals in Europe since our previous update on 7 October 2024.

Implications for Great Britain

There are 2 main trends of relevance for HPAI H5 in wild birds in Great Britain currently. These are the south-easterly spread of HPAI H5N5 through northern Europe and the westward spread of HPAI H5N1 through central and eastern Europe.

After a quiet summer with no reported H5N5 cases in northern Europe, October has seen a south-east spread of HPAI H5N5 cases in wild birds through Great Britain and on to the coast of Belgium (a common gull) and Germany (an auk species). In the north, Iceland has reported four wild bird H5N5 cases (1 black-headed gull and 3 ravens) and along the north coast of Norway there have been 5 wild bird H5N5 cases (4 gulls and 1 eagle) according to Animal Disease Information System (ADIS) - European Commission (europa.eu). Since our previous outbreak assessment on 7 October 2024, HPAI H5N5 continues to be detected in wild bird populations in Great Britain (Table 1). Previously, with the exception of the 20 sampled pheasants at a site in Worcestershire, these H5N5 cases in wild birds have been associated with marine ecosystems (seabirds, gull species or a scavenging kestrel at Sumburgh Head) washed ashore on the coast, or on islands around northern Scotland and Northumberland. However, in the last month there has been both inland spread (Map 1) and cases in non-marine avian species including buzzards, red kites and mallard ducks (Table 1). Thus, although the seabird breeding colonies around the coast of Great Britain dispersed in September, the HPAI H5N5 virus has also been detected inland, into terrestrial species. This change in the disease process is a concern and it is not known how much immunity previous exposure to HPAI H5N1 will provide in the wild birds, many of which will be immunologically naïve first winter birds. It is interesting to note that many geese and swans will have migrated south through Iceland to winter in Great Britain and the Solway barnacle geese which summer in Svalbard will have flown along the north coast of Norway. As such, there may be more cases of H5N5 detected in wild bird species inland in Great Britain in the coming weeks. Although (to date 30 October 2024) no

outbreaks of HPAI H5N5 have been reported in poultry, we have observed the recent even in pheasants in Worcester, which are also a susceptible indicator species for the disease.

The traditional route of entry of HPAI H5 to Great Britain has been through wild ducks, geese and swans migrating every autumn from their breeding sites in north-east Eurasia through the Baltic and Netherlands to overwinter in Great Britain. Since our previous outbreak assessment on 7 October 2024, HPAI H5N1 continues to spread west through central and eastern Europe (Map 2). Although migrating ducks, geese and swans would not fly north-west from these areas directly into Great Britain, some would have flown south-west through the eastern Baltic and west Russia through which some of those birds flying west to Great Britain may have also stopped over, providing an opportunity for mixing and disease transmission.

To date, no cases of H5N1 have been reported in the Netherlands. Germany, has reported 3 events of H5N1 in geese, 3 in swans and 1 in a gull to WOAH, with recent Plateforme reports indicating mute swans have been affected. Hungary (in addition to 38 poultry outbreaks) has reported 6 events of H5N1 in greylag geese and 6 events in mute swans. In north-east Italy (in addition to 8 poultry outbreaks) there have been 3 events of HPAI H5N1 in migratory species, namely 1 Eurasian wigeon and 2 Eurasian teal, in addition to 3 mallards which may be migratory (though they can be sedentary).

As the number of west-bound waterfowl migrants in Great Britain increases through November, the density of aggregations on the continental staging sites, as well as the large number of birds that will move from the coastal Baltic states and northern Europe to Great Britain will increase substantially the risk for HPAI H5N1 entry. This is borne out by the recent detection of HPAI H5N1 in a greylag goose in Yorkshire (Table 1). Although the greylag goose itself is unlikely to be a migratory goose, gene sequencing of the H5N1 virus suggests a new incursion of a reassortant strain from central or eastern Europe. It is anticipated that through November, wild bird cases of H5N1 may increase at short notice, with the ongoing arrival of migratory waterbirds to Great Britain.

Considering the current trends in both HPAI H5N5 and HPAI H5N1 in Great Britain and Europe, the risk of wild bird incursion into Great Britain has been increased from medium to high. At this time of year, it is considered that this increase in risk naturally increases the infection pressure on domestic poultry in Great Britain and the risk levels for poultry have therefore been raised. The risk level for poultry with stringent biosecurity is therefore increase from very low to low (with low uncertainty). It should be noted that the very low and low risk levels are very broad in range. While the risk to poultry with sub-optimal biosecurity has increased within the low risk level range, it is not yet in the medium risk level, and is best described as “low but heightened”. The uncertainty in this low risk level for poultry with sub-optimal biosecurity is therefore high.

Also in Europe, HPAI H5Nx and H5N1 are ongoing in southern Brittany (France) with 5 poultry outbreaks and the Iberian Peninsula where there have been 11 cases of H5N1 in gulls in Spain and a case of H5N1 in a yellow-legged gull in Portugal. While these events

represent a potential reservoir for over-wintering of the virus in south-west Europe, they present little risk to Great Britain at this time of year, although further consideration to this should be given early next year when gull species over-wintering in the Iberian Peninsula move up north to their breeding sites in northern Europe.

Conclusion

Since our previous outbreak assessment on 7 October 2024, there have been 25 more cases of HPAI H5N5 reported in wild birds in Great Britain. Although some of these H5N5 cases are still marine birds in coastal Scotland and coastal northern England (Northumberland) there have been cases occurring in terrestrial wild birds in inland areas in the south of Great Britain such as Norfolk, Lincolnshire, Worcestershire and south Wales. In addition, the first case of HPAI H5N1 has been detected this season, with a found-dead greylag goose in Yorkshire testing positive. From sequencing studies, it is suggested this is an incursion from central or eastern Europe where HPAI H5N1 continues to spread. With the increase in positive reports in wild birds in central and eastern Europe and the ongoing autumn migration together with the spread of HPAI H5N5 to inland, terrestrial bird species in Great Britain, the risk of HPAI H5 in wild birds in Great Britain has been raised from medium to high.

There have been no outbreaks of HPAI H5 in domestic poultry in Great Britain since February 2024. Currently, we consider the main routes of exposure to poultry would be through wild bird incursion either directly, or indirectly from fomites from wild birds introduced with biosecurity lapses. At this time of year, the increase in the wild bird risk to high naturally increases the risk of exposure to poultry and the risk levels to poultry have therefore been increased. The risk of infection of poultry in Great Britain with stringent biosecurity is now considered to have increased from very low to low, with low uncertainty. The risk to poultry where biosecurity is non-stringent and there are biosecurity breaches is still considered to be in the low risk level range, but heightened, and therefore with high uncertainty. Here we consider stringent biosecurity to be the highest standards of biosecurity, which are applied by premises in the poultry compartments scheme including air and door locks, shower in – shower out facilities and pristine areas in the poultry sheds as defined previously in the scientific opinion on the incursion of HPAI H5N1 into housed or not housed poultry flocks and captive birds.

We are continuing to closely monitor the situation in Europe and to review the risk.

It is particularly important that stringent adherence to good biosecurity practices is maintained, particularly in the coming weeks as wader bird species and then migratory ducks, geese and swans haven started to arrive in Great Britain for the autumn and winter.

Advice for working with birds

Reinforcement of good biosecurity awareness behaviours and practices should be frequently communicated to all personnel working with birds.

Any lapse of these measures could still result in disease being introduced to poultry and captive birds.

This could be by direct or indirect contact with wild birds.

Direct contact includes wild birds getting into housing or onto the range.

Indirect contact with wild birds includes faecal contamination of:

- feed
- water
- bedding
- equipment
- vermin
- clothing (including footwear of people in contact with infected birds or contaminated environment including flood water)

Special consideration should be made when bringing in equipment and materials, especially bedding and outer packages which may have become contaminated following environmental exposure whilst stored outside.

If you keep poultry (including game birds or as pets), you should follow our biosecurity best practice advice on GOV.UK.

Remain vigilant for any signs of disease in your flock and report any suspicious clinical signs of avian influenza to the Animal and Plant Health Agency. Contact

- 03000 200 301 in England
- 0300 303 8268 in Wales
- your local field services office in Scotland

Further guidance about avian influenza, including updated biosecurity advice for poultry keepers in:

- England is available on GOV.UK
- Wales is available on the Welsh Government's website
- Scotland is available on the Scottish Government's website
- Northern Ireland is available on DAERA's website

The WOAH, Food and Agriculture Organisation (FAO) International Reference Laboratory and the UK National Reference Laboratory at Weybridge have the necessary diagnostic

capability for strains of avian influenza virus, whether of low or high pathogenicity, and continually monitor changes in the virus on a wide scale, whilst utilising global networks to gain early insights into epidemiological trends and potential emergence of new genotypes which might change the risk profile.

We will continue to report on any updates to the situation in Europe and, in particular, any changes in disease distribution or wild bird movements which may increase the risk to the UK.

In England, Scotland and Wales, any findings of the following dead wild birds found at the same location at the same time should be reported online (https://www.gov.uk/guidance/report-dead-wild-birds) or to the Defra wild bird helpline on 03459 33 55 77:

- 1 or more dead birds of prey (such as an owl, hawk or buzzard)
- 1 or more dead swans, goose or duck
- 1 or more dead gulls
- 5 or more dead wild birds of any species (not including gulls)

It is advisable that you do not touch these birds.

Authors

- Megan Arter-Hazzard
- Dr James Aegerter
- Dr Lauren Perrin
- Dr Paul Gale
- Dr Mary Nelson

References

All outbreaks and cases were taken from the World Organisation for Animal Health (WOAH). Please note that changes in format and level of detail are due to the change of data source for this report, from EU's Animal Disease Notification System (ADNS) to World Organisation for Animal Health (WOAH).

- Anon (2024) Confirmation of avian influenza in a Breton farm | Successful poultry (reussir.fr)
- DAERA (2024) Department of Agriculture, Environment and Rural Affairs Avian influenza information page
- IZSVe (2024) EURL Avian Flu Data Portal (izsvenezie.it)
- WOAH (2024) WAHIS (woah.org)

This publication is available at https://www.gov.uk/government/collections/animal-diseases-international-monitoring.

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