

Updated Outbreak Assessment #48

High pathogenicity avian influenza (HPAI) in the UK and Europe

18 December 2023

Disease report

Since our last outbreak assessment on 01 November 2023, there has been four further reports of high pathogenicity avian influenza (HPAI) H5 clade 2.3.3.4b in domestic poultry in the United Kingdom (UK). Three outbreaks were at commercial premises in England, and one was on a backyard holding in Scotland. There have been 8 HPAI H5 clade 2.3.3.4b events involving “found-dead” wild birds in Great Britain (GB) since our last assessment.

Weekly numbers of found-dead wild bird cases continue at low levels in GB each week and the **wild bird risk** level remains at **medium** (occurs regularly). The risk to **poultry with stringent biosecurity** remains at **low, with low uncertainty**, and the risk to **poultry with suboptimal biosecurity** also remains at **low, but the uncertainty has been raised from medium to high**. This is because of the outbreaks in poultry with suboptimal biosecurity in recent weeks, in addition to an observed increase in wild bird reports in Europe and the uncertainty associated with whether more wild birds will fly in from Europe in the coming weeks, though we are now past the peak migration period movements may still occur as a result of cold snaps and sudden drops of temperature.

Although housing measures and the strengthened biosecurity requirements of the Avian Influenza Prevention Zones (AIPZs) are not currently in place, a ban on poultry gatherings remains in force in Scotland and Wales (the ban was lifted in England on 23 August for Galliforme poultry, but not Anseriforme poultry).

Across Europe, HPAI H5 reports in wild birds and poultry increased exponentially over three weeks (weeks 44 to 46) before levelling out and falling to very low levels in the last few weeks. Since 01 November 2023, the World Organisation for Animal Health (WOAH) has reported 87 outbreaks of HPAI H5N1 in domestic poultry in Belgium, Croatia, Denmark, Germany, Hungary, Italy, Netherlands, Poland and Romania, all of which were commercial premises. Bulgaria and France reported outbreaks of untyped or partially typed HPAI H5 in commercial poultry. The Netherlands reported one outbreak in commercial poultry which is currently pending typing.

HPAI H5N1 events in non-poultry species, including wild birds, have been reported to WOAH from Austria, Belgium, Croatia, Denmark, Finland, Germany, Hungary, Italy, Netherlands, Portugal, Romania, Serbia, Slovenia, Spain and Sweden. In central and

eastern Europe, common cranes have been affected with mass die-offs. There were also reports of HPAI H5N5 in Germany, Iceland and Norway and untyped or partially typed HPAI in Norway and Sweden in non-poultry species, including wild birds.

There have been 39 reports of HPAI H5 in mammals in fur farms in Finland since 01 November. Species affected include Blue fox, Raccoon Dog, Silver Fox and Mink.

Situation assessment

Here, a HPAI H5 event refers to a report of HPAI H5 in poultry, or a location with at least one HPAI H5 positive wild bird. Individual HPAI H5 positive wild birds are referred to as cases.

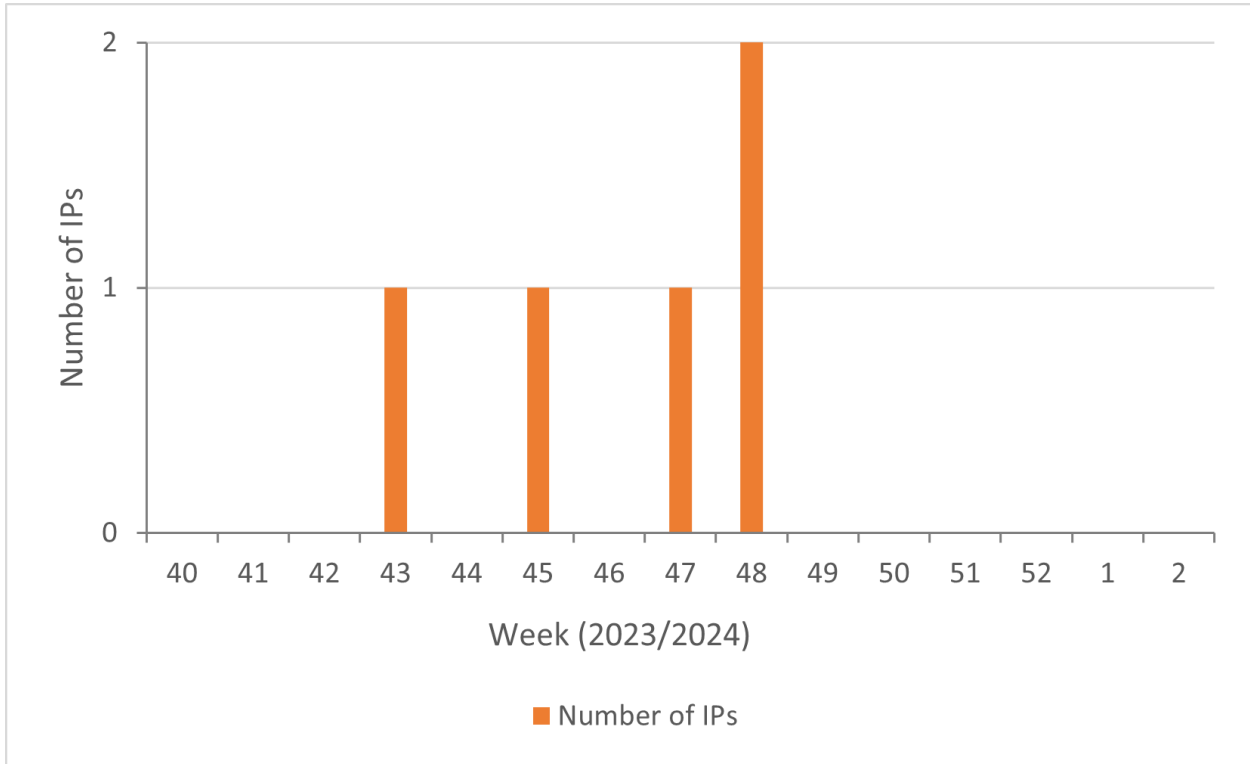
United Kingdom

Since our last report on 01 November 2023 (to 18 December 2023), four further infected premises (IPs) have been confirmed. The premises were confirmed with HPAI H5N1 in poultry¹, three of which were commercial and one a backyard holding (Figure 1). One of the commercial farms housed 11,000 turkeys in Lincolnshire, one was in Northumberland and housed 30,000 chickens, and the other in Devon housing 3,500 ducks. The backyard holding was on the Orkney Islands and housed five chickens. (Map 1).

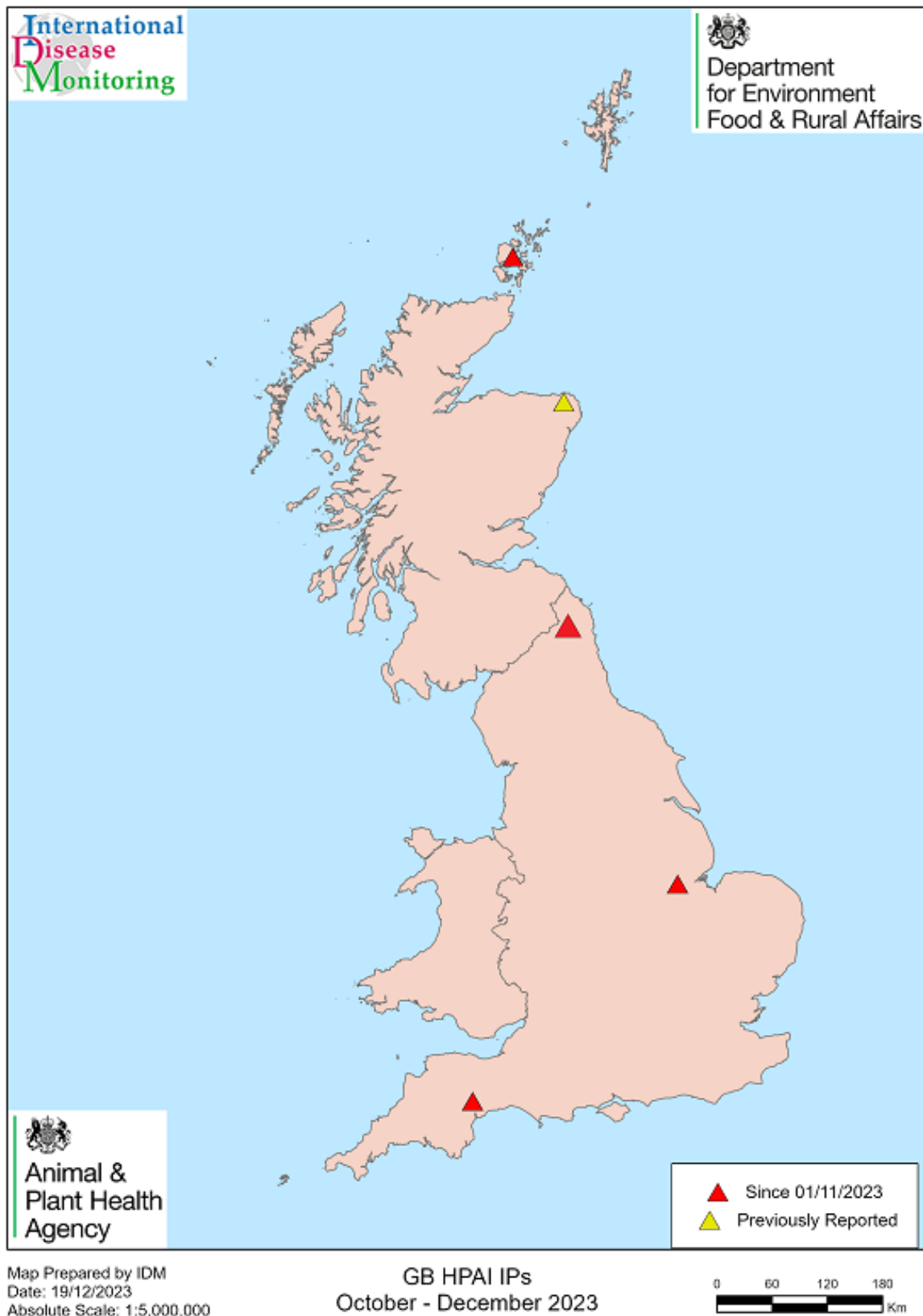
For further details, please see the reports on the latest situation regarding HPAI in domestic poultry and captive birds in [England](#), [Scotland](#), [Wales](#) and [Northern Ireland](#).

¹ According to the 2021 WOAHA definition of poultry. Terrestrial Code Online Access - WOAHA - World Organisation for Animal Health

Figure 1 Number of infected premises (IPs) confirmed with HPAI H5N1 in GB from week 40 2023 (start of October 2023) to week 51 (the most recent IP was confirmed in week 48, at end of November 2023).



Map 1. HPAI H5 outbreaks in poultry¹ and captive birds across GB, October 2023 to 18 December 2023.



¹ According to the 2021 WOA definition of poultry. Terrestrial Code Online Access - WOA - World Organisation for Animal Health

Map 2. Map showing the HPAI H5 positive findings in wild birds across GB which were confirmed between 01 October and 18 December 2023.



Map Prepared by IDM
Date: 19/12/2023
Absolute Scale: 1:4,580,437

**GB HPAI Wild Bird Events
October - December 2023**

0 60 120 180
Km

Wild birds

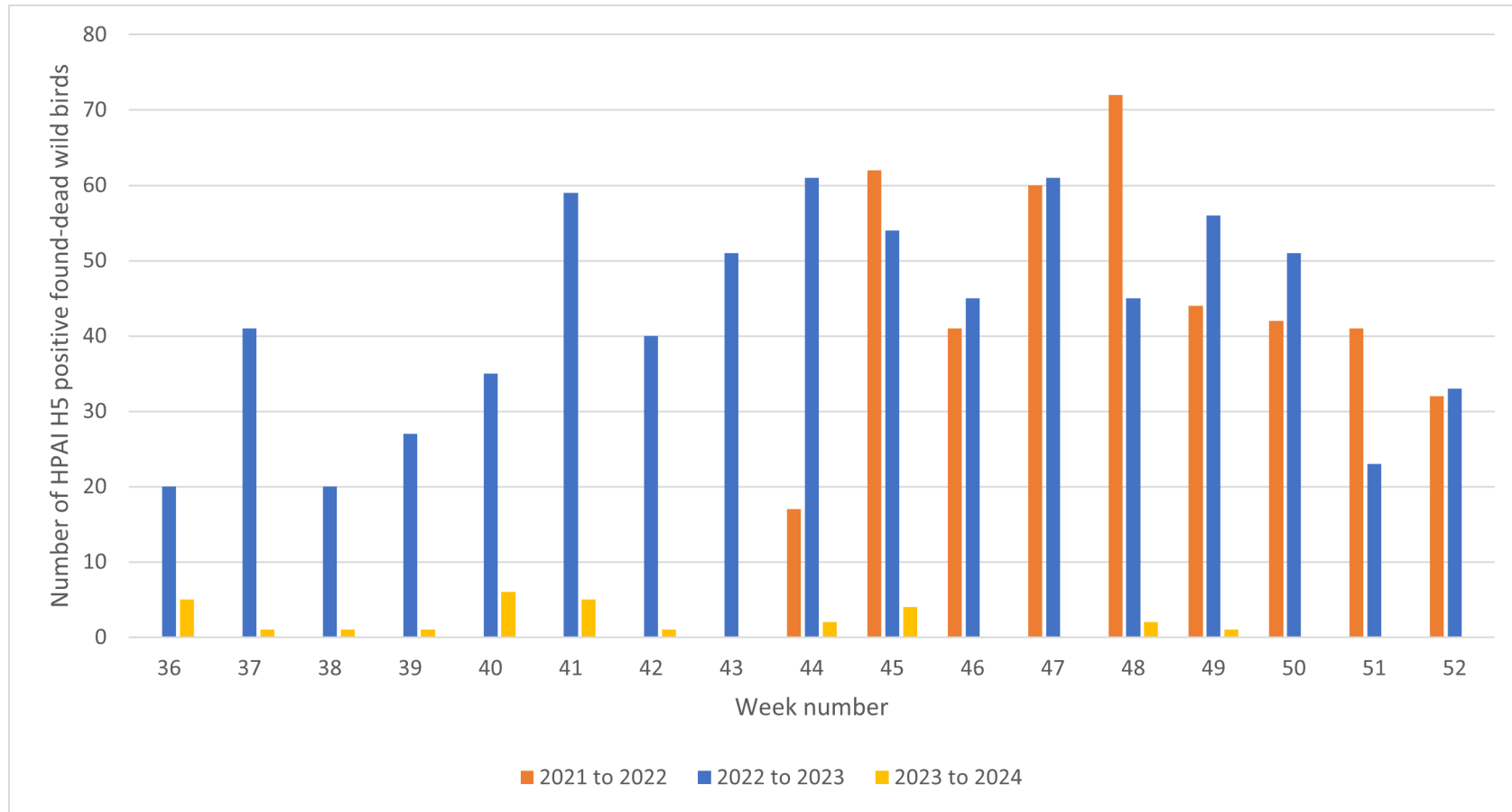
Between 01 November 2023 and 18 December 2023, HPAI H5 has been detected in 8 found-dead wild birds in 7 separate locations in GB, including 7 wild bird species (listed in Appendix 1) across 6 counties. Please note there is a lag period between found-dead wild bird reporting, collection, sampling and testing. The majority of the wild bird cases confirmed since 01 November 2023 were at coastal locations (Map 2). Of these, 5 of the findings were confirmed as HPAI H5N1 (3 in England and 2 in Scotland), 2 were confirmed as HPAI H5N5 in England, and 1 was confirmed as HPAI H5Nx in England. (See Appendix 1).

It is important to note that these surveillance figures are based on passive surveillance of found dead birds and as such, may be affected by several factors including frequency of visiting areas with dead birds, sensitivity (discussed below) as well as the size and location of carcasses, meaning that this wild bird surveillance does not 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 GB and [Northern Ireland](#).

Non-avian wildlife

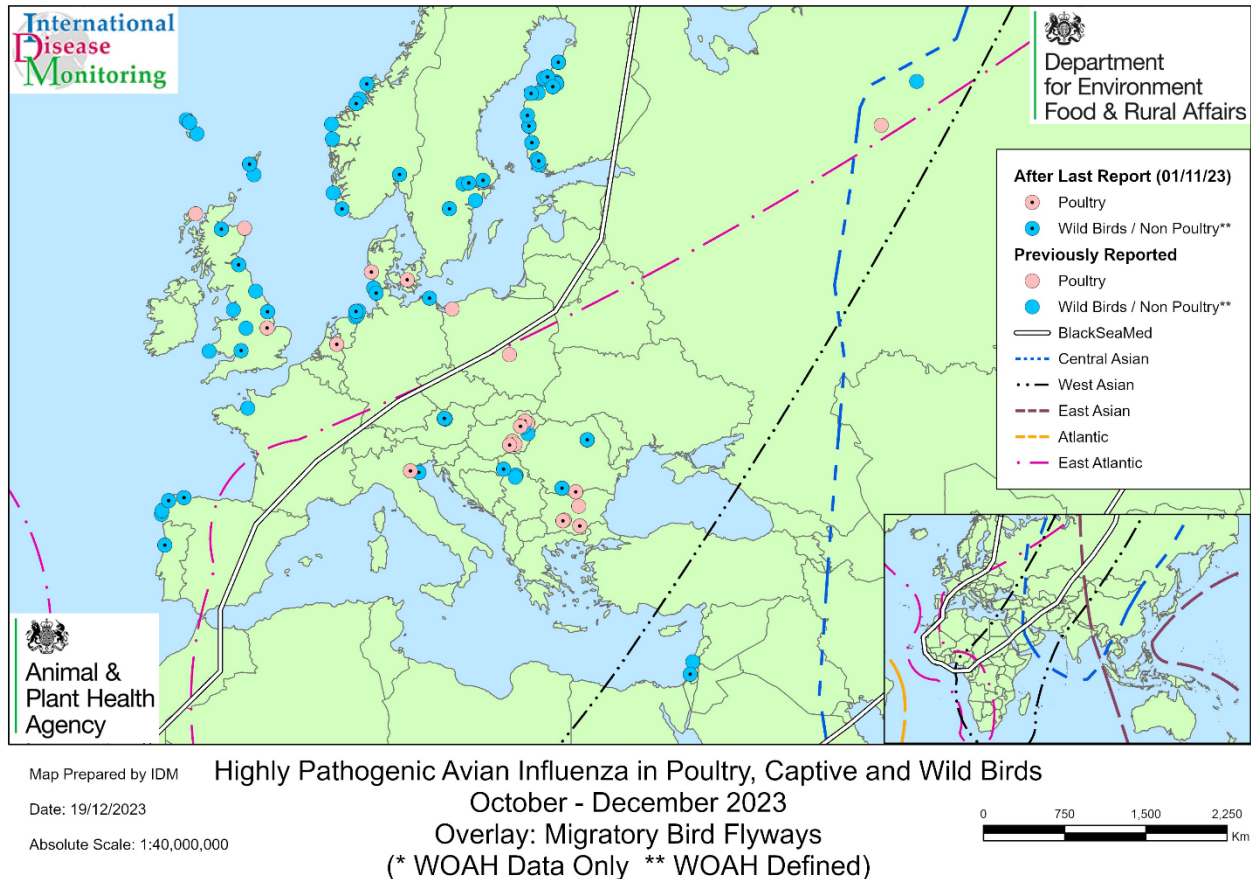
Since 01 November, there have been no further positive HPAI H5N1 detections in non-avian wildlife in GB. For further details and for previously reported detections in wild mammals, please see the report on findings of [HPAI in non-avian wildlife](#) in GB. For further details and for previously reported detections in non-avian wildlife from retrospective testing, please see the report on findings of [HPAI in non-avian wildlife](#) in GB.

Figure 2 Wild bird HPAI H5 positive cases per week across GB between 2020 and 2023 from week 36 (beginning of September) to the end of week 52 (end of December).



Europe

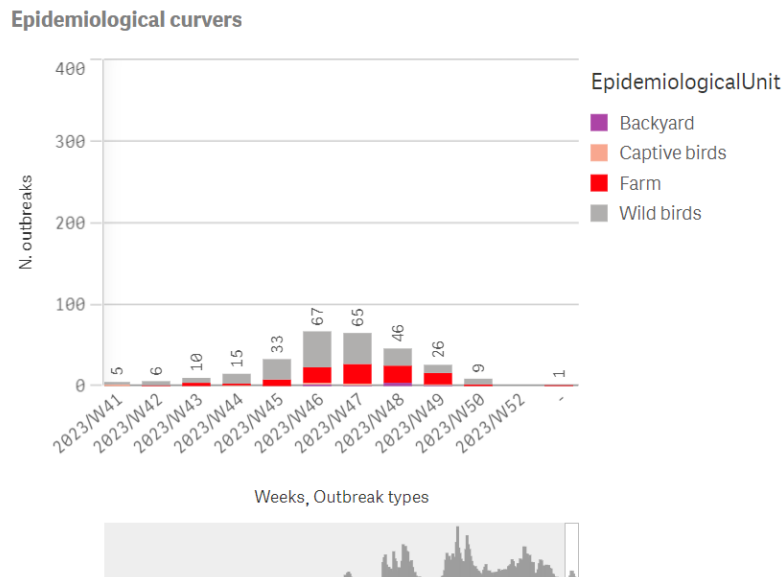
Map 3. Map showing HPAI H5 events in domestic poultry and wild birds in Europe reported by WOAHA between 01 October and 18 December 2023 (WOAH, 2023).



Between the 01 November and 18 December, there were a total of 278 HPAI H5 events reported by WOAHA in domestic poultry and non-poultry including wild birds (and mammals) across Europe. Most of these occurred at inland locations in the Balkans along with coastal wild bird reports in Scandinavia and north-west Spain (Map 3). Outbreaks of HPAI H5N1 were reported in domestic poultry in Belgium (2), Croatia (1), Denmark (3), Germany (9), Hungary (63), Italy (4), Netherlands (2), Poland (2) and Romania (1). Outbreaks of HPAI H5Nx were reported in Bulgaria (6) and France (1). One outbreak, which is pending typing, was reported in the Netherlands.

A total of 174 HPAI H5N1 events were reported in non-poultry including wild birds in Europe: Austria (10), Belgium (1), Croatia (1), Denmark (9), Finland (39), Germany (23), Hungary (34), Italy (12), Netherlands (20), Portugal (2), Romania (6), Serbia (7), Slovenia (1), Spain (4) and Sweden (5). Cases of HPAI H5N5 were reported in non-poultry including wild birds in Germany (1), Iceland (3) and Norway (1). Cases of HPAI H5Nx were reported in Norway (3) and Sweden (1).

Figure 3. Weekly outbreaks of HPAI in poultry and captive birds and cases in wild birds reported across Europe between week 41 (mid-October 2023) and week 50 (mid-December 2023) (IZSVE, 2023)



Though there are a lower number of cases being reported this year than in the last two years, there has still been an observed increase in the number of reports across Europe in through November in to December, reaching a peak of 24 in week 46, and steadily decreasing over the last 2 weeks. (Figure 3). In response to the increased infection pressure and larger wild bird populations following migration, several European countries have increased their risk levels and implemented disease control and mitigation measures. The Netherlands [initially lifted all of their housing and sheltering orders](#) for poultry on 3 November, only to implement regional housing orders on 11 November, and for the whole country on 14 November following 3 confirmed reports in poultry and an increase in wild bird cases. [France have raised their risk level from 'moderate' to 'high'](#) following the first outbreak of the winter on a farm in turkeys in Brittany and a second outbreak in turkeys in Somme the same week. In an effort to control HPAI, France launched a vaccine campaign in ducks in early October, with an aim to vaccinate over 60 million ducks. At the end of November, 70% of the 60 million had received their first dose and 40% were fully vaccinated. The number of cases in wild birds has followed a similar trend with cases rising to 44 in week 46, falling to 7 cases in week 50. A range of species such as birds of prey, gulls, and waterfowl are currently being detected as positive for H5 across Europe.

Implications for GB

HPAI H5 is still circulating in wild bird populations in GB, albeit at greatly reduced levels compared to the summer of 2023, and there are now some inland cases (Map 2). After an exponential increase week on week in the autumn as migration was starting, the number of positive wild bird cases in continental Europe has fallen steadily over the last three

weeks recently (Figure 3), although there are still detections. It is also worth noting that in “traditional” years in Europe there is often a peak in November through December with cases falling towards Christmas and the New Year, only to increase strongly in a large second peak in January through to February.

There are three main trends ongoing in avian species in Europe (excluding the detection of more outbreaks in fur farms in Finland). First the detection of cases of H5N5 in wild birds in Iceland/ south-west Norway and H5Nx in poultry in the Faroes has greatly reduced since November, and now is of little importance to GB because all those migratory birds (whooper swans and geese) which fly south into GB from those northern latitudes arrived several weeks ago and probably accounted for the emergence of the few cases of H5N5 detected in wild birds in GB in the autumn and more recently in gulls in north-west Germany. The second trend is the ongoing spread of HPAI H5N1 west through the Balkans and Hungary into southern Germany, Austria and northern Italy. HPAI H5 seems to spread through particular groups of wild bird species in its progression, for example seabirds in summer 2022, gulls in summer 2023 and now common cranes in central Europe this autumn. Indeed, the number of cranes affected recently is in the thousands. While this route is too far south to be of importance to GB it does represent a more general spread of HPAI from the north-east (Russia, Belarus, Ukraine) as autumn migrants fly south-west and west to their wintering grounds in southern and central Europe. Indeed, cases in gulls have been detected as far west as northern Spain and Portugal. It should be noted that France and now Denmark have increased their risk levels to high. Of more importance to GB is the third trend, namely the ongoing detection of wild bird cases in northern Germany, Denmark, the Wadden Sea, and the Netherlands. The detection of wild bird cases in these areas in September/October would have been of great concern to GB with thousands of ducks and geese migrating west through these areas. However, at this time of year in mid-December, most birds have arrived as we enter the stable, core winter period. This together with the decreasing reports of cases in wild birds in Europe (figure 3) offers some optimism although a cold snap in Europe in the next two months could bring more birds over. It should be noted that the Meteorological Office is forecasting severe cold and heavy snow in north-east Europe which may have an effect. The small number of wild bird cases most weeks over the last two months in GB can be interpreted as “occurs regularly” which is the definition of medium risk level. The detection of a single case in a traditional migratory waterbird, the whooper swan at Welney, does not justify increasing the risk to high, and indeed that swan could even have been infected in GB. The wild bird risk in GB is therefore maintained at **medium**.

Conclusion

Since our last assessment on 01 November 2023, the numbers of wild bird cases of HPAI H5 reported per week remain at low levels in GB and have peaked in Europe after a spike in weeks when cases were increasing exponentially (though we note that there will be variation in surveillance plans across Europe and as with previous years there may follow a second peak in birds in Europe in the New Year). Although HPAI H5 is ongoing in western Europe, at this time of year most migratory ducks, geese and swans have now

arrived and we enter the stable winter core period. However, a cold snap in Europe could bring more birds across into GB, together with HPAI H5 if prevalence is maintained in birds in the Netherlands and Wadden Sea area. This period of uncertainty could continue to the end of February 2024, after which it is unlikely more birds will fly over to GB, with most then starting to move north-east to their breeding grounds. With the migratory birds having now arrived in GB for the winter, and the low numbers of found dead wild birds and IPs reported, the national risk level for HPAI H5 in wild birds remains at **MEDIUM** (occurs regularly).

The number of poultry IPs in GB has remained low in November in to December with 4 IPs since our last update on the 01 November (Figure 1). The risk of infection of poultry in GB with stringent biosecurity is therefore maintained at **LOW** with **low uncertainty**. The 4 IPs were all in premises with sub-optimal biosecurity. However, even suboptimal biosecurity has some impact on reducing the risk and given the current medium risk in wild birds, the risk to poultry with suboptimal biosecurity in GB is also maintained at **low**. However, due to the uncertainty of more birds coming in from Europe, together with the occurrence of outbreaks in poultry with suboptimal biosecurity, the level of uncertainty is raised to **high**. With the colder weather expected in Europe and the continued low presence of residual HPAI in wild birds in GB, it is noted that the risk to poultry could be elevated at short notice.

It remains important that biosecurity is maintained to the highest extent possible to mitigate against the risk of infection posed by wild birds across GB.

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

It is particularly important that stringent adherence to good biosecurity practices is still maintained, particularly with likely increased wild bird interactions with poultry in the coming weeks.

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 via direct contact with wild birds (getting into housing or on the range) or indirect contact, such as contact with contaminated feed, water, bedding, equipment, vermin or 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 WOA, 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.

Appendix 1. 2023 to 2024 HPAI season - wild bird species in Great Britain that have tested positive for HPAI H5 between 1 October 2023 and 18 December 2023.

Region and species	Total number of birds testing positive with HPAI H5 since last assessment (01 November 2023)	Total number of birds testing positive with HPAI H5 since 01 October 2023
England		
Common Buzzard	1	1
Common Gull	1	1
Greylag Goose	2	2
Herring Gull	0	2
Merlin	1	1
Whooper Swan	1	1
England total	6	8
Scotland		
Herring Gull	1	2
Pheasant	0	1
Shag	1	1
Sparrowhawk	0	1
Gannet	0	1
Scotland total	2	6
Wales		

Region and species	Total number of birds testing positive with HPAI H5 since last assessment (01 November 2023)	Total number of birds testing positive with HPAI H5 since 01 October 2023
Lesser black-backed gull	0	1
Wales total	0	1
Grand total	8	15

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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).

- DAERA (2023) [Department of Agriculture, Environment and Rural Affairs Avian influenza information page](#)
- IZSve (2023) [EURL Avian Flu Data Portal \(izsvnezie.it\)](#)
- WOAH (2023) [WAHIS \(woah.org\)](#)



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