# **Updated Outbreak Assessment #4**

# Highly pathogenic avian influenza (HPAI) in the UK and Europe

29 November 2021 Reference: VITT/1200 HPAI in the UK and Europe

# **Disease report**

Since our last outbreak assessment on 22 November 2021, there continue to be reports of highly pathogenic avian influenza (HPAI) H5 both in Europe and in Great Britain.

There have been a further 9 confirmed report cases of HPAI H5N1 in domestic poultry or captive birds since our last assessment, with 4 in backyard (or captive birds) premises, and 5 in commercial premises.

According to the World Organisation for Animal Health (OIE), there has been a sustained increase in reports of HPAI H5 in northern Europe over the past week.

Since 22 November, Germany, the Netherlands, and Poland have reported further outbreaks of HPAI H5N1 in domestic poultry, while France has reported HPAI H5N1 in poultry for the first time this season.

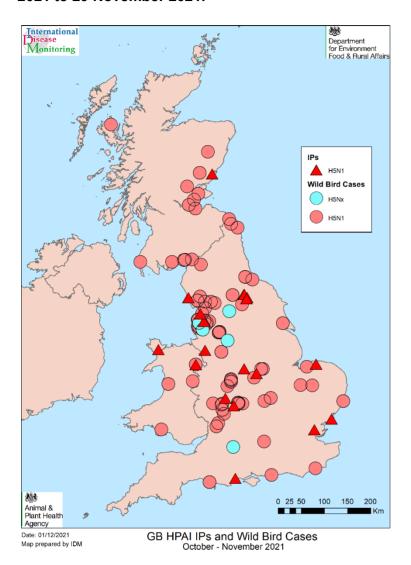
Whilst there have been no cases of HPAI in captive or domestic birds in Northern Ireland, there have been 6 wild bird cases found at Belfast Waterworks, the Harbour Estate in Belfast and at Monlough Lake near Carryduff. As a result, Avian Influenza housing measures came into place in Northern Ireland on 29 November.

To the 29 November, the Republic of Ireland (RoI) has confirmed HPAI H5N1 at a second infected premises in County Monaghan. RoI has also reported 50 cases of HPAI H5N1 in wild birds to date, with a housing order brought into effect on 22 November (DAERA, 2021).

In southern Europe further outbreaks of HPAI H5 and H5N1 have continued to be reported on finishing turkey and broiler units and layer farms in Italy. Croatia has reported HPAI in a backyard poultry unit for the first time this season.

Wild bird HPAI H5N1 cases continue to be reported in north-west Germany, the coastal regions of the Netherlands, Denmark, Sweden, Norway, and Finland.

Map 1: HPAI outbreaks (OIE) in poultry, captive, and wild birds across Great Britain, October 2021 to 29 November 2021.



# Situation assessment

# **United Kingdom**

The first detection of HPAI H5N1 virus this season was in rescued swans and captive poultry at a swan sanctuary in Worcester (England) on 15 October. Since then, there have been 23 further confirmed cases of HPAIV H5N1 (see map 1 and table 1).

Since our last assessment on 22 November, there has been 4 new outbreaks of HPAI H5N1 in non-commercial, non-poultry<sup>1</sup> premises in Great Britain, including 2 backyard hobby farms (Wales and England) and 2 mixed captive bird premises (England).

<sup>&</sup>lt;sup>1</sup> According to the 2021 OIE definition of poultry: <u>Terrestrial Code Online Access - OIE - World Organisation for Animal Health</u>

There have also been 5 new reports of HPAI H5N1 in poultry, 4 in North Yorkshire and 1 in Leicestershire.

Table 1: poultry and captive bird outbreaks for highly pathogenicity avian influenza (HPAI) H5N1 so far in Great Britain since 1 October 2021, as of 29 November.

Date HPAI H5N1 confirmed	Location and county	Description			
27 October	Near Wychavon, Worcester	Rescued wild swans (adults and young), rescued and captive geese, ducks and chickens			
2 November	Near Chirk, Cheshire	Backyard chickens			
4 November	Near Arbroath, Angus	Mixed backyard flock of 16 chickens, 20 guinea fowl and 12 ducks			
8 November	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken			
11 November	Near Kirby Cross, Essex	Small flock of mixed geese, chickens and guinea fowl			
12 November	Near Preston, Lancashire	Commercial turkey premises			
13 November	Near Northallerton, North Yorkshire	Commercial free range laying hens			
16 November	Near Preston, Lancashire	Backyard chickens			
17 November	Near Willington, Derbyshire	Commercial turkey premises			
19 November	Near Pokesdown, Bournemouth	Backyard ducks			
19 November	Near Silecroft, Cumbria	Commercial free range laying hens			
21 November	Near Mouldsworth, Chester	Commercial turkey premises			
21 November	Near North Fambridge, Essex	Small flock of mixed geese, chickens and ducks			
21 November	Near Holkham, Norfolk	Small flock of mixed chickens and turkeys			

Date HPAI H5N1 confirmed	Location and county	Description		
21 November	Near Thirsk, Yorkshire	Commercial turkey premises		
25 November	Near Thirsk, Yorkshire	Commercial free range laying hens		
25 November	Near Thirsk, Yorkshire	Commercial turkey premises		
26 November	Near Loughborough, Leicestershire	Commercial free range laying hens		
26 November	Near Thirsk, Yorkshire	Commercial turkey premises		
27 November	Near Blackpool, Lancashire	Mixed ornamental birds		
26 November	Near Anglesey, Wales	Backyard hobby farm		
26 November	Near Clitheroe, Lancashire	Mixed captive birds		
28 November	Near Thirsk, Yorkshire	Backyard hobby farm		
29 November	Near Thirsk, Yorkshire	Commercial turkey premises		

Since our last outbreak assessment on 22 November, and to 29 November, HPAI H5 has been detected in a further 24 wild bird locations in Great Britain, bringing the total to 60 separate wild bird positive locations, involving 21 separate bird species in 40 separate counties (see table 2).

There have been 5 cases for which the H5 genotype has been identified but the N type has not. These cases are currently undergoing further processing to identify the Neuraminidase genotype strain (H5Nx in map 1).

For further details, please see the report (which is updated weekly) on findings of <u>HPAI in wild birds in Great Britain</u> on GOV.UK or for Northern Ireland visit the <u>Department of Agriculture</u>, <u>Environment and Rural Affairs (DAERA)</u> website.

Table 2: wild birds in Great Britain that have tested positive for HPAI H5 as of 29 November 2021

Region and species	Total number of birds testing positive
England	176 cases in England
Canada Goose	17
Greylag goose	7
Mute Swan	96
Peregrine Falcon	2
Pink Footed goose	10
Swan	8
Unspecified Goose	4
Whooper Swan	14
Common Buzzard	2
Pheasant	5
Curlew	2
Gull	1
Great-crested Grebe	1
Barnacle Goose	3
Mallard Duck	2
Widgeon	1
Black headed gull	1
Wales	9 cases in Wales
Canada Goose	2
Herring Gull	1
-	·
Mute Swan	1
Pheasant	5
Scotland	19 cases in Scotland

Region and species	Total number of birds testing positive
Greylag goose	3
Kestrel	1
Mute Swan	3
Pink Footed goose	1
Unspecified Goose	1
Whooper Swan	3
Total cases in Great Britain	204

# **Cases in Europe**

The total numbers of HPAI H5 outbreaks in poultry and wild bird cases in Europe are presented in table 3. Please note that this is a rapidly changing picture, with new disease reports being made to the World Organisation for Animal Health (OIE) on a regular basis.

Numbers reported are from OIE's World Animal Health Information System (WAHIS) platform except for Germany and Republic of Ireland wild bird figures, where IZSVe totals are used due to more frequent reporting.

Table 3: current outbreaks (data up to 29 November 2021) of HPAI H5 in domestic poultry and cases in wild birds since 1 October 2021 in Europe, excluding the UK, according to OIE reporting.

Country	H5 wild birds	H5 poultry	H5N1 wild birds	H5N1 poultry	H5N8 wild birds	H5N8 poultry	H5N2 wild birds	Total
Austria			1					1
Belgium	1		6					7
Bosnia and Herzegovina			2					2
Croatia				1				
Czech Republic			4					4
Denmark		1	22					23
Estonia			2		2	1		5
Finland			9		2			11
France			2					1
Germany			240	18				258
Hungary			2	20				22
Ireland			20	1				21
Italy			4	82				86
Netherlands			33	8	1			42
Norway			2	2				4
Poland			2	18				21
Romania			1					1
Russia	30	7	10	1				48

Country	H5 wild birds	H5 poultry	H5N1 wild birds	H5N1 poultry	H5N8 wild birds	H5N8 poultry	H5N2 wild birds	Total
Serbia and Montenegro			3		3		1	7
Slovakia			10		1			11
Sweden			7		1			8
Switzerland			1					1
Ukraine	1							1

# Northern Europe (OIE data)

Since our last outbreak assessment on 22 November, HPAI H5 has been recorded in 18 European countries.

#### **Austria**

Austria has reported their first outbreak of HPAI this season, where HPAI H5N1 was reported in a backyard chicken flock with approximately 20 birds. The premises is located in Bruck an der Leitha, situated between the river Leitha and Lake Neusiedl.

## **Belgium**

Belgium has reported 2 further wild bird events, 2 white-fronted geese (Anser alibrons), one common buzzard (Buteo buteo) and one mallard (Anas platyrhynchos), bringing the total to 7 cases of H5N1 in wild birds since 10 November.

#### The Czech Republic

The Czech Republic has reported 2 further outbreaks of HPAI H5N1 in breeding geese units affecting approximately 1,000 birds per site.

Samples at the second site were taken as part of surveillance and the geese displayed no clinical signs. A wild mute swan was also found dead on a pond in the Kojetin region.

#### **Denmark**

Denmark has reported a further fifteen wild bird positives, all HPAI H5N1 and widespread across the country, these included:

- 4 Barnacle geese (Branta leucopis)
- 3 Greylag geese (Anser anser)
- 1 Black-headed gull (Larus ridibundus)
- 2 Herring gulls (Larus argentatus)
- 1 Great black-backed gull (Larus marinus)
- 1 Eurasian wigeon (Anas penelope)
- 1 Northern pintail (Anas acuta)
- 1 Common teal (Anas crecca)
- 1 Grey heron (Ardea cinerea)

#### **Finland**

Finland has reported a further event of HPAI H5N8 in asymptomatically infected mallards. The birds were sampled as part of a surveillance scheme close to an area where HPAI H5N1 had previously been detected in released pheasants.

#### **France**

France has reported seven further HPAIV H5N1 events in wild birds in the Grand Est region.

Four of these reports occurred in the Nonsard-Lamarche area affecting Great egrets (Ardea alba), Canada geese (Branta canadensis), Greylag geese (Anser anser), and Mute swans (Cygnus olor).

Significant mortality has been reported amongst these species with over 140 total birds affected.

Two Common cranes (Grus grus) and a Mute swan (Cygnus olor) have also been found dead on different waterbodies in the Grand Est region.

France have also reported their first poultry outbreak of the season, in a commercial layer premises with 2 sheds of 80,000 birds in the Warheim region near Dunkirk on the north coast.

#### Germany

Germany has reported HPAI H5N1 in poultry on eight further farms since our last report, all of which were reported on 25 November and located in the north of the country. A further 22 wild bird events have been officially reported by OIE at this time (a total of 35 since 1 October).

However significantly higher numbers of wild bird reports have been submitted on to the IZSVe platform (IZSVe, 2021b), with 240 wild bird reports by Germany to date.

## The Republic of Ireland

The Republic of Ireland (RoI) has reported one further domestic outbreak in County Monaghan in a commercial broiler and breeder farm. Bringing the total for RoI to 2 officially reported commercial premises to 29 November.

According to DAERA there have now been a total of 50 wild bird cases of HPAI H5N1 across eight locations in the Republic of Ireland. A housing order has been in place since 22 November

#### The Netherlands

The Netherlands has reported a further HPAI H5N1 outbreak in a commercial layer unit in Vinkeveen, reported on 23 November. One outbreak of HPAI H5N1 in captive pheasants on a small hobby farm has also been reported since our last assessment affecting 40 birds.

Additionally, 12 further wild bird outbreaks, affecting 14 birds, have been reported since 22 November:

- 7 mute swans (Cygnus olor)
- 4 greylag geese (Anser anser)
- 1 Buzzard (Buteo buteo)
- 1 Gadwall (Anas strepera)
- 1 barnacle goose (Branta leucopsis)

## **Norway**

Norway has reported 2 further wild bird HPAI H5N1 cases, affecting a mute swan (Cygnus olor) and a mallard (Anas platyrhynchos).

#### **Poland**

Poland has reported 2 cases of HPAI H5N1, 1 in mallards and 1 in greylag geese, since our report on 22 November.

Twelve further poultry premises have been reported by OIE, affecting commercial farms with between 3,000 and 22,000 birds.

## **Serbia and Montenegro**

Serbia and Montenegro have reported a further wild bird case of HPAI H5N1 affecting a Mute swan (Cygnus olor) on 24 November.

#### Sweden

Sweden has reported 9 further cases of HPAI H5N1 in wild birds since 22 November via OIE.

# Southern Europe

Since our last outbreak assessment on 22 November:

#### Italy

Italy has reported 13 further outbreaks in domestic poultry, all clustered around the previous Verona reports. HPAI H5N1 was also detected in a common magpie on 24 November, in the far north-east of the country.

#### Croatia

Croatia has reported their first outbreak of HPAI H5N1 in a backyard poultry unit with 90 birds.

## Hungary

Hungary has reported HPAI H5N1 in captive birds on 25 November, affecting 12 birds on a premises with approximately 400 birds across several species.

#### Slovakia

Slovakia has reported its first event for of HPAI H5N1 for this season affecting a wild Mute swan found dead on a pond in the Senica region.

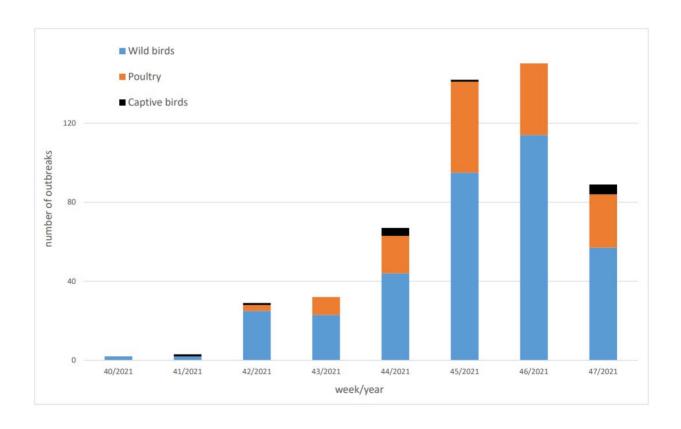


Figure 1: number of HPAI events in Europe each week from October 2021 to 29 November 2021 (IZSVe, 2021a)

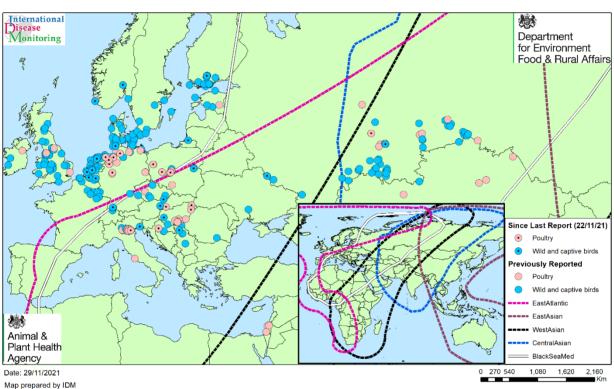
The number of poultry, wild bird, and captive bird reports for each week according to the EU Reference Laboratory (IZSVe 2021a) is shown in figure 1.

Though more HPAI H5 events were observed across Europe earlier in the year this season than last, the total number of outbreaks for week 46 in 2021 are comparative to those

reported in 2020. Week 46 in 2020 had 160 total reports, increasing to approximately 180 in week 47, compared to the 150 reports for week 46 this year.

Map 2 shows the distribution of HPAI H5 events in poultry, captive birds and wild birds in Europe reported from September to 29 November to OIE. Those events reported since our last outbreak assessment on 22 November are distinguished with dots.

Map 2: HPAI outbreaks (from OIE) in poultry, captive, and wild birds across Europe, September 2021 to 29 November 2021.



Highly pathogenic avian influenza in Poultry, Captive and Wild birds
September - November 2021
Overlay: migratory bird flyways

**OIE Data Only** 

# Implications for the UK

Given the frequency of reports of HPAI H5N1 across north-west Europe, including Great Britain, the domestic poultry and captive bird populations remain under an increased infection pressure particularly where biosecurity is sub-optimal. Even where biosecurity is stringent, it will highlight any weaknesses that exist.

Mixed poultry outbreaks are following the wild bird cases in Poland, Germany, and the Netherlands.

# **Conclusions**

New cases of HPAI H5 in wild birds and outbreaks in poultry have continued to be reported in northern Europe, including in the UK and the Republic of Ireland, since our last assessment.

Although total numbers of migrating wild water birds (ducks, geese, and some swan species) may not peak until December and January in Great Britain.

The majority of wintering water birds have now arrived in the UK with multiple confirmed cases of HPAI H5 in wild birds (204 to 29 Nov 2021) across a range of species, including resident sedentary species such as raptors and mute swan, indicates that they had been exposed to infection in Great Britain.

Furthermore, potential bridging species such as gulls and raptors have tested positive.

The risk level of HPAI H5 in wild birds is maintained at Very High across Great Britain with more cases expected in the next three months.

HPAI virus will continue to circulate in both susceptible migrant water birds and sedentary bird species within the UK over the next few months, with a greater number of events likely to be observed around water bird wintering sites.

The risk of exposure of poultry across the whole Great Britain is maintained at Medium (with low uncertainty) where good biosecurity is applied, and at High (with low uncertainty) where biosecurity is suboptimal.

This assessment takes into consideration the Avian Influenza Protection Zone (AIPZ) and assumes that bird keepers are taking the additional biosecurity measures required.

On 24 November, the Chief Veterinary Officers for England, Scotland, Wales, and Northern Ireland announced housing measures, which came into force on the 29 November 2021.

It is now a legal requirement for all bird keepers to keep their birds indoors and to follow strict biosecurity measures in order to limit the spread of and eradicate the disease.

These housing measures build on the strengthened biosecurity requirements that were introduced as part of the AIPZ in Great Britain on 3 November 2021, and in Northern Ireland on 17 November 2021.

We are continuing to closely monitor the situation.

It is particularly important that stringent adherence to good biosecurity practices is now not only maintained but is constantly being reviewed for further improvement.

Strict attention should now be made to ensure compliance with reviewed contingency plans, with regular maintenance checks and repairs being carried out promptly on roofs and fabric of buildings, especially following damage caused by the recent Storm Arwen.

Reinforcement of good bio awareness behaviours and practices should be constantly instilled into personnel to prevent disease being introduced to poultry and captive birds.

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 <u>biosecurity best practice advice</u> 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

- In England contact 03000 200 301
- In Wales, contact 0300 303 8268
- In Scotland, contact your local <u>Field Services Office</u>

Find further guidance on <u>Avian Influenza</u> on GOV.UK including updated biosecurity advice for poultry keepers for England. For biosecurity advice if you live:

- in Wales visit the Welsh Government's website
- in Scotland visit the Scottish Government's website
- in Northern Ireland visit DAERA website

The OIE and FAO International Reference Laboratory and the UK National Reference Laboratory at Weybridge has the necessary ongoing proven diagnostic capability for these strains of virus. whether low or high pathogenicity Avian Influenza.

We continually monitor changes in the virus on a wide scale whilst utilising global networks to gain early insights to epidemiological trends and potential emergence of new genotypes which might change the risk profile.

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

If you find any dead wild birds of any species should be reported to the wild bird helpline by calling 03459 33 55 77 and then select option 7. It is advisable that you do not touch these birds.

# **Assessment authors**

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# References

All outbreaks and cases were taken from the World Organisation for Animal Health (OIE).

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 (OIE).

- DAERA (2021) <u>Department of Agriculture</u>, <u>Environment and Rural Affairs Avian influenza information page</u>
- FLI (2021) FLI Animal disease survey report (TSIS)
- IZSVe (2021a) IZSVe report Number of highly pathogenic avian influenza positive events notified by country and poultry category (PDF)
- IZSVe (2021b) <u>IZSVe report Highly Pathogenic Avian Influenza (HPAI) in Europe: update, Wild bird species affected (PDF)</u>



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