Updated Outbreak Assessment #15

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

21 February 2022

Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

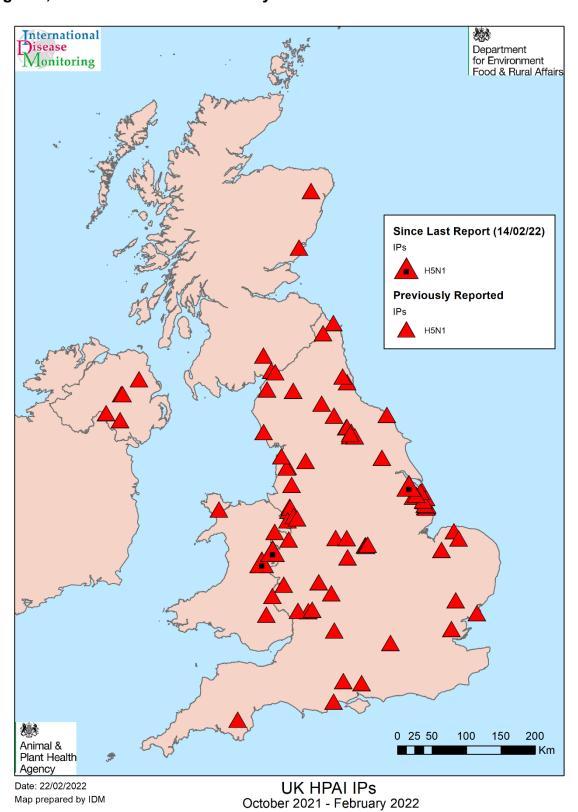
Since our last outbreak assessment on 14 February 2022, there continue to be reports of highly pathogenic avian influenza (HPAI) H5 both in Europe and in the United Kingdom (UK). This includes three further confirmed outbreaks of HPAI H5N1 in domestic poultry in the UK.

There have been a further three confirmed outbreaks in Great Britain (GB) of HPAI H5N1 in commercial poultry premises since our last assessment. Two of the outbreaks have occurred in Powys, Wales and one in Lincolnshire, England. In Northern Ireland (NI), there have been no further HPAI H5N1 outbreaks confirmed since our last assessment (DAERA 2022).

Since 14 February 2022, OIE has reported outbreaks of HPAI H5N1 in domestic poultry in France, Germany, Italy, the Netherlands, Poland, Portugal, Russia and Spain. An outbreak of HPAI H5N1 has been reported in domestic poultry in Romania for the first time this HPAI season.

Wild bird HPAI H5 cases continue to be reported in Austria, Germany, Hungary, Norway, Poland, the Republic of Ireland (RoI) and Romania. The highest number of wild bird cases reported in the last week was for Germany (29) decreasing from 120 reported in the previous week.

Map 1: HPAI H5 outbreaks in poultry¹ and captive birds across the United Kingdom, October 2021 to 21 February 2022.



Situation Assessment

United Kingdom

The first detection of HPAI H5N1 virus this HPAI season was in rescued wild swans and captive poultry at a swan sanctuary in Worcester (England) on 15 October 2021. Since then, there have been 89 further confirmed outbreaks of HPAI H5N1 in poultry and captive birds across Great Britain (Map 1), (Table 1) taking the total to 90. Of these 90 outbreaks, 79 have occurred in England, six have occurred in Scotland and five in Wales.

In the week since our last assessment on 14 February 2022 there have been three new outbreaks of HPAI H5N1 in domestic poultry premises in GB. Two of these outbreaks occurred in the county of Powys, Wales and one outbreak occurred in Lincolnshire, England.

Since our last report, there have been no further outbreaks of HPAI H5N1 confirmed in NI. The total number of poultry outbreaks in NI remains at six across the counties of Tyrone, Antrim, Armagh and Fermanagh (DAERA, 2022).

Table 1: Poultry¹ and captive bird outbreaks of High Pathogenicity Avian Influenza (HPAI) H5N1 in Great Britain since 1 October 2021, as of 21 February 2022

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
1	27 October 2021	Near Wychavon, Worcester	Rescued wild swans (adults and young), rescued and captive geese, ducks, and chickens.
2	2 November 2021	Near Chirk, Cheshire	Backyard chickens
3	4 November 2021	Near Arbroath, Angus	Mixed backyard flock of 16 chickens, 20 guinea fowl and 12 ducks.

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

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	
4	8 November 2021	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken	
5	11 November 2021	Near Kirby Cross, Essex	Small flock of mixed geese, chickens, guinea fowl	
6	12 November 2021	Near Preston, Lancashire	Commercial turkey premises	
7	13 November 2021	Near Northallerton, North Yorkshire	Commercial free range laying hens	
8	16 November 2021	Near Preston, Lancashire	Backyard chickens	
9	17 November 2021	Near Willington, Derbyshire	Commercial turkey premises	
10	19 November 2021	Near Pokesdown, Bournemouth	Backyard ducks	
11	19 November 2021	Near Silecroft, Cumbria	Commercial free range laying hens	
12	21 November 2021 Near Mouldsworth, Chester Commercia		Commercial turkey premises	
13	21 November 2021	Near North Fambridge, Essex	Small flock of mixed geese, chickens, ducks	
14	21 November 2021	Near Holkham, Norfolk	Small flock of mixed chickens and turkeys	
15	21 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	
16	25 November 2021	Near Thirsk, Yorkshire	Commercial free range laying hens	
17	25 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	
18	26 November 2021	Near Loughborough, Leicestershire	Commercial free range laying hens	
19	26 November 2021	Near Thirsk, Yorkshire	Commercial turkey premises	
20	27 November 2021	Near Blackpool, Lancashire	Mixed ornamental birds	
21	26 November 2021	Near Anglesey, Wales	Backyard hobby farm	
22	26 November 2021	Near Clitheroe, Lancashire	Mixed captive birds	
23	28 November 2021	Near Thirsk, Yorkshire	Backyard hobby farm	
24	29 November 2021 Near Thirsk, Yorkshire		Commercial turkey premises	
25			Commercial free range laying hens	
26	02 December 2021	Near Thirsk, Yorkshire	Commercial free range laying hens	
27	02 December 2021	Staffordshire	Backyard hobby farm	
28	02 December 2021	Herefordshire	Commercial broiler farm	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
29	04 December 2021	Dumfries	Commercial laying hens
30	04 December 2021	Powys	Mixed captive birds
31	04 December 2021	Yorkshire	Backyard turkeys
32	04 December 2021	Gloucestershire	Wildfowl Park
33	04 December 2021	Yorkshire	Commercial laying hens
34	06 December 2021	Leicestershire	Commercial laying hens
35	07 December 2021	Leicestershire	Commercial laying hens
36	07 December 2021	near Pocklington, East Yorkshire	Commercial ducks
37	08 December 2021	Near Sudbury, South Suffolk	Commercial laying hens
38	08 December 2021	Near Thirsk, North Yorkshire	Commercial turkeys
39	09 December 2021	Cumbria	Commercial laying hens
40	09 December 2021	Dumfries	Backyard mixed species
41	10 December 2021	Near Moffat, Dumfriesshire	Backyard mixed species

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
42	10 December 2021	Near Highworth, Wiltshire	Commercial turkeys
43	10 December 2021	Near Clifford, Herefordshire	Commercial turkeys
44	11 December 2021	Near Washington, Sunderland, Tyne & Wear	Mixed wildfowl
45	11 December 2021	Near Alford, Lincolnshire	Commercial laying hens
46	11 December 2021	Near Willington, Derbyshire	Mixed poultry
47	12 December 2021	Near Alford, Lincolnshire	Commercial laying hens
48	12 December 2021	Near Alford, Lincolnshire	Commercial laying hens
49	14 December 2021	Near Middleton-in- Teesdale, County Durham	Backyard chickens
50	14 December 2021 Near Pocklington, Yorkshire Comm		Commercial ducks
51	14 December 2021	Near Alford, Lincolnshire	Commercial laying hens
52	14 December 2021	Near Alford, Lincolnshire	Commercial broiler breeder and laying hens
53	15 December 2021	Near Atherstone, Leicestershire	Backyard mixed species

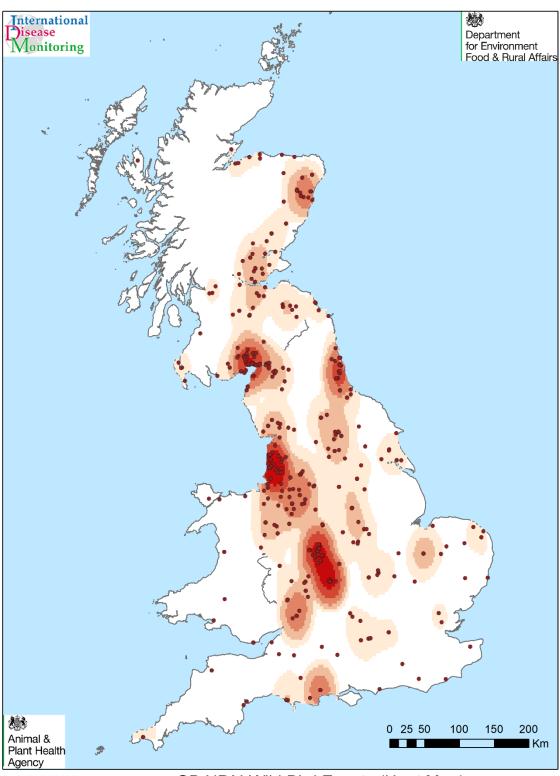
Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	
54	15 December 2021	Near Wem, Shropshire	Commercial mixed species	
55	15 December 2021	Near Lockerbie, Dumfries and Galloway	Backyard mixed species	
56	16 December 2021	Near Alford, Lincolnshire	Commercial chickens	
57	16 December 2021	Near Thirsk, Yorkshire	Commercial broiler chickens	
58	16 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
59	17 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
60	18 December 2021	Near Alford, Lincolnshire	Commercial laying hens	
61	18 December 2021	Near Frodsham, Cheshire	Commercial mixed species	
62	22 December 2021	Near Alvanley, Cheshire	Backyard ducks	
63	22 December 2021	Near Buckfastleigh, Devon	Backyard ducks	
64	28 December 2021	Near Pentney, Norfolk	Commercial turkeys	
65	28 December 2021	Near North Somercotes, Lincolnshire	Commercial turkeys	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	
66	30 December 2021	Near Romsey, Hampshire	Backyard mixed species	
67	31 December 2021	Near Theddlethorpe, Lincolnshire	Backyard mixed species	
68	31 December 2021	Near Melton Mowbray, Lincolnshire	Commercial turkeys	
69	02 January 2022	Near Eton, Berkshire	Rescued wild swans	
70	03 January 2022	Near Alford, Lincolnshire	Backyard chickens	
71	04 January 2022	Near Carlisle, Cumbria	Commercial mixed species	
72	05 January 2022	Near Louth, Lincolnshire	Commercial turkeys	
73	07 January 2022	Near Upholland, Lancashire	Backyard mixed species	
74	10 January 2022	Near Louth, Lincolnshire	Commercial laying hens	
75	13 January 2022	Near Tattenhall, Cheshire	Commercial grandparent breeder turkeys	
76	13 January 2022	Near Tarporley, Cheshire	Commercial breeder turkeys	
77	20 January 2022	Near Ross on Wye, Herefordshire	Backyard mixed species	
78	22 January 2022	Near Crewe, Cheshire	Commercial turkeys	

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description	
79	22 January 2022	Near Inverurie, Aberdeenshire	Backyard mixed species	
80	25 January 2022	Near Newcastle upon Tyne, Tyne and Wear	City farm smallholder mixed species	
81	26 January 2022	Near Whitby, North Yorkshire	Wildlife rescue centre mixed species	
82	28 January 2022	Near Calveley, Cheshire	Commercial turkeys	
83	28 January 2022	Near Ashleworth, Gloucestershire	Backyard chickens	
84	4 February 2022	Near Bishops Waltham, Hampshire	Commercial broiler breeder chickens	
85	5 February 2022	Near Fakenham, Norfolk	Conservation park mixed species	
86	9 February 2022	Near Berwick-upon- Tweed, Northumberland	Backyard mixed species	
87	14 February 2022	Near Wooler, Northumberland	Backyard mixed species	
88	21 February 2022	Near Grimsby, Lincolnshire	Commercial rearing turkeys	
89	21 February 2022	Near Newton, Powys	Commercial breeding pheasants	
90	21 February 2022	Near Welshpool, Powys	Commercial breeding pheasants	

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

Map 2: Map showing individual cases and the relative density of HPAI H5 positive findings in wild birds across Great Britain October 2021 to 21 February 2022



Date: 21/02/2022 Map prepared by IDM GB HPAI Wild Bird Events (Heat Map) October 2021 - February 2022 In the week since our last outbreak assessment on 14 February 2022, HPAI H5 has been detected in a further five wild bird locations in GB, bringing the total to 201 separate wild bird positive locations, involving 35 different bird species in 66 separate counties (Table 2). There have been 15 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. During the current 2021/22 HPAI season, the highest numbers of confirmed wild bird cases of HPAI H5 have been observed around the Solway Firth, North Yorkshire, Lancashire, Worcestershire and Gloucestershire (Map 2).

Further analysis of the Order profile of HPAI positive wild birds throughout the current 2021/22 season has shown a shift; with a greater proportion of birds of prey (Accipitriformes) and variety of birds infected as the outbreak has progressed (Figures 1 and 2).



Figure 1 HPAI H5N1 Wild bird positives by Order. October - November 2021

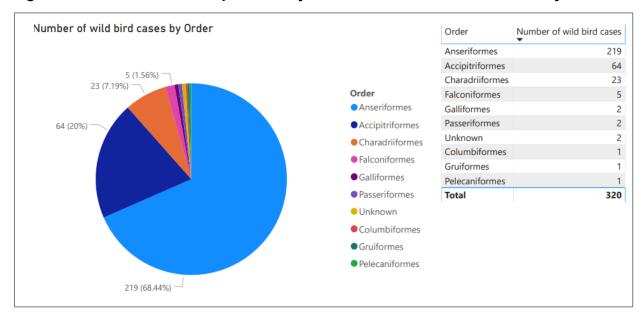


Figure 2 HPAI H5N1 Wild bird positives by Order. December 2021 - 22 February 2022

For further details, please see the report (updated weekly) on findings of $\underline{\mathsf{HPAI}}$ in wild $\underline{\mathsf{birds}}$ in GB. and $\underline{\mathsf{NI}}$.

Table 2: Wild bird species in Great Britain that have tested positive for HPAI H5 as of 21 February 2022

Region and species	Total number of birds testing positive
England	513
Barnacle Goose	10
Bewick's Swan	1
Black headed gull	13
Black Swan	2
Canada Goose	99
Common Buzzard	38
Coot	1
Curlew	2
Goshawk	1
Great-crested Grebe	2
Grey Heron	1
Greylag goose	26
Guillemot	1
Gull	6
Herring Gull	7
Kestrel	4

Region and species	Total number of birds testing positive
Lapwing	1
Little Gull	1
Mallard Duck	4
Mute Swan	204
Peregrine Falcon	4
Pheasant	7
Pink Footed Goose	13
Red Kite	1
Sparrowhawk	5
Unidentified Swan	17
Unspecified Duck	1
Unspecified Goose	12
Whooper Swan	28
Widgeon	1
Scotland	155
Barnacle Goose	31
Blackbird	1
Canada Goose	3
Common Buzzard	31
Greylag Goose	8
Gull	2
Herring Gull	1
Kestrel	1
Magpie	1
Mute Swan	17
Pink Footed Goose	22
Red Kite	1
Sea Eagle	1
Sparrowhawk	1
Unidentified Swan	10
Unspecified Bird of Prey	2
Unspecified Duck	2
Unspecified Goose	13
Whooper Swan	7
Wales	17
Canada Goose	2
Common Buzzard	2
Herring Gull	1
Mute Swan	5

Region and species	Total number of birds testing positive
Pheasant	5
Unspecified Goose	1
Unspecified Pigeon	1
Grand Total	685

Europe

The total numbers of HPAI H5 outbreaks in poultry and wild bird cases in Europe are presented in Table 3. This is a rapidly changing picture, with new disease reports being made to the World Organisation for Animal Health (OIE) on a daily basis. Numbers reported are from OIE's WAHIS platform.

Table 3 Events (to 21 February 2022) of HPAI H5 in domestic poultry (P) and cases in wild birds (WB) since 1 October 2021 in Europe, excluding the UK, according to OIE report date

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N3 (WB)	Total
Austria			31						31
Belgium	5		50	2					57
Bosnia and Herzegovina			2						2
Bulgaria		10							10
Croatia			7	2					9
Czech Republic			16	4					20
Denmark		1	85	4	1	1			92

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N3 (WB)	Total
Estonia			7		2	1			10
Finland			12		2				14
France			44	216					260
Germany			814	57			1	1	873
Greece			1						1
Hungary			25	113					138
Ireland			67	6					73
Italy			18	242					260
Latvia			2						2
Luxembourg			3						3
Moldova				1					1
Netherlands	1		144	22	2				169
Norway			6	2					8
Poland			30	88					118
Portugal			7	3					10
Romania			8	1					9
Russia	34	11	12	8					65

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N3 (WB)	Total
Serbia and Montenegro			3		3		1		7
Slovakia			17	2	1				20
Slovenia			39	1					40
Spain			15	9					24
Sweden			33	4	1				38
Switzerland			1						1
Ukraine	2	1							3

Northern Europe (OIE data only, by report date)

In the week since our last outbreak assessment on 14 February 2022, HPAI H5 has been reported in 13 European countries (OIE). The total number of European countries affected this season according to IZSVe (2022) is currently 31.

Since our last assessment, **Austria** has not reported any outbreaks of HPAI H5N1 in domestic poultry but has reported three cases of H5N1 in wild birds which were two unidentified *Anserinae* and one mute swan (*Cygnus olor*), based on OIE data.

There have been no reports of HPAI in birds from **Denmark** in the last week, though there has been a report of HPAI H5N8 being detected in a harbour seal which was found dead on a beach in Denmark in September 2021. The Center for Diagnostics at the Technical University of Denmark reported that influenza virus was detected in the lung, but otherwise no other disease-causing organisms could be detected that could explain why the seal was dead. The report stated that the detected virus is closely related to the viruses that have been the cause of bird flu outbreaks in wild birds and domestic poultry since the autumn of 2020, in Denmark as well as the rest of Europe (Outbreak News Today, 2022).

There have been 101 outbreaks of HPAI H5N1 in domestic poultry in **France** reported by OIE within the last week. These reports refer to outbreaks which have occurred throughout January and February 2022. Eighty-four of the outbreaks occurred on duck farms, seven outbreaks affected premises with red junglefowl (*Gallus gallus*) and six outbreaks occurred within broiler chicken premises. Two of the outbreaks occurred in farms with turkeys and guinea fowl, respectively. No further information is available on the farm affected by the two remaining outbreaks reported.

Germany has reported one outbreak of HPAI H5N1 in domestic poultry since our last report, according to OIE data. The outbreak occurred in a premises with broiler chickens, located within the municipality of Spahnharrenstätte in Lower Saxony. Although the total number of susceptible animals at the site was not reported, there were 30 deaths recorded. There have also been 29 events of HPAI H5N1 in wild birds reported by OIE since our last assessment, with unidentified *Anatidae* (14), *Accipitridae* (5), *Laridae* (3), *Ardeidae* (2), *Cygnus* (2), *Charadriidae* (2) and *Ciconiidae* (1) species affected.

According to OIE, there have been no outbreaks of HPAI in domestic poultry and two further HPAI H5N1 events in wild birds reported in **Hungary** in the last week. One of these events involved a total of 90 birds including a mute swan (*Cygnus olor*) and a pelican (*Pelecanidae*) located in northern Hungary in the village of Poroszló. The second event involved a white-tailed eagle (*Haliaeetus albicilla*) located in the northwest of Hungary.

The **Netherlands** has reported two outbreaks of HPAI H5N1 in poultry since our last report, based on OIE data. Both of these outbreaks affected layer premises, one was located in Putten, which lies in the coastal area of the old Zuiderzee, for which 28 animals were reportedly affected by the virus. The other layer premises is located in the northern village of Woltersum, Groningen, for which there were 632 individual animals reported as infected. There have been no further HPAI H5N1 cases in wild birds reported by OIE in the last week.

According to OIE, **Norway** has not reported any further outbreaks of HPAI H5N1 in domestic poultry within the last week but has reported one case of HPAI H5N1 in a wild greylag goose (*Anser anser*) which was located in the Stangeland borough on the southwest coast of Norway.

Poland has reported five outbreaks of HPAI H5N1 in poultry since our last assessment, based on OIE data. The outbreaks occurred in two farms with slaughter ducks, one farm with slaughter turkeys, one farm with laying hens and one farm with a mix of laying hens and slaughter ducks. The reported number of animals on these farms ranged from 165 at the slaughter turkey premises to 26,200 at a mixed premises of laying hens and

slaughter ducks. There have also been four HPAI H5N1 events reported in wild birds in the last week, involving a total of 12 mute swans (*Cygnus olor*).

The **Republic of Ireland** has reported no further outbreaks of HPAI H5N1 in domestic poultry but has reported one HPAI H5N1 event in wildlife in the last week. The case involved a barnacle goose (*Branta leucopsis*) and a red fox (*Vulpes vulpes*) which were both found dead in Benduff and submitted to Sligo Regional Veterinary Laboratory for testing.

Romania has reported their first outbreak of HPAI H5N1 in domestic poultry of this HPAI season within the last week. The outbreak occurred in a backyard premises with 65 birds which is located in the southwestern town of Ţăndărei. There has also been a single case of HPAI H5N1 reported in a wild mute swan (*Cygnus olor*).

According to OIE, **Russia** has reported one outbreak of HPAI H5N1 in domestic poultry within the last week. The affected premises had turkeys and the reported number of birds affected was 60. The farm is located in southern Russia, in the Bashkortostan region. There have been no further reports of HPAI in wild birds.

Southern Europe (OIE data only, by report date)

Italy has reported two further outbreaks of HPAI H5N1 in backyard flocks of domestic poultry since our last report. Both of these outbreaks occurred in the region of Tuscany and the total number of animals at each of the premises was four and 17. There have been no further reports of HPAI events in wild birds in the last week.

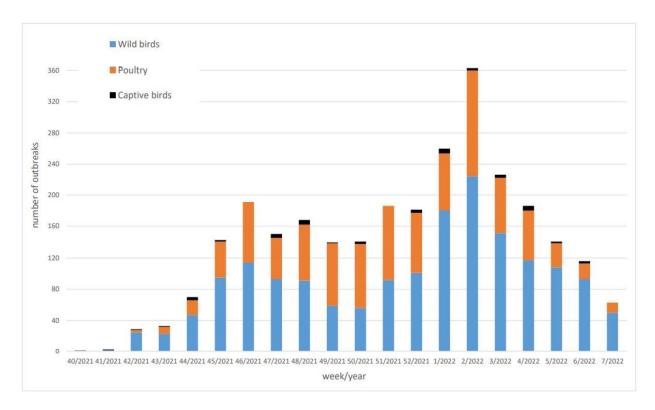
According to OIE data, **Portugal** has reported an outbreak of HPAI H5N1 at a commercial duck breeding premises with 12,414 birds, located in A Dos Cunhados, which is approximately 50km north and slightly west of Lisbon. There have been no further HPAI events in wild birds reported within the last week.

Spain has reported a further three outbreaks of HPAI H5N1 in domestic poultry in the last week. The three farms comprised of a fattening turkey premises with 32,500 birds, a free-range hen farm with 600 birds and a breeding hen farm with 16,000 birds. All of the affected farms are located in southern Spain where large numbers of waterbirds feed in the Donana National Park: the turkey premises is located within the Huelva province and the other two farms are in Seville. There have been no further HPAI H5N1 events reported in wild birds since our last assessment.

According to OIE, there have been no further reports of HPAI H5N1 outbreaks in domestic poultry or cases in wild birds between 14 and 21 February in **Belgium**, **Bosnia and Herzegovina**, **Bulgaria**, **Croatia**, **Czech Republic**, **Denmark**, **Estonia**, the **Faroe Islands**, **Finland**, **Greece**, **Latvia**, **Luxembourg**, **Moldova**, **Serbia and**

Montenegro, **Slovakia**, **Slovenia**, **Sweden**, **Switzerland** or **Ukraine**. The Faroe Islands therefore still remains the most north-westerly point of the epizootic.

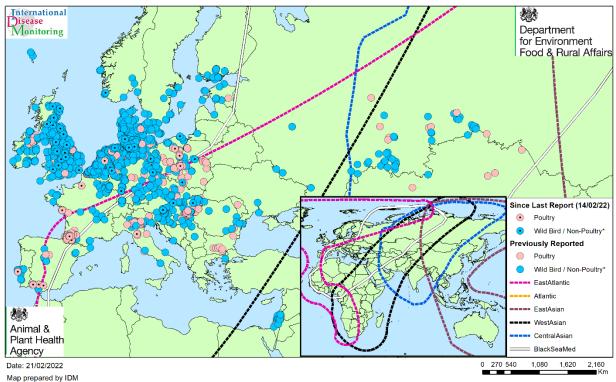
Figure 3: Number of HPAI positive events reported in poultry, captive and wild birds each week in Europe from October 2021 to 21 February 2022 (IZSVe, 2022)



Across Europe, the number of outbreaks continues to decrease (Figure 3) across poultry, wild, and captive birds. However, the overall numbers observed are roughly two times higher than the same time period in the <u>2020/21 season</u>, <u>week 4 and 5</u>.

The map below (Map 3) shows the distribution of HPAI H5 outbreaks in poultry and captive birds together with cases in wild birds in Europe reported to OIE between September 2021 and 21 February 2022. Those events reported since our last outbreak assessment on 14 February are distinguished with dots.

Map 3: HPAI outbreaks (from OIE) in poultry, captive, and wild birds across Europe, September 2021 to 21 February 2022.



Highly Pathogenic Avian Influenza in Poultry and Non-Poultry*
September 2021 - February 2022

September 2021 - February 2022 OIE Data Only
Overlay: Migratory Bird Flyways *OIE Defined

Implications for the UK

Given the continuing reports of wild bird cases of HPAI H5N1 across GB, the domestic poultry and captive bird populations in GB remain under high infection pressure, particularly where biosecurity is sub-optimal. Even where biosecurity is good, the ongoing high wild bird infection pressure will highlight any weaknesses that exist. Recent storms which have hit the UK may have damaged housing and biosecurity measures. Given the continued infection pressure posed by wild birds across the UK, it is imperative that biosecurity is maintained as much as possible to mitigate the risk of infection. This will be of particular importance in the coming weeks as flooding is anticipated as a consequence of the recent storms. There has been an unprecedented number of poultry outbreaks and wild bird cases reported in the 2021/22 season not only for the UK but also across Europe, and a long tail in the epizootic is expected over the coming months. Although the number of wild bird cases of HPAI H5 appear to be

decreasing across northern European countries (Figure 3), the continued reports of cases in wild birds and an increased number of outbreaks affecting poultry premises in Spain and Portugal are suggestive of its continued spread in southern Europe. It should be noted that trends in wild bird cases in Europe are of little importance as a predictor for the UK as the winter progresses through into the spring, as the birds that migrate from continental Europe to overwinter in GB have arrived by this stage of winter and some will be making their return journey starting as early as next month.

Conclusion

Cases of HPAI H5 in wild birds and outbreaks in poultry continue to be reported across Europe and in GB since our last assessment.

Total numbers of migrating wild water birds (ducks, geese, and some swan species) have now peaked in GB, with the majority of wintering water birds having arrived by the end of January. These birds will begin their return journey from March. There have been 685 confirmed cases of HPAI H5 in wild birds in GB to 21 February 2022 across a range of species, including a significant number of resident sedentary birds of species such as mute swan, Canada goose, some raptors (including 71 buzzards across GB) and a pigeon indicating that exposure to infection within GB is still occurring. Furthermore, the avian 'order shift' observed (Figures 1 and 2) demonstrates that a greater proportion of potential bridging species such as pigeons, gulls, pheasants and some raptors have tested positive as the outbreak has developed. This is not unexpected, as the waterfowl species would likely be the initial birds exposed to infection from migratory water birds from Europe, as infection persists in the population, more native species are likely to be exposed to the disease. In continental Europe, pigeons, corvids and sparrows which could also serve as bridging species continue to be reported as infected.

HPAI <u>H5N8 in seals</u> and HPAI <u>H5N1 in foxes</u> have been reported in recent months, in Denmark, The Netherlands and Rol. Comorbidities were investigated in the case of the seals and none were found, the fox in The Netherlands displayed neurological signs (walking in circles and falling over) and the fox in Rol was found dead. It is possible that other factors may have influenced disease severity. Infection of mammalian species with HPAI is a rare event and it is considered that more genetic changes are required before an avian influenza virus can spread between humans. We will continue to monitor reports closely.

HPAI H5 is continuing to circulate in both susceptible over-wintering migrant water birds and sedentary wild bird species within GB, with a greater number of events likely to be observed around water bird wintering sites. The risk level of HPAI H5 in wild birds is therefore maintained at **VERY HIGH** across GB.

The risk of exposure of poultry across the whole of GB 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, to exclude contact with wild birds, 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 GB on 3 November 2021, and in Northern Ireland on 17 November 2021.

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

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 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 winter storms. Reinforcement of good biosecurity 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 biosecurity best practice advice, which can be found here: https://www.gov.uk/guidance/avian-influenza-bird-flu#biosecurity-advice.

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>. Further information is available here:

https://www.gov.uk/guidance/avian-influenza-bird-flu including updated biosecurity advice for poultry keepers for England; https://gov.wales/avian-influenza for Wales; http://gov.scot/avianinfluenza for Scotland and; https://www.daera-ni.gov.uk/articles/avian-influenza-ai#AIPZ for NI.

The OIE/FAO International Reference Laboratory/UK National Reference Laboratory at Weybridge has the necessary diagnostic capability for strains of avian influenza virus,

whether of low or high pathogenicity, and continually monitors 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.

In England, any findings **of three or more** dead wild birds of any species, found at the same location at the same time should be reported to the Wild bird Helpline (Tel: 03459 33 55 77 – please select option 7). It is advisable that you do not touch these birds.

In Scotland and Wales, findings **of any number** of dead wild birds of any species, found at the same location at the same time should be reported to the Wild bird Helpline (Tel: 03459 33 55 77 – please select option 7). It is advisable that you do not touch these birds.

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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 (2022) <u>Department of Agriculture, Environment and Rural Affairs Avian influenza information page</u>

IZSVe (2022) <u>IZSVe report - Number of highly pathogenic avian influenza positive</u> events notified by country and poultry category (pdf)

Outbreak News Today (2022) <u>Denmark reports 1st highly pathogenic avian influenza</u> case in harbor seal - Outbreak News Today



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

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