Updated Outbreak Assessment #28

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

20 June 2022 Ref: VITT/1200 HPAI in the UK and Europe

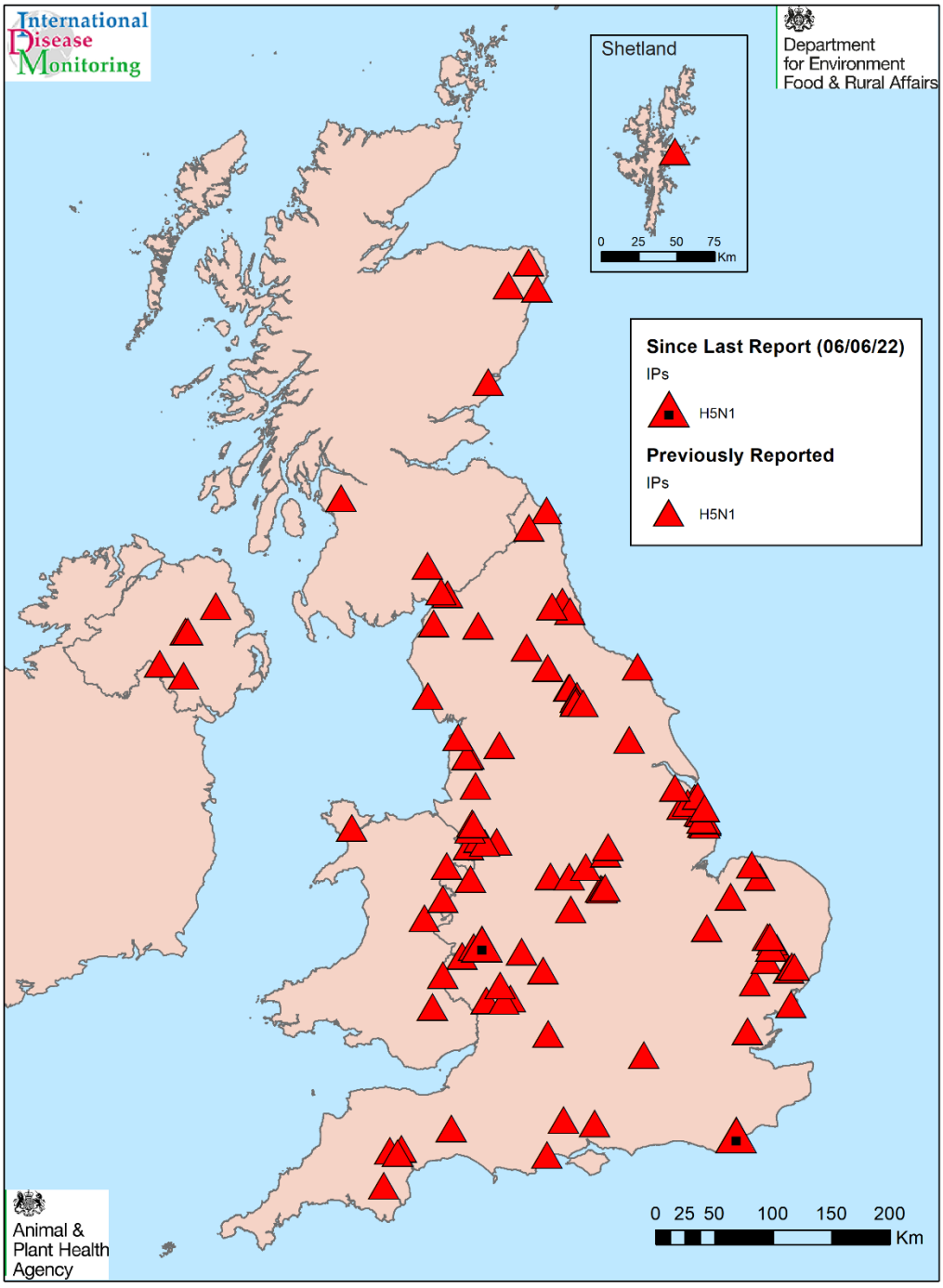
Disease report

Since our last outbreak assessment on 06 June 2022, there have been further reports of high pathogenicity avian influenza (HPAI) H5 both in domestic poultry and in wild birds in the United Kingdom (UK) and Europe. These include two infected premises (IPs) confirmed with HPAI H5N1 in domestic poultry in the UK; both of which were in England. There have been 41 further HPAI H5 events detected in wild birds in Great Britain (GB) since our last assessment.

The World Organisation for Animal Health (WOAH) has reported new IPs with HPAI H5N1 in domestic poultry in Croatia, France, Germany, Hungary and the Netherlands since our last report. One new IP with HPAI H5 in poultry has also been reported in Bulgaria.

Wild bird cases of HPAI H5N1 continue to be reported in Belgium, Denmark, Finland, France, Germany, Hungary, Iceland, Poland, Russia, Spain and Sweden. Further wild bird cases of HPAI H5N5 have been reported in Norway.

Map 1: HPAI H5 outbreaks in domestic poultry[1] and captive birds across the United Kingdom, October 2021 to 20 June 2022



[1] According to the 2021 WOAH definition of poultry: Terrestrial Code Online Access - WOAH - World Organisation for Animal Health

Situation assessment

United Kingdom

The first detection of HPAI H5N1 virus during this 2021 to 2022 HPAI season was in rescued wild swans and captive poultry at a swan sanctuary in Worcester (England) on 15 October 2021. An AIPZ was declared in England, Wales and Scotland on 3 November 2021, requiring personnel working with poultry and hobbyists to take additional biosecurity measures. Additional housing measures came into force from 29 November 2021. These housing measures were lifted on 2 May 2022 but the AIPZ remains in place.

Since the first HPAI H5N1 detection on 15 October 2021, there have been 115 further confirmed IPs with HPAI H5N1 in poultry and captive birds across Great Britain (Map 1), (Table 1) and one on the Shetland Islands north of Scotland. Of these 116 IPs in total, 101 have occurred in England, 10 have occurred in Scotland (including the Shetland Islands), and five in Wales.

Since our last assessment on 06 June 2022, HPAI H5N1 has been confirmed at two further premises in England. The new IPs were a commercial fattening turkey premises in Shropshire and a backyard flock of chickens in East Sussex.

There have been no new premises with HPAI H5N1 confirmed in Northern Ireland since our last report on 06 June 2022. Following the lifting of the AIPZ in Northern Ireland on 1 June 2022, the total number of poultry IPs remains at six including the counties of Tyrone, Antrim, Armagh and Fermanagh (DAERA, 2022). As of 17 June 2022, the number of wild bird findings of HPAI H5 in Northern Ireland is seven (IZSVe, 2022).

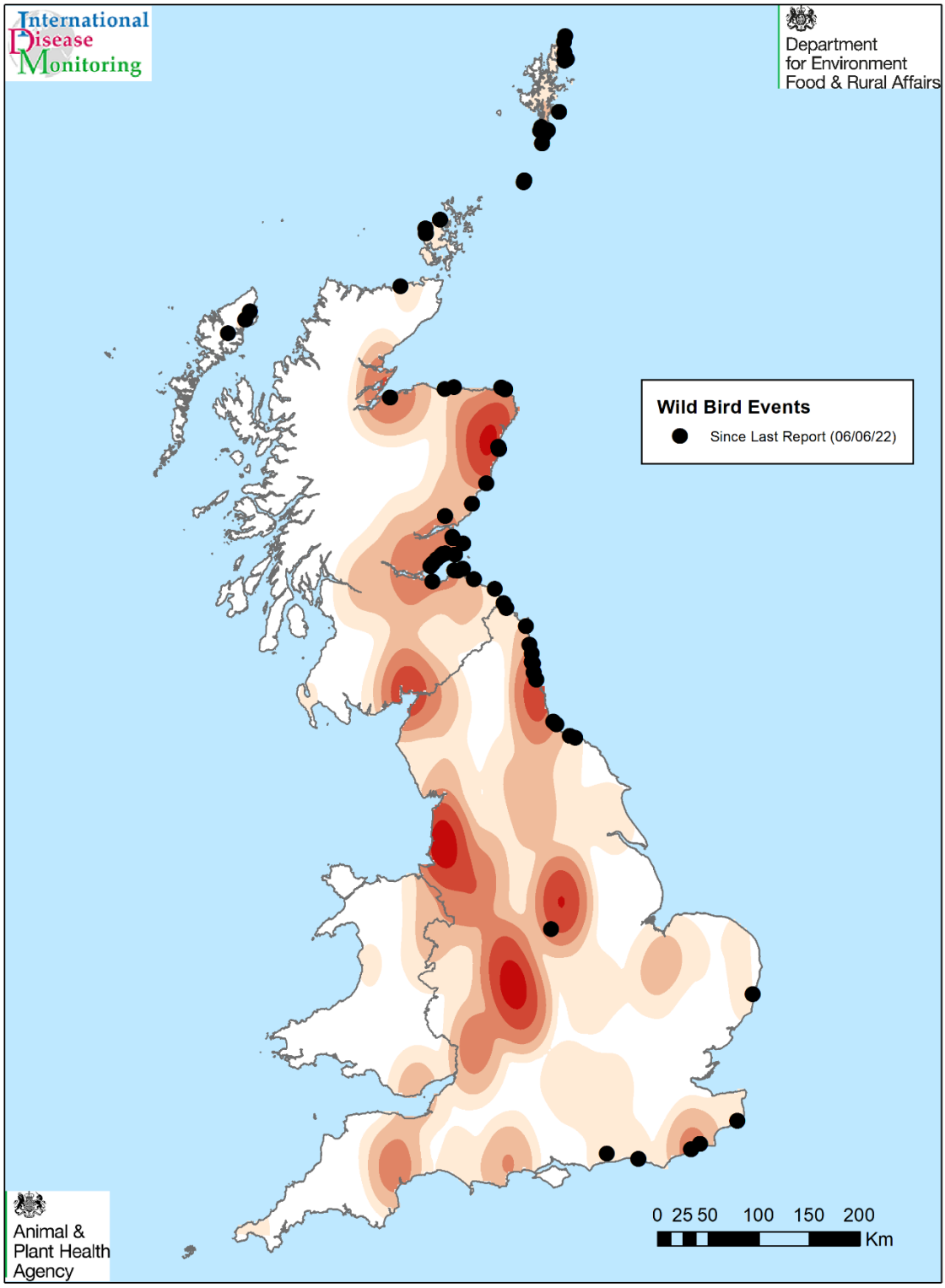
Table 1: Current poultry[1] and captive bird premises with High Pathogenicity Avian Influenza (HPAI) H5N1 in Great Britain and Shetlands as of 20 June 2022. For outbreaks which were resolved before 6 June, see our previous outbreak assessment

Outbreak Number	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved[2]
79	22 January 2022	Near Inverurie, Aberdeenshire	Backyard mixed species	22/01/2022[3]
104	06 April 2022	Near Exeter, Devon	Commercial mixed species	9 June 2022
106	07 April 2022	Near Exeter, Devon	Backyard mixed species	9 June 2022

Outbreak Number	Date HPAI H5N1 confirmed	Location, County	Description	Date resolved[2]
109	13 April 2022	Near Teignbridge, Devon	Commercial mixed species	9 June 2022
110	24 April 2022	Near Ilkeston, Derbyshire	Smallholder mixed species	
111	7 May 2022	Near Lowdham, Nottinghamshire	Commercial laying hens	
112	19 May 2022	Near Southwell, Nottinghamshire	Commercial smallholder mixed species	
113	30 May 2022	Near the Island of Whalsay, Shetland	Commercial free range laying hens	
114	1 June 2022	Near Ludlow, Shropshire	Commercial fattening turkeys	
115	7 June 2022	Near Ludlow, Shropshire	Commercial fattening turkeys	
116	15 June 2022	Near Bexhill-on-Sea, East Sussex	Backyard chickens	

[1] According to the 2021 WOAH definition of poultry: Terrestrial Code Online Access - WOAH - World Organisation for Animal Health
[2] Date resolved refers to the date when all disease control restrictions (3km Protection Zone, 10km Surveillance Zone, 3km Captive Bird Monitoring Controlled Zone) have been removed from the premises
[3] This was a special category premises, so no new disease control zones were applied.

Map 2: Map showing the relative density of and most recent HPAI H5 positive findings in wild birds across Great Britain October 2021 to 20 June 2022

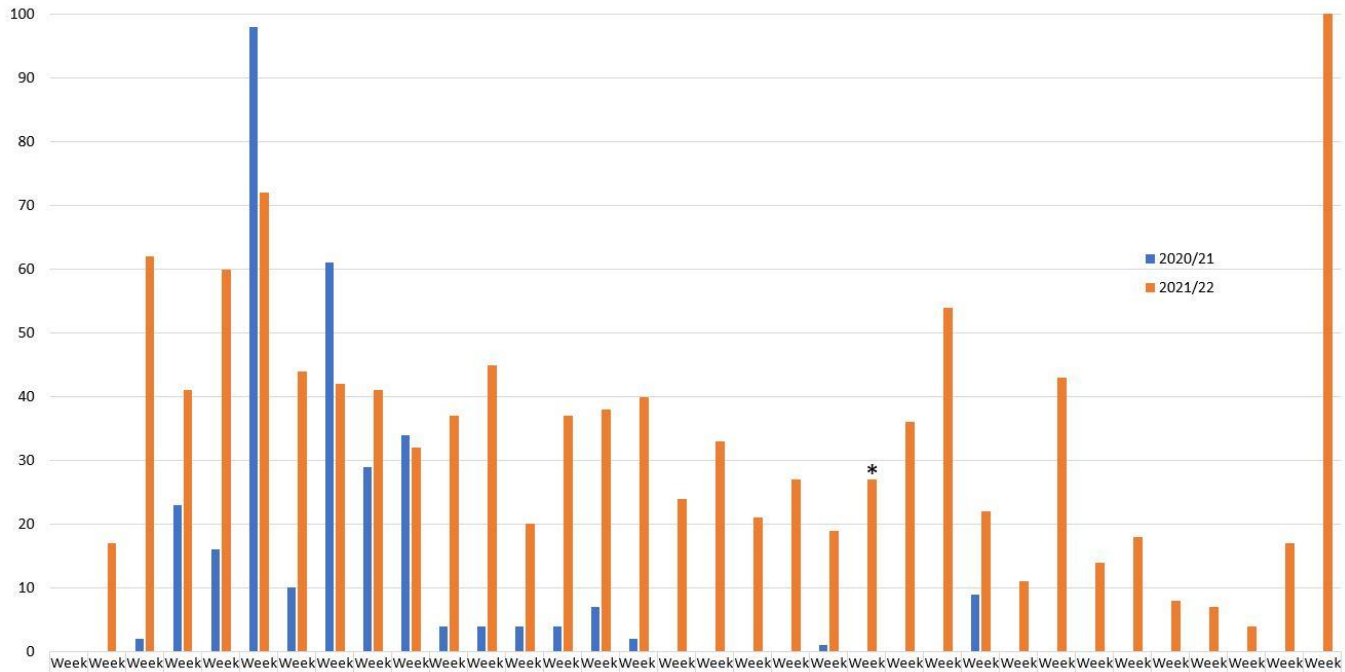


Since our last outbreak assessment on 06 June 2022, HPAI H5 has been detected in wild birds in 41 locations in Great Britain and the Scottish Isles, 21 of which have not had HPAI reported in wild birds previously, bringing the total to 312 separate wild bird positive locations, involving 54 different bird species (listed in Table 2), in 78 separate counties. The total number of positive wild bird findings is 1,253, with most in England (Table 2). The findings reported within the last two weeks are along the north-eastern coasts of England and Scotland and on the south-east coast of England.

The majority of wild birds that have tested positive for HPAI H5 in Great Britain during the 2021 to 2022 season have been infected with the H5N1 strain. HPAI continues to be detected in wild birds, with many more reports in the 2021 to 2022 season compared to the 2020 to 2021 season (Figure 1).

There have been 48 cases for which the HPAI H5 genotype has been identified, and characterisation of neuraminidase (NA) subtype is in progress due to low viral loads in samples. The NA could not be determined for a total of eight H5 HPAI samples from wild birds, due to very low viral loads.

Figure 1: Wild bird HPAI H5N1 positives across Great Britain 2020 to 2021 and 2021 to 2022 seasons. The asterisk denotes an increase in surveillance sensitivity in England.

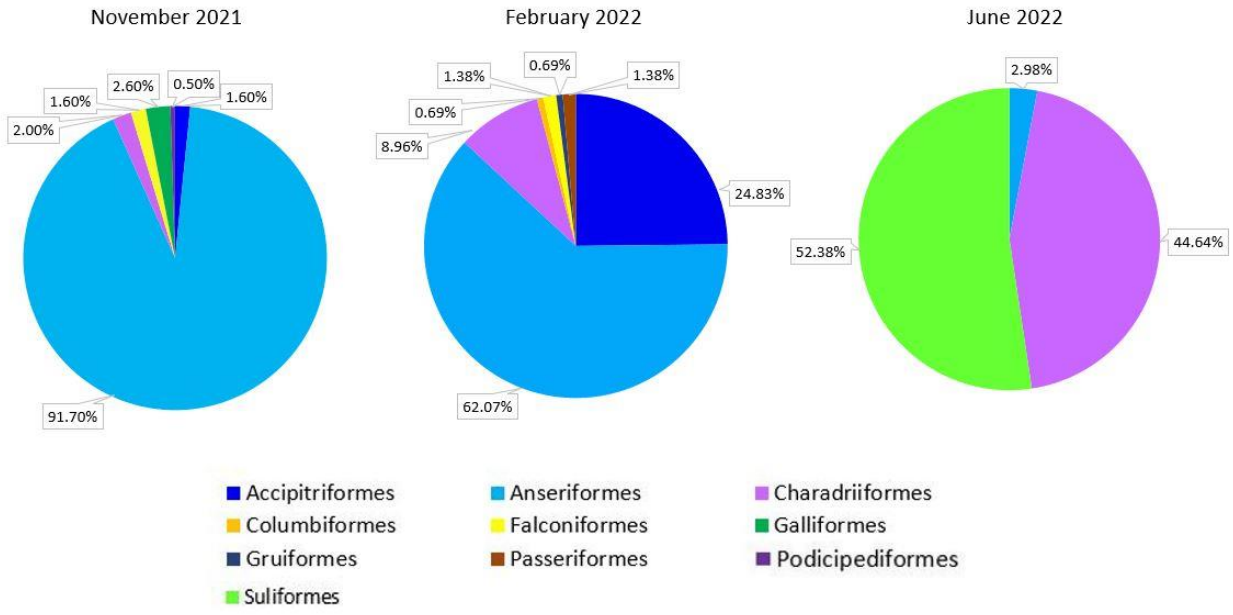


	Week 43	Week 44	Week 45	Week 46	Week 47	Week 48	Week 49	Week 50	Week 51	Week 52	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24
2020/21	0	0	2	23	16	98	10	61	29	34	4	4	4	4	7	2	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0
2021/22	0	17	62	41	60	72	44	42	41	32	37	45	20	37	38	40	24	33	21	27	19	27	36	54	22	11	43	14	18	8	7	4	17	146

The species of wild birds affected by HPAI in mainland Great Britain have varied throughout the current 2021 to 2022 season, including a greater variety of wild bird species overall compared to previous seasons. An increasing proportion of birds of prey/raptor (*Accipitriformes*) and other resident species (*Passeriformes, Columbiformes*) have become infected as the outbreak has progressed and more recently, many seabirds including gannets, gulls, guillemots and great skua have become infected throughout June 2022 (Figure 2). Thus gannets (Suliforms) now account for over half the cases.

This increased number of cases in sea birds may be in part due to breeding patterns, with auk species such as guillemot now at coastal breeding sites rather than out to sea. Gannets and auks nest in closely packed colonies on cliffs and would be exposed to faeces from other birds in the colony.

Figure 2: Proportion of HPAI H5 wild bird positives by Order across the 2021 to 2022 HPAI season in mainland Great Britain as of 20 June 2022



For further details, please see the report (updated weekly) on findings of HPAI in wild birds in Great Britain and Northern Ireland.

As of 20 June 2022, there has been a total of 43 wild bird HPAI findings from across the Scottish islands of Shetland (29), Orkney (10) and the Western Isles (4). These findings comprise of four Arctic terns, eight common eider ducks, 11 gannets, two great black-backed gulls, 16 great skua, one unidentified gull and one unspecified goose and were collected between 18 March and 06 June 2022. We are continuing to monitor the situation regarding HPAI in the Scottish islands.

Table 2: Wild bird species in Great Britain that have tested positive for HPAI H5 as of 20 June 2022

Region and species	Total number of birds testing positive
England (below)	**744**
Barnacle Goose	13
Bewick's Swan	1
Black headed gull	17
Black Swan	2
Canada Goose	145
Common Buzzard	59
Common Eider	1
Common Tern	2
Coot	1
Curlew	2
Gadwall	1
Gannet	23
Goshawk	1
Great-crested Grebe	3
Grey Heron	3
Greylag goose	38
Guillemot	2
Gull sp.	8
Hen Harrier	1
Herring Gull	43
Kestrel	6
Kittiwake	1
Lapwing	1
Little Gull	1
Magpie	1
Mallard Duck	15
Moorhen	3
Mute Swan	230
Oystercatcher	1
Peregrine Falcon	5
Pheasant	8
Pied Wagtail	6
Pink Footed goose	18
Puffin	1
Red Kite	2
Sandwich Tern	1

Region and species	Total number of birds testing positive
Sea Eagle	1
Sparrowhawk	7
Tawny Owl	1
Tufted Duck	1
Unidentified Swan	17
Unspecified Dove	2
Unspecified Duck	1
Unspecified Goose	14
Unspecified pigeon	1
White Fronted Goose	1
Whooper Swan	31
Widgeon	1
Wales (below)	**41**
Canada Goose	4
Common Buzzard	4
Goshawk	1
Greylag goose	1
Herring Gull	2
Mute Swan	15
Peregrine Falcon	1
Pheasant	5
Sparrowhawk	1
Unidentified Swan	1
Unspecified Goose	5
Unspecified pigeon	1
Scotland (below)	**468**
Arctic Tern	4
Barnacle Goose	34
Bird of Prey Unspecified	3
Black headed gull	1
Blackbird	1
Canada Goose	3
Common Buzzard	63
Common Eider	13
Gannet	70
Great black backed gull	2
Great skua	19
Greylag goose	26
Guillemot	12
Gull sp.	13

Region and species	Total number of birds testing positive
Herring Gull	12
Kestrel	1
Magpie	1
Mallard Duck	1
Mute Swan	28
Pink Footed goose	80
Red Kite	3
Sea Eagle	2
Sparrowhawk	5
Unidentified Swan	16
Unspecified Duck	2
Unspecified Goose	42
Unspecified Gull	1
Unspecified waterfowl	1
Whooper Swan	9
Wood Pigeon	1
Grand Total	**1,253**

Europe

The total numbers of IPs with HPAI H5 in poultry and cases in wild birds in Europe are presented in Table 3. New disease reports are still being made to the World Organisation for Animal Health (WOAH) on a daily basis. Numbers reported are from WOAH's WAHIS platform.

Table 3: Events (to 20 June 2022) of HPAI H5 in domestic poultry (P) and cases in wild birds (WB) since 1 October 2021 in the UK and Europe, according to WOAH report date

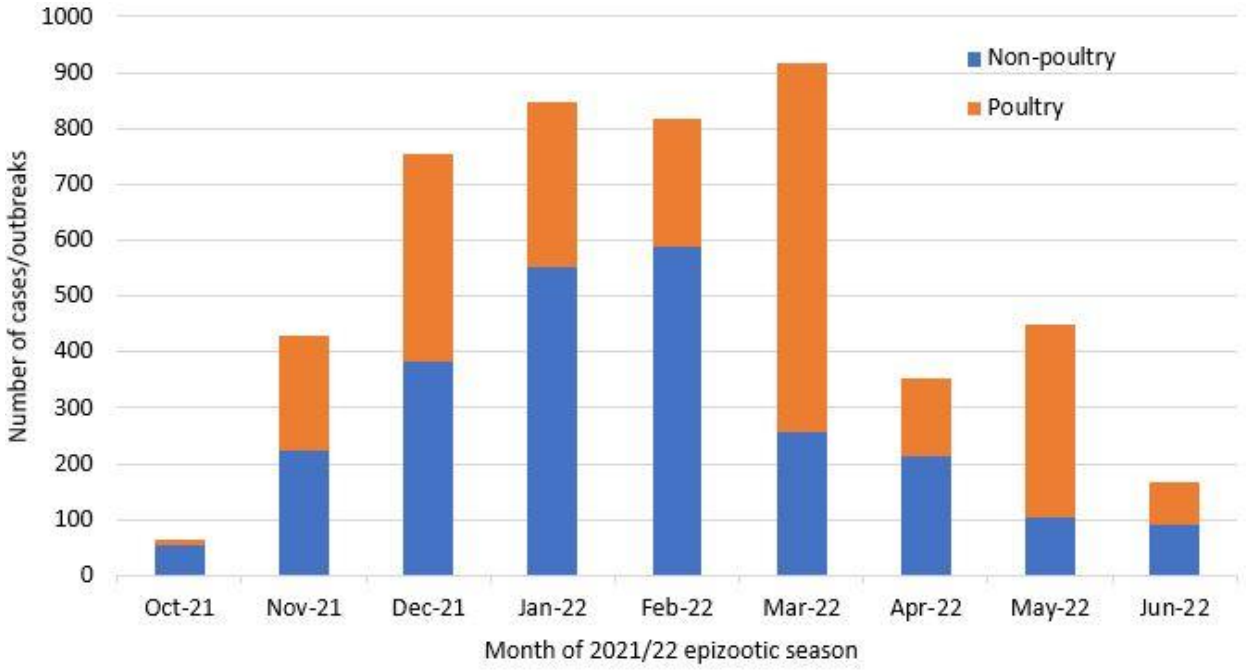
Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	H5N5 (WB)	Total
Albania			1			4					5
Austria			35								35
Belgium	6		70	3							79

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	H5N5 (WB)	Total
Bosnia and Herzegovina			2								2
Bulgaria	1	32									33
Croatia			8	3							11
Czech Republic			21	6							27
Denmark		1	126	4	1	1					133
Estonia			10		2	1					13
Faroe Islands			1								1
Finland			21		2						23
France			103	1,121							1,224
Germany			1,047	71			1		1		1,120
Greece			7								7
Hungary			33	305							338
Iceland			17	1							18
Ireland			75	6							81
Italy			21	249							270
Latvia			2								2

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	H5N5 (WB)	Total
Lithuania			5								5
Luxembourg			4								4
Moldova				1							1
Netherlands	1		214	47	2						264
Norway			11	2						8	21
Poland			34	103				1			138
Portugal			12	4							16
Republic of North Macedonia			3								3
Romania			14	5							19
Russia	35	12	16	9							72
Serbia and Montenegro			3		3		1				7
Slovakia			22	3	1						26
Slovenia			39	1							40
Spain			53	31							84
Sweden			41	4	1						46
Switzerland			3								3

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N2 (P)	H5N3 (WB)	H5N5 (WB)	Total
Ukraine	2	1									3
United Kingdom			409	82	1						492

Figure 3: Number of HPAI H5 outbreaks in poultry and cases in non-poultry, including wild birds reported in the United Kingdom and Europe each month during the 2021 to 2022 epizootic, according to WOAH report date as of 20 June 2022



The number of outbreaks of HPAI H5 in poultry and cases in non-poultry, including wild birds reported by the WOAH each month are at their lowest since November 2021, with 78 outbreaks in poultry and 90 cases in non-poultry reported in June 2022 (Figure 3).

Northern Europe

Since our last outbreak assessment on 06 June 2022, HPAI H5 has been reported in 15 European countries excluding the United Kingdom (WOAH). The total number of

European countries affected this HPAI season according to EU reference laboratory data, (Istituto Zooprofilattico Sperimentale delle Venezie; IZSVe, 2022) is currently 34.

Belgium

Between 06 and 20 June, the WOAH has not reported any further HPAI outbreaks in poultry but has reported seven further cases of HPAI H5N1 in wild birds. These cases all involved single birds, comprising a total of four European herring gulls (*Larus argentatus*), a lesser black-backed gull (*Larus fuscus*), a black-headed gull (*Chroicocephalus ridibundus*) and a sandwich tern (*Thalasseus sandvicensis*).

Bulgaria

Since our last assessment, one further poultry IP with HPAI H5 (N-type not disclosed) has been reported in a duck farm with 3,200 birds. No further cases in non-commercial flocks or wild birds have been reported.

Croatia

Between 06 and 20 June the WOAH has reported a further poultry IP with HPAI H5N1. This was a backyard flock with 17 birds, though the type of birds was not reported. No further cases in non-commercial flocks or wild birds have been reported.

Denmark

There have been no further reports of HPAI in poultry since our last assessment but there have been 12 further cases in wild birds. These 12 cases involved a total of four great cormorants (*Phalacrocorax carbo*), three barnacle geese (*Branta leucopsis*), three common buzzards (*Buteo buteo*), two peregrine falcons (*Falco peregrinus*) one common raven (*Corvus corax*) and one European herring gull (*Larus argentatus*).

Finland

Since our last assessment, the WOAH has not reported any further HPAI IPs, but has reported one further case of HPAI H5N1 in wild birds, involving three great cormorants (*Phalacrocorax carbo*).

France

On 13 June, the WOAH reported a further 48 HPAI IPs with domestic poultry and another five cases in wild birds. However the start dates of these reports range from 5 January to 25 May. The latest report from the International Animal Health Watch has stated that there have been no new poultry outbreaks detected in France since 15 May

2022. However, detections in wild birds have continued, including reports spanning from the Belgian border to Brittany, and gannets in the Somme department. The Health Watch has described the situation as “exceptional” in France given the scale and time period of the detections, which until now was considered off-season for HPAI activity (Plateforme ESA, 2022).

According to the latest French presentation to the Standing Committee on Plants, Animals, Food and Feeds (PAFFs), ANSES (the French Agency for Food, Environmental and Occupational Health & Safety) has performed genomic analyses on samples from across France this epizootic season. Eight different genotype strains were isolated, however one of the strains in particular (FR2) was predominant amongst the increased cases observed in the west and midwest of France in March and April 2022. A different genotype (FR1) was observed to be more prevalent during the first two waves of infection in December 2021 and January 2022, while a third distinct genotype (FR4) was prevalent amongst the outbreaks in the south-west (PAFF, 2022a).

On 08 June, a ministerial decree announced the lowering of the risk level to “negligible” and thus lifting of housing measures, movement restrictions and bans on poultry gatherings for the whole French territory, effective from the beginning of June 2022. Criteria which informed the lowering of the risk level included favourable evolution of wild bird migratory pathways across France, improvement of the sanitary situation in poultry, seasonal temperatures being unfavourable for environmental HPAI survival and the need to guarantee optimal welfare conditions for poultry usually kept outdoors (PAFF, 2022a). It should be noted that restricted zones with housing measures are still in place in the following areas: Brittany, Normandy and Pays de la Loire regions, plus the Deux-Sèvres Department in the west, and in the Departments of Aveyron, Cantal, Charente, Corrèze, Dordogne, Haute-Vienne, Lot and Lot et Garonne in the midwest (Plateforme ESA, 2022).

In May 2022, an experimental study was launched to investigate the effects of two candidate vaccines for HPAI in ducks in France. There are two parallel study phases; one on farm sites and one in animal laboratories (PAFF, 2022a).

Germany

There has been one further poultry premises with HPAI H5N1 reported by the WOAH for Germany since our last assessment. This was a commercial premises with 14,850 birds, though the type of birds kept was not reported. There has also been a further seven cases reported in wild birds, including unspecified Laridae (10), Anatidae (3) and Accipitridae (2) birds.

The latest German PAFF presentation has described that although infection pressure from wild birds remains in northern Germany, recovery of HPAI-free status in poultry according to WOAH definition could be achieved during the summer of 2022, with continued awareness and demonstration of high-level biosecurity measures (PAFF, 2022b).

Hungary

Between 06 and 20 June 2022, the WOAH has reported one further poultry IP in Hungary. This was a fattening goose holding with 10,503 birds in Téglás, located in the Northern Great Plain region of eastern Hungary. One further case of HPAI H5N1 was also reported in a wild common blackbird (*Turdus merula*).

The latest PAFF presentation from Hungary has stated that following epidemiological investigation, primary outbreaks of HPAI were likely caused by introduction of virus from wild birds. In addition, factors which have contributed to the spread of infection include biosecurity, density of poultry holdings, weather and geography, feed transport and loading (PAFF, 2022c).

Iceland

Since our last assessment, there have been no further reports of HPAI in poultry by the WOAH but there have been 15 further cases of HPAI H5N1 reported in wild birds. These cases involved a total of eight northern gannets (*Morus bassanus*), two greylag geese (*Anser anser*), two great black-backed gulls (*Larus marinus*), two great skua (*Stercorarius skua*), one pink-footed goose (*Anser brachyrhynchus*), one barnacle goose (*Branta leucopsis*) and one black-headed gull (*Chroicocephalus ridibundus*).

Netherlands

There have been five further commercial poultry HPAI H5N1 IPs reported by the WOAH since 06 June 2022. These premises were comprised of a broiler farm with 220 birds, an organic layer hen premises with 200 birds, a fattening duck farm with 20 birds, a fattening duck and laying hen farm with 14,112 birds and a breeding parent duck farm with 7,144 birds. No further HPAI H5N1 events in wild birds have been reported.

Norway

There have been no further reports of HPAI H5N1 in poultry or wild birds since 06 June, but there have been two further cases of HPAI H5N5 reported in wild birds. These cases involvedthree unspecified Laridae birds and one common raven (*Corvus corax*).

Poland

Since our last assessment, there have been no further reports of HPAI in poultry by the WOAH but there have been two further cases reported in wild birds. These involved one common tern (*Sterna hirundo*), one sandwich tern (*Thalasseus sandvicensis*), one black-headed gull (*Chroicocephalus ridibundus*) and one Armenian gull (*Larus armenicus*).

Russia

Between 06 and 20 June, the WOAH has reported no further poultry IPs with HPAI H5N1 but has reported two outbreaks in non-commercial backyard flocks, one with 43 birds and one with 128 birds, the type of birds was not reported. In addition, one new case in wild birds was reported, involving a total of 2,220 birds including 1,795 Caspian terns (*Hydroprogne caspia*), 300 great black-headed gulls (*Larus ichthyaetus*), 124 Caspian gulls (*Larus cachinnans*) and a single Dalmatian pelican (Pelecanus crispus).

Sweden

There have been no further reports of HPAI in poultry since our last assessment but there has been a case of HPAI H5N1 reported in a single northern gannet (*Morus bassanus*).

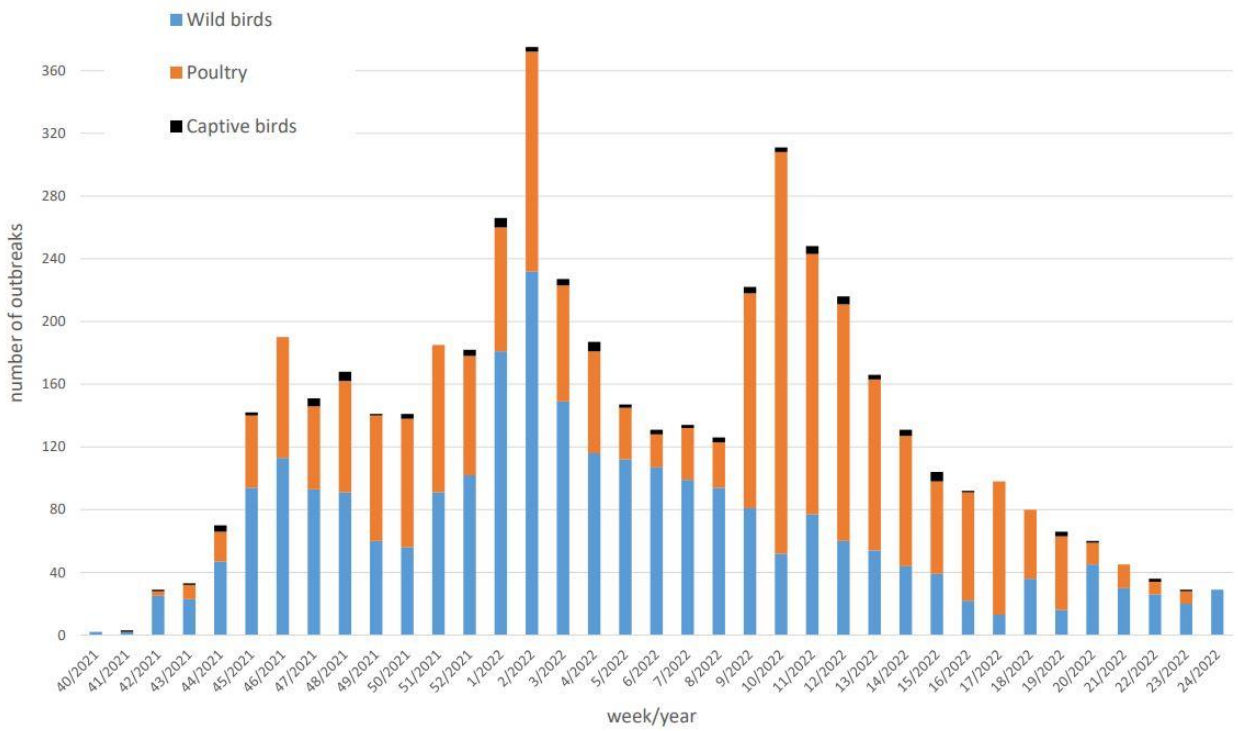
Southern Europe

Spain

Since 06 June 2022, the WOAH has not reported any further HPAI IPs with domestic poultry but has reported 11 cases of HPAI H5N1 in wild birds. The cases involved a total of three unspecified Anatidae birds, five greylag geese (*Anser anser*), two white storks (*Ciconia ciconia*), two mute swans (*Cygnus olor*), one peregrine falcon (*Falco peregrinus*), two unspecified Falconidae birds, one northern bald ibis (*Geronticus eremita*), three bearded vultures (*Gypaetus barbatus*), two griffon vultures (*Gyps fulvus*) and three unidentified wildlife species.

According to the WOAH, there have been no further reports of HPAI H5 outbreaks in domestic poultry or cases in wild birds between 06 and 20 June in; Albania, Austria, Bosnia and Herzegovina, Czech Republic, Estonia, the Faroe Islands, Greece, Italy, Latvia, Lithuania, Luxembourg, Moldova, North Macedonia, Portugal, the Republic of Ireland, Romania, Serbia and Montenegro, Slovenia, Switzerland or Ukraine.

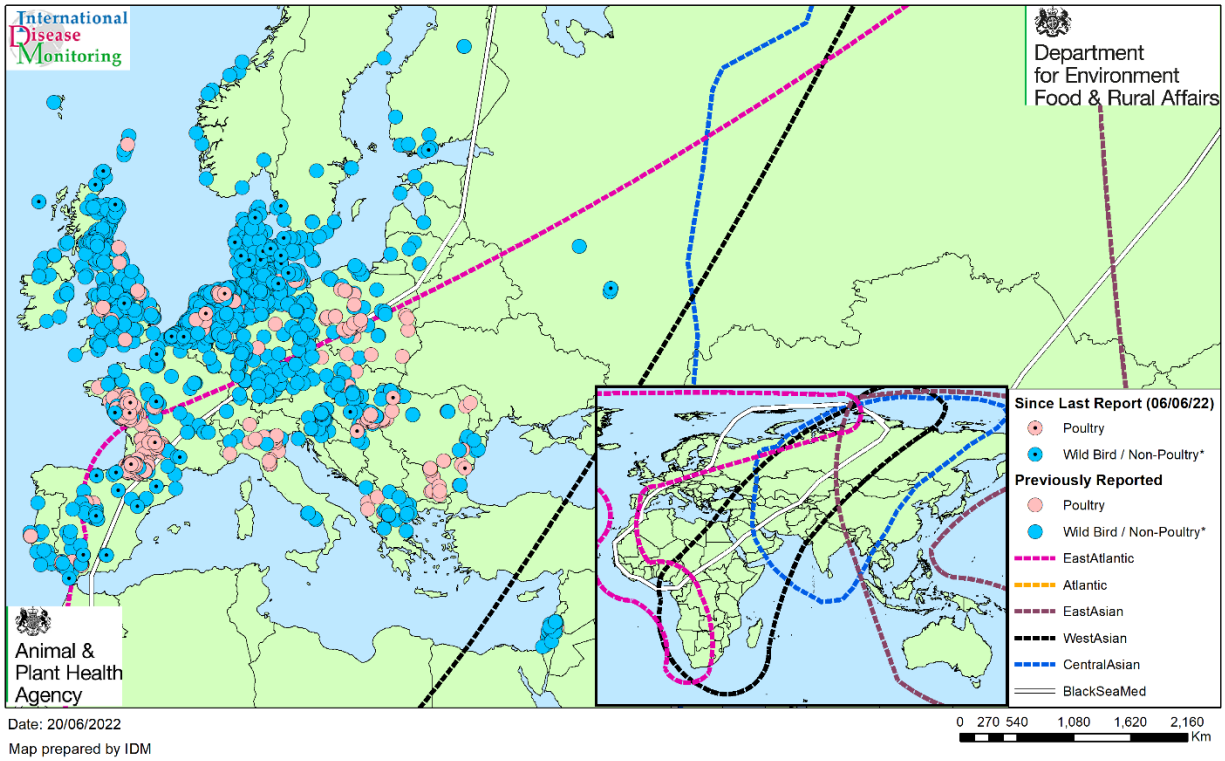
Figure 4: Number of HPAI positive events reported in poultry, captive and wild birds each week in Europe from October 2021 to 20 June 2022 (IZSVe, 2022)



Across Europe, the number of poultry IPs reported weekly by IZSVe continues to decrease, with fewer than 10 outbreaks reported in weeks 22 and 23, respectively and no outbreaks reported in week 24 (Figure 4). The weekly number of HPAI cases in wild birds has shown a general decreasing trend from week 20 to 23, although the number of cases has increased in week 24 (Figure 4).

Map 3 shows the distribution of HPAI H5 outbreaks in poultry and captive birds, together with cases in wild birds, in Europe reported by WOAH between January 2022 and 20 June 2022. Those events reported since our last outbreak assessment on 06 June are identified with black central dots.

Map 3: HPAI outbreaks (from WOAH) in poultry, captive, and wild birds across Europe, January 2022 to 20 June 2022.



Implications for the GB

The detections of HPAI H5 in wild birds in Great Britain have greatly increased in the last week (Figure 1), although many of these cases are seabirds including Northern gannet (Figure 2) and located on Scottish Isles such as The Shetlands and are therefore more remote from mainland domestic poultry premises. However, two new IPs reported herein confirm the ongoing infection pressure from wild birds on the domestic poultry and captive bird populations in GB. This wild bird infection pressure results in continued poultry exposure where biosecurity is sub-optimal. Even where biosecurity is good, the wild bird infection pressure is likely to expose any weaknesses that exist. Although the infection pressure from wild birds has decreased on the mainland and high temperatures recently will have reduced environmental HPAIV H5 contamination, it is imperative that biosecurity is maintained to the highest extent possible to mitigate against the ongoing risk of infection posed by wild birds across the UK, especially since the lifting of housing measures on 2 May 2022.

There has also been an unprecedented number of HPAI H5 IPs in domestic poultry and captive birds as well as wild bird cases reported in this 2021 to 2022 season across Europe. It should be noted that trends in wild bird cases in Europe are of minimal significance as a predictor for UK incursions at this time of year, particularly as Europe has fewer seabird colonies which are now being affected in the UK. The downward trend in wild bird cases in Europe (Figures 3 and 4) may also be levelling out.

The departure of migratory wildfowl from GB is now complete with all overwintering waterbirds now gone until the autumn. It should be noted that the departure of migrant waterfowl did not mark the end of the risks for HPAI through wild birds. The virus is likely to continue to circulate in resident GB wild birds over the next month, with sporadic detections, although it is not clear how quickly or indeed if the rate will continue falling through summer. It is clear from Figure 1 that the previous epizootic is not an indicator of the unprecedented events this season as there were no wild bird cases in 2021 from March. This summer, resident birds may continue to circulate HPAI H5 virus and consequently act as a future source of infection to poultry. Furthermore, juvenile birds which are immunologically naïve will soon be leaving their nests within the UK and dispersing. This change in population structure and contact behaviour could increase the circulation of virus within the wild bird population and hence HPAI virus contamination levels close to sites of poultry production over the summer. This would be unprecedented. Higher temperatures and sunlight intensities over June and July will, howeverreduce the level of environmental HPAIV contamination by promoting inactivation of the virus.

Conclusion

Cases of HPAI H5 in wild birds and confirmations in poultry premises have continued to be reported across Europe and in Great Britain since our last assessment.

There have been 1,253 confirmed cases of HPAI H5 in wild birds in Great Britain to 20 June 2022 across a range of species, with multiple detections in wild birds each week (Figure 1). The wild bird species ‘order shift’ observed between November 2021 and June 2022 (Figure 2) reflects the spread of HPAIV infection from migratory water birds to native, sedentary wild bird species, including now seabird populations, which is unprecedented. The overall number of detections in wild birds, and wild bird infection pressure, is not decreasing as was perhaps anticipated from previous epizootics (Figure 1).

Even though the migratory waterbirds have now departed the UK some months ago, there are still immunologically naïve, susceptible, resident bird species in the UK which could become infected from residual environmental contamination. The number of susceptible birds will increase as the juvenile birds from this season disperse. Higher environmental temperatures, together with increasing sunlight intensities will greatly reduce environmental levels of HPAI H5N1 and the associated risks in the summer months. However, it remains to be seen to what level the wild bird risk will fall over the summer.

The risk of HPAI H5 infection in wild birds in GB remains at **MEDIUM**.

The risk of exposure of poultry across the whole of Great Britain is maintained at **low** (with low uncertainty) where good biosecurity is applied, and at **medium** (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. The housing measures were subsequently lifted across the UK on Monday 2 May 2022, though the AIPZ still remains in place, and biosecurity requirements should be adhered to.

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 still maintained, even though the outbreak appears to be waning and sunnier, warmer weather is forecast. Strict attention should be made to ensure compliance with reviewed contingency plans, with regular maintenance checks and repairs being carried out promptly not only on buildings, but to fencing and boundaries of outdoor areas to minimise contact with wild birds.

Reinforcement of good biosecurity awareness behaviours and practices should be a constant reminder to all personnel working with birds; any lapse of these measures could still easily result in 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 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 field services office

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
- North Ireland is available on DAERA's website

The WOAH, FAO International Reference Laboratory and the 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 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, any findings of the following dead wild birds found at the same location at the same time should be reported to the Wild bird Helpline (Telephone: 03459 33 55 77 – select option 7):

- 3 or more swans, geese, ducks, gulls, waders and raptors
- five or more birds of any species

It is advisable that you do not touch these birds.

In Scotland, any findings of the following dead wild birds found at the same location at the same time should be reported to the Wild bird Helpline (Telephone: 03459 33 55 77 – select option 7):

- 3 or more swans, geese, ducks or birds of prey
- five or more birds of any species

It is advisable that you do not touch these birds.

In 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 (Telephone: 03459 33 55 77 – 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 (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 (2022) Department of Agriculture, Environment and Rural Affairs Avian influenza information page

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

- PAFF (2022a) HPAI - France - English Version (europa.eu)
- PAFF (2022b) PowerPoint-Präsentation (europa.eu)
- PAFF (2022c) HPAI_Hungary_PAFF_May_2022 (europa.eu)
- Plateforme ESA (2022) Weekly bulletin of International Animal Health Watch of 13/06/2022 to 19/06/2022

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