

Updated Outbreak Assessment #16

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

28 February 2022

Ref: VITT/1200 HPAI in the UK and Europe

Disease Report

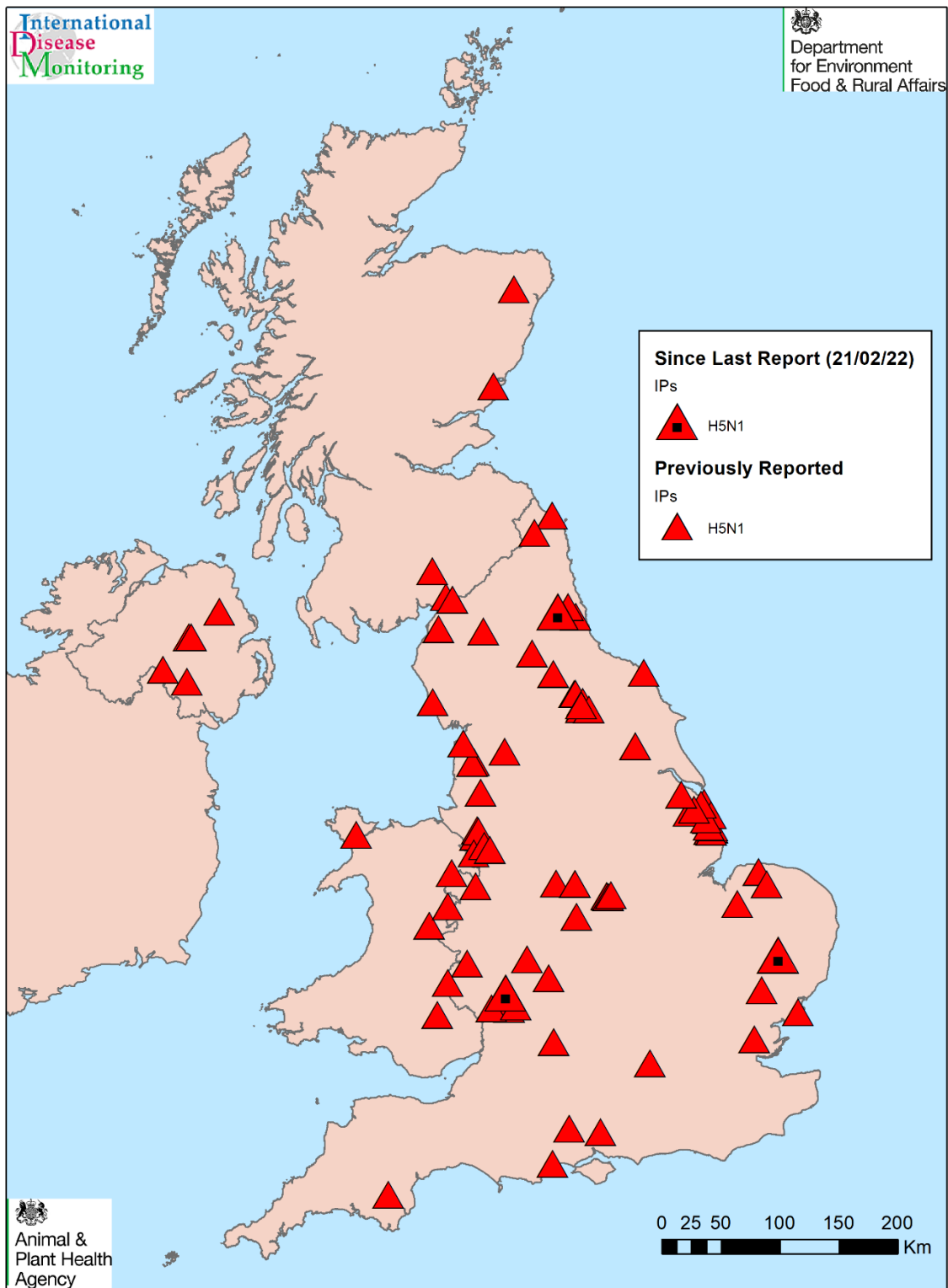
Since our last outbreak assessment on 21 February 2022, there continue to be reports of highly pathogenic avian influenza (HPAI) H5 both in Europe and in the United Kingdom (UK). This includes three further confirmed outbreaks of HPAI H5N1; two in domestic poultry and one in a backyard mixed flock in the UK.

There have been a further three confirmed outbreaks in Great Britain (GB) of HPAI H5N1 in poultry and smallholding premises since our last assessment. All of these outbreaks have occurred in England in the counties of Tyne and Wear, Herefordshire, and Suffolk. There have been no further HPAI H5N1 outbreaks confirmed in Northern Ireland (NI) since our last assessment (DAERA 2022).

Since 21 February 2022, OIE has reported outbreaks of HPAI H5N1 in domestic poultry in Italy, the Netherlands, Portugal and Spain.

Wild bird HPAI H5 cases continue to be reported in Belgium, Croatia, the Czech Republic, Denmark, Estonia, France, Germany, Hungary, Italy, Luxembourg, Poland, Portugal, Romania and Spain. Wild birds with HPAI H5N1 in the Faroe Islands have been reported for the second time this HPAI season since the first detection in mid-September 2021 and H5N1 has been reported in wild birds for the first time this season in Lithuania and in the Republic of North Macedonia.

Map 1: HPAI H5 outbreaks in poultry¹ and captive birds across the United Kingdom, October 2021 to 28 February 2022.



Date: 28/02/2022
Map prepared by IDM

UK HPAI IPs
October 2021 - 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 92 further confirmed outbreaks of HPAI H5N1 in poultry and captive birds across Great Britain (Map 1), (Table 1) taking the total to 93. Of these 93 outbreaks, 82 have occurred in England, six have occurred in Scotland and five in Wales.

In the week since our last assessment on 21 February 2022 there have been three new outbreaks of HPAI H5N1 in England, GB. These outbreaks have occurred in one poultry¹ premises of a mixed flock, one commercial pheasant supplier and one backyard holding of mixed species, within the counties of Tyne and Wear, Herefordshire and Suffolk.

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 28 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.
4	8 November 2021	Near Alcester, Bidford	Small flock of 31 turkeys and 19 chicken

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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	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
16	25 November 2021	Near Thirsk, Yorkshire	Commercial free range laying hens

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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	01 December 2021	Leicestershire	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
29	04 December 2021	Dumfries	Commercial laying hens
30	04 December 2021	Powys	Mixed captive birds

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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
42	10 December 2021	Near Highworth, Wiltshire	Commercial turkeys
43	10 December 2021	Near Clifford, Herefordshire	Commercial turkeys

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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	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
54	15 December 2021	Near Wem, Shropshire	Commercial mixed species

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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
66	30 December 2021	Near Romsey, Hampshire	Backyard mixed species

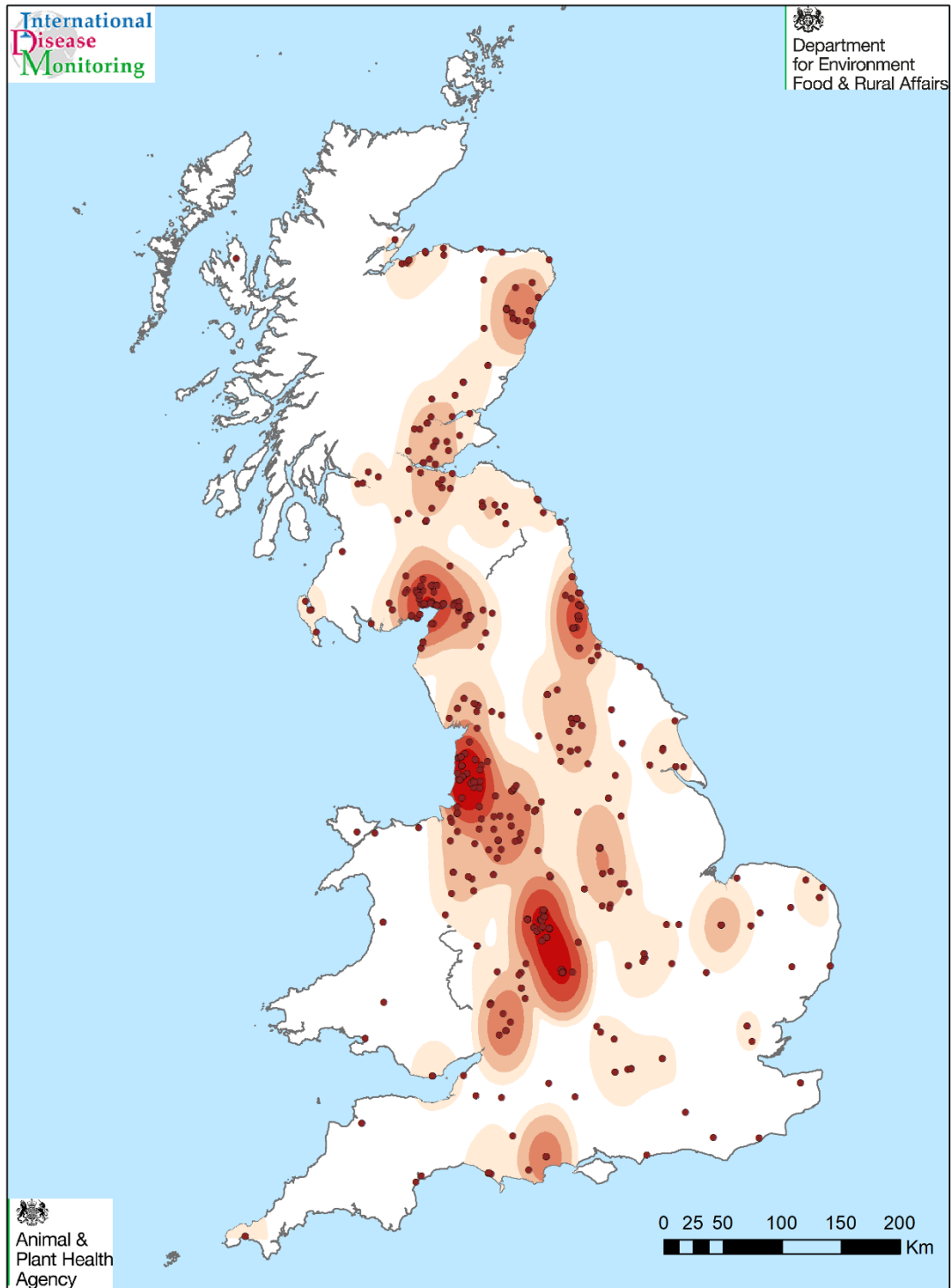
Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
67	31 December 2021	Near Theddlethorpe, Lincolnshire	Backyard mixed species
68	31 December 2021	Near Melton Mowbray, Lincolnshire	Commercial turkeys
69	02 January 2022	Near Eton, Berkshire	Rescued wild swans
70	03 January 2022	Near 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
79	22 January 2022	Near Inverurie, Aberdeenshire	Backyard mixed species

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
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 Newtown, Powys	Commercial breeding pheasants
90	21 February 2022	Near Welshpool, Powys	Commercial breeding pheasants
91	23 February 2022	Near Gateshead, Tyne and Wear	Commercial hobby flock mixed species

Outbreak Count	Date HPAI H5N1 confirmed	Location, County	Description
92	25 February 2022	Near Ledbury, Herefordshire	Commercial game supplier
93	26 February 2022	Near Westhorpe, Suffolk	Smallholding mixed species

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

Map 2: Map showing individual cases and the relative density of HPAI H5 positive findings in wild birds across Great Britain October 2021 to 28 February 2022



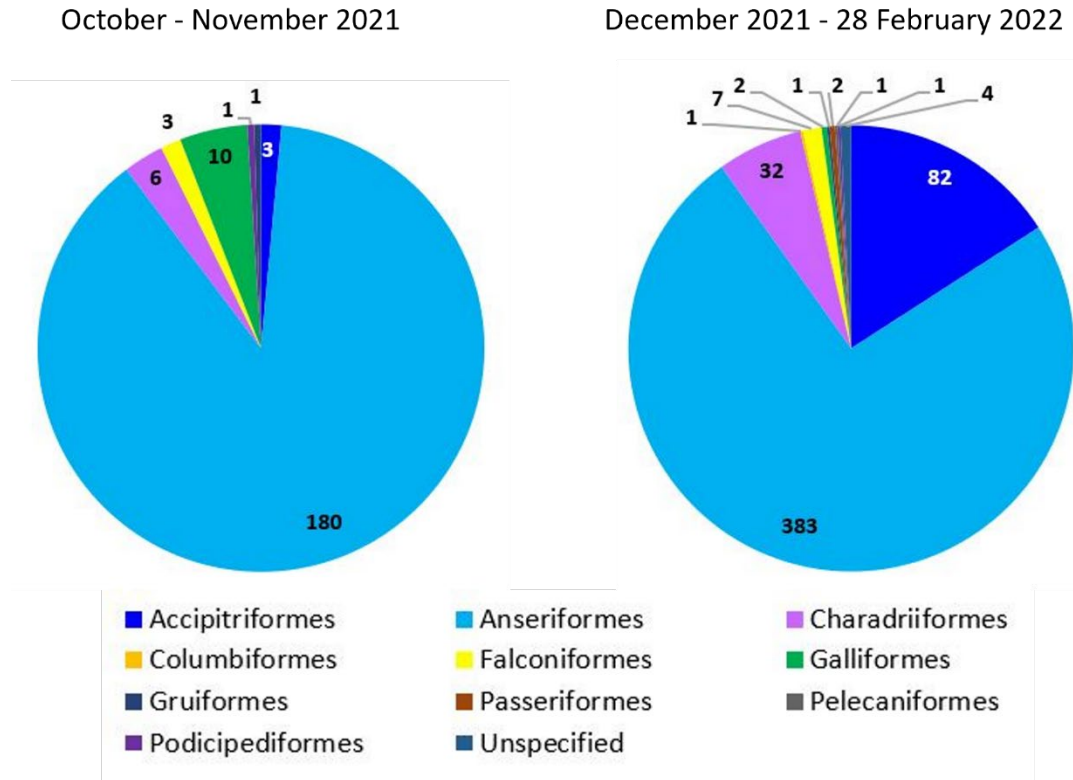
Date: 28/02/2022
Map prepared by IDM

GB HPAI Wild Bird Events (Heat Map)
October 2021 - February 2022

In the week since our last outbreak assessment on 21 February 2022, HPAI H5 has been detected in a further 11 wild bird locations in GB, bringing the total to 212 separate wild bird positive locations, involving 35 different bird species in 69 separate counties (Table 2). There have been 25 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). While there has been a number of outbreaks of HPAI in poultry and captive bird premises within these areas, a large number of outbreaks have occurred in other areas such as Lincolnshire, Norfolk and Suffolk where the wild bird detection is lower (Map 1). This may suggest that although wild migratory waterbirds contribute significantly to the initial incursion of HPAI virus into the UK, other additional factors may also affect the extent of disease spread throughout the epidemic. These could include spread into smaller endemic wild bird species that are not detected as well as fomite spread.

Further analysis of the Order profile of HPAI positive wild birds throughout the current 2021/22 season has shown a shift; with a greater variety of wild bird species overall and in particular, a greater proportion of birds of prey (Accipitriformes) species becoming infected as the outbreak has progressed (Figure 1).

Figure 1 Number of HPAI H5 Wild bird positives by Order across the 2021-2022 HPAI season in GB



For further details, please see the report (updated weekly) on findings of [HPAI in wild birds](#) in GB. and [NI](#).

Table 2: Wild bird species in Great Britain that have tested positive for HPAI H5 as of 28 February 2022

Region and species	Total number of birds testing positive
England	531
Barnacle Goose	13
Bewick's Swan	1
Black headed gull	15
Black Swan	2
Canada Goose	103
Common Buzzard	40
Coot	1
Curlew	2

Region and species	Total number of birds testing positive
Goshawk	1
Great-crested Grebe	2
Grey Heron	1
Greylag goose	26
Guillemot	1
Gull	6
Herring Gull	7
Kestrel	5
Lapwing	1
Little Gull	1
Mallard Duck	5
Mute Swan	206
Peregrine Falcon	4
Pheasant	7
Pink Footed Goose	16
Red Kite	1
Sparrowhawk	5
Unidentified Swan	17
Unspecified Duck	1
Unspecified Goose	12
Whooper Swan	28
Widgeon	1
Scotland	169
Barnacle Goose	32
Blackbird	1
Canada Goose	3
Common Buzzard	34
Greylag Goose	8
Gull	2
Herring Gull	2
Kestrel	1
Magpie	1
Mute Swan	18
Pink Footed Goose	30
Red Kite	1
Sea Eagle	1
Sparrowhawk	1
Unidentified Swan	10
Unspecified Bird of Prey	2

Region and species	Total number of birds testing positive
Unspecified Duck	2
Unspecified Goose	13
Whooper Swan	7
Wales	20
Canada Goose	2
Common Buzzard	2
Herring Gull	1
Mute Swan	8
Pheasant	5
Unspecified Goose	1
Unspecified Pigeon	1
Grand Total	720

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 28 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		52	2					59
Bosnia and Herzegovina			2						2
Bulgaria		10							10

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N3 (WB)	Total
Croatia			8	2					10
Czech Republic			17	4					21
Denmark		1	96	4	1	1			103
Estonia			9		2	1			12
Faroe Islands			1						1
Finland			12		2				14
France			61	216					277
Germany			847	57			1	1	906
Greece			1						1
Hungary			28	113					141
Ireland			67	6					73
Italy			21	243					264
Latvia			2						2
Lithuania			2						2
Luxembourg			4						4
Moldova				1					1

Country	H5 (WB)	H5 (P)	H5N1 (WB)	H5N1 (P)	H5N8 (WB)	H5N8 (P)	H5N2 (WB)	H5N3 (WB)	Total
Netherlands	1		144	23	2				170
Norway			6	2					8
Poland			31	88					119
Portugal			8	4					12
Republic of North Macedonia			3						3
Romania			10	1					11
Russia	34	11	12	8					65
Serbia and Montenegro			3		3		1		7
Slovakia			17	2	1				20
Slovenia			39	1					40
Spain			22	18					40
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 21 February 2022, HPAI H5 has been reported in 18 European countries (OIE). The total number of European countries affected this HPAI season according to IZSve (2022) is currently 32.

Since our last assessment, **Belgium** has not reported any outbreaks of HPAI H5N1 in domestic poultry but has reported two cases of H5N1 in wild barnacle geese (*Branta leucopsis*).

According to OIE, in **Croatia** there have not been any further outbreaks of HPAI H5N1 in domestic poultry in the last week but there has been one case reported in wild birds which involved two mute swans (*Cygnus olor*).

The **Czech Republic** has not reported any further outbreaks of HPAI H5N1 in commercial poultry since our last assessment but has reported one case in a non-commercial backyard holding with 18 hens.

There have been no reports of HPAI in domestic poultry in **Denmark** within the last week, though there have been 11 cases of HPAI H5N1 in wild birds reported by OIE. The cases comprised of six common buzzards (*Buteo buteo*), two greylag geese (*Anser anser*), two barnacle geese (*Branta leucopsis*) and one European herring gull (*Larus argentatus*).

In **Estonia**, there have been no reports of HPAI H5N1 in domestic poultry since our last assessment but there have been two further cases reported in wild birds. These wild birds were a northern goshawk (*Accipiter gentilis*) and an unspecified bird from the *Anatidae* family.

Since our last assessment the **Faroe Islands** have reported a case of HPAI H5N1 in a wild great black-backed gull (*Larus marinus*). This follows the reporting of the first H5N1 events on the islands in wild Great Skuas (*Stercorarius skua*) which were detected in September 2021 and reported in December. The islands are the most north-westerly point of this epizootic in Europe although the virus has spread further west into Canada and the USA.

There have been no further outbreaks of HPAI H5N1 in commercial poultry in **France** reported by OIE within the last week. Ten outbreaks have been reported in non-commercial backyard poultry premises with the number of birds ranging from seven to 283. There have also been six HPAI H5N1 events reported in wild birds, involving mute swan (*Cygnus olor*), great egret (*Ardea alba*), Eurasian spoonbill (*Platalea leucorodia*),

common shelduck (*Tadorna tadorna*), grey heron (*Ardea cinerea*), greylag goose (*Anser anser*) and common wood pigeon (*Columba palumbus*) species.

Germany has not reported any outbreaks of HPAI H5N1 in domestic poultry since our last report, according to OIE data. There have been 30 events of HPAI H5N1 in wild birds reported since our last assessment, with unidentified *Anatidae* (17), *Accipitridae* (6), *Cygnus* (4), *Ardeidae* (2), *Corvidae* (2) and *Laridae* (2) 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 greater white-fronted goose (*Anser albifrons*) and a black-headed gull (*Larus ridibundus*). The other case occurred in a white-tailed eagle (*Haliaeetus albicilla*). Both of these events occurred within forest areas in Hungary.

In the week since our last assessment, HPAI H5N1 has been reported in wild birds in **Lithuania** for the first time this HPAI season. Two mute swans (*Cygnus olor*) which were found dead were confirmed as having H5N1 as part of enhanced passive surveillance, according to OIE. The swans were reported to have been found on a riverbank in the middle of a city however no further information on the location is available currently.

Luxembourg has not reported any outbreaks of HPAI H5N1 in domestic poultry in the last week but has reported another case of HPAI H5N1 in a wild barnacle goose (*Branta leucopsis*) which occurred in the northern village of Alscheid.

The **Netherlands** has reported one further outbreak of HPAI H5N1 in poultry since our last report, based on OIE data. The outbreak was confirmed on a fattening turkey farm in Uithuizen, Groningen with 9,492 birds. Another poultry premises located nearby within the 3km protection zone has been examined, sampled and tested and there have been no positive results. There have been no further HPAI H5N1 cases in wild birds reported by OIE in the last week.

Poland has not reported any further outbreaks of HPAI H5N1 in domestic poultry since our last assessment, based on OIE data. There has been one HPAI H5N1 event reported in a wild mute swan (*Cygnus olor*) which was located in Warsaw within the last week.

Romania has not reported any further outbreaks of HPAI H5N1 in domestic poultry within the last week but has reported two cases of HPAI H5N1 in wild birds, involving a total of three mute swans (*Cygnus olor*).

Southern Europe (OIE data only, by report date)

Italy has reported one further outbreak of HPAI H5N1 in a backyard flock of 117 birds since our last report. No further details on the location of the outbreak are available currently. There have also been three HPAI H5N1 events in wild birds reported in the last week according to OIE. These events involved a long-eared owl (*Asio otus*), a yellow-legged gull (*Larus michahellis*) and a common kestrel (*Falco tinnunculus*).

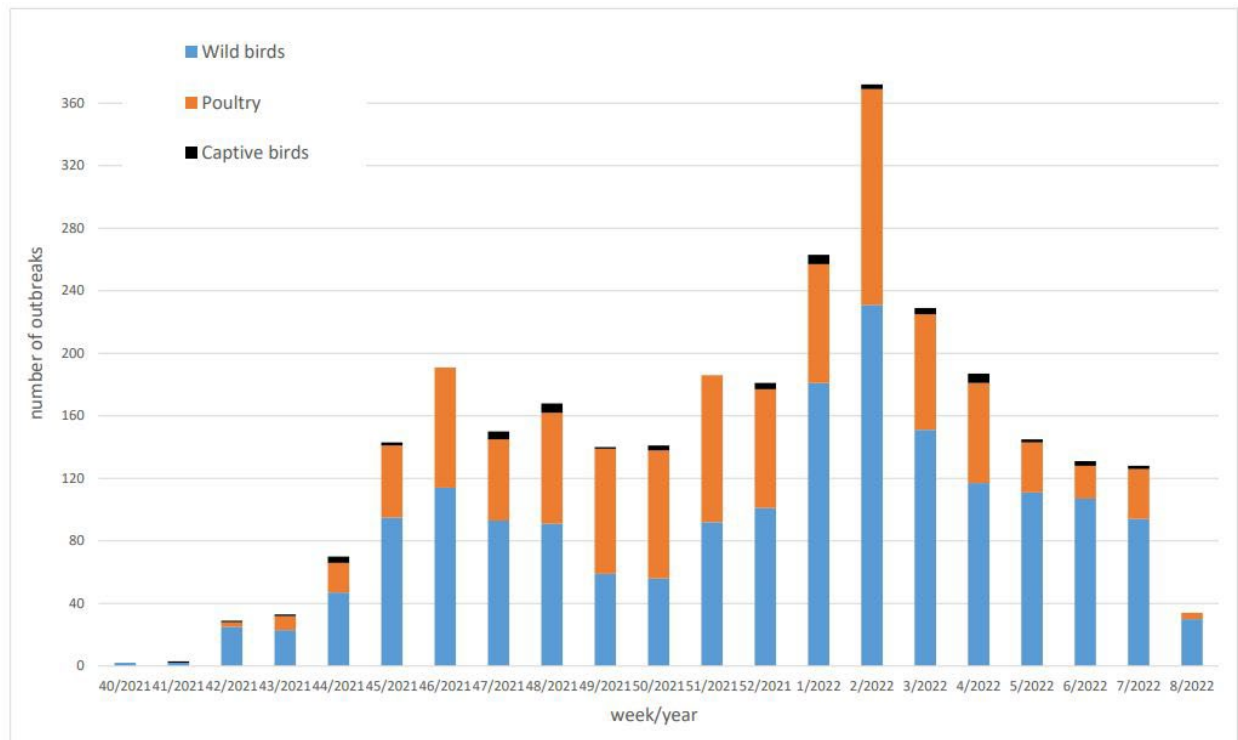
According to OIE data within the last week, **Portugal** has reported a further outbreak of HPAI H5N1 in a commercial flock of ducks located in A Dos Cunhados, which is approximately 50km north and slightly west of Lisbon. There has also been an outbreak of HPAI H5N1 reported in a non-commercial hobby flock of 26 chickens which was located in the south eastern municipality of Mértola. There have been no further HPAI H5N1 events in wild birds reported since our last assessment.

The **Republic of North Macedonia** has reported cases of HPAI H5N1 in wild birds for the first time this HPAI season. According to OIE two HPAI events have been reported, one of which involved a mallard duck (*Anas platyrhynchos*) and a whooper swan (*Cygnus cygnus*) and was located in the village of Zlokućani in the north of the country. The second event involved a great cormorant (*Phalacrocorax carbo*) which was located in the village of Seltse which lies approximately 40km west of Zlokućani, where the first event occurred.

Spain has reported a further nine outbreaks of HPAI H5N1 in domestic poultry in the last week. The affected farms included three turkey premises with the number of birds ranging from 6,256 to 37,100, a breeding hen farm with 15,125 birds and a laying hen farm with 33,477 birds. For the four remaining outbreaks, three farms reported the number of animals (16,950 to 30,400) however no further information on the species affected is currently available. Five of the nine affected premises are located in Seville, two in Huelva and one farm each in Almeria and Valladolid. There have been seven further HPAI H5N1 events reported in wild birds since our last assessment. These cases comprised of three white storks (*Ciconia ciconia*), one unspecified *Anatidae*, one greylag goose (*Anser anser*), one grey heron (*Ardea cinerea*) and a common crane (*Grus grus*).

According to OIE, there have been no further reports of HPAI H5N1 outbreaks in domestic poultry or cases in wild birds between 21 and 28 February in Austria, **Bosnia and Herzegovina, Bulgaria, Finland, Greece, Latvia, Moldova, Norway, the Republic of Ireland (RoI), Russia, Serbia and Montenegro, Slovakia, Slovenia, Sweden, Switzerland or Ukraine.**

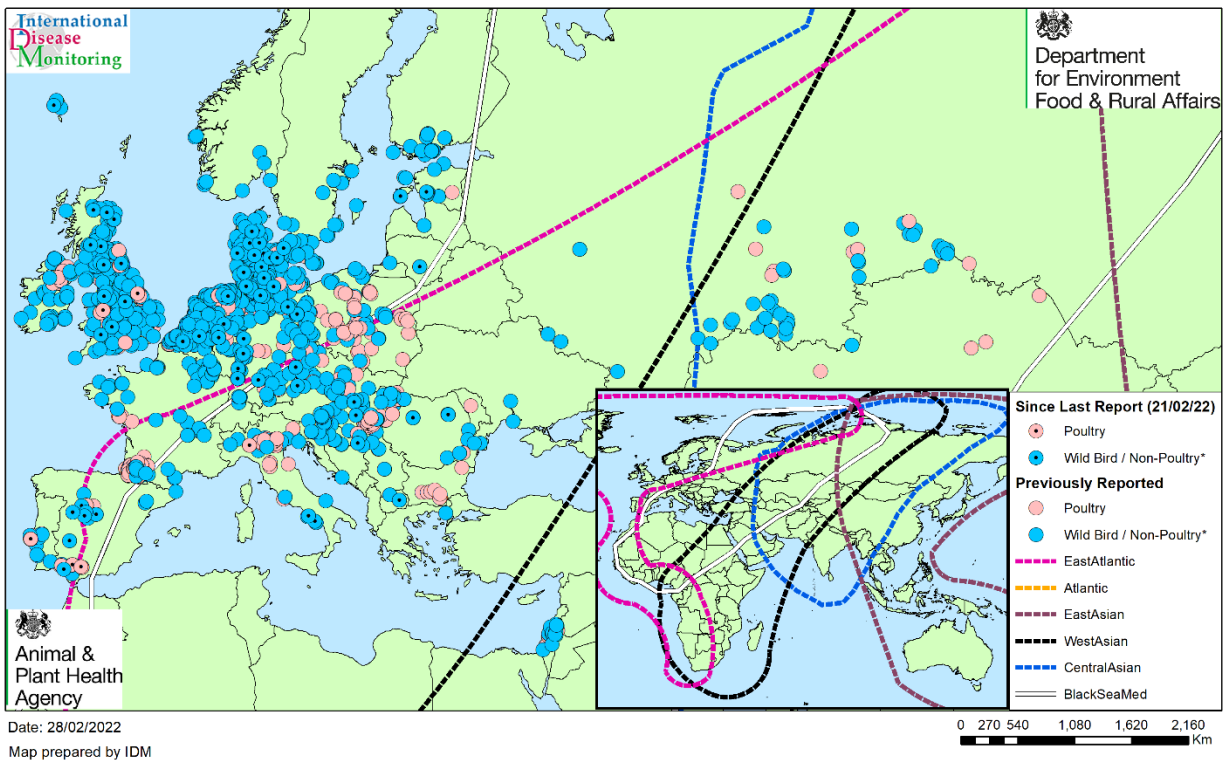
Figure 2: Number of HPAI positive events reported in poultry, captive and wild birds each week in Europe from October 2021 to 28 February 2022 (IZSVe, 2022)



Across Europe, the number of outbreaks continues to decrease (Figure 2) in poultry captive birds with wild bird cases steadily declining week on week. However, the overall numbers observed are roughly a third higher than those in the same time period in the [2020/21 season, week 6 and 7](#). The rate of decrease between weeks 4 and 7 of 2022 appears to have slowed compared with that observed between weeks 2 and 4, particularly in terms of the number of wild birds which are still being widely reported across Europe. Therefore, it seems likely that a long tail of residual HPAI infection may be anticipated into the spring months at least, particularly in wild birds.

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 28 February 2022. Those events reported since our last outbreak assessment on 21 February are distinguished with dots.

Map 3: HPAI outbreaks (from OIE) in poultry, captive, and wild birds across Europe, September 2021 to 28 February 2022.



Highly Pathogenic Avian Influenza in Poultry and Non-Poultry*

September 2021 - February 2022

Overlay: Migratory Bird Flyways

OIE Data Only

*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. Given the continued infection pressure posed by wild birds across the UK, it is imperative that biosecurity is maintained fully to mitigate the risk of infection. This will be of particular importance where flooding has occurred from 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 2), the reports of increasing outbreaks affecting poultry premises in Spain and most recently the reports

of infected wild birds in Lithuania and North Macedonia are suggestive of continued spread across Europe. It should be noted that trends in wild bird cases in Europe are of little importance as a predictor for the UK during the spring, as the birds that migrated during the autumn/winter from continental Europe to overwinter in GB begin to start making their return journey in late March and in early April.

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 and some of these birds will begin their return journey during March. There have been 720 confirmed cases of HPAI H5 in wild birds in GB to 28 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 76 buzzards across GB) and a pigeon indicating that exposure to infection within GB is still occurring. Furthermore, the avian 'order shift' observed (Figure 1) demonstrates that a greater proportion of potential bridging species such as pigeons, gulls and pheasants have tested positive as the outbreak has developed. In addition, the proportion of bird orders represented by raptors has increased. This is expected as the waterfowl species would likely be the initial birds exposed to infection from migratory water birds from Europe then, as infection persists in the population, more native, sedentary species are likely to be exposed to the HPAI virus through the environment. In continental Europe, pigeons, corvids and sparrows which could also serve as bridging species continue to be reported as infected.

HPAI virus H5 is continuing to circulate within GB. 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 [Field Services Office](#). 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 the following dead wild birds 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):

- Three or more swans or geese.

- Any number of ducks, gulls, waders and raptors
- Five or more birds of any species

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.

Authors

Dr Lorna Freath

Anthony Pacey

Dr Paul Gale

Dr Lauren Perrin

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) [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 \(pdf\)](#)



© Crown copyright 2021

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.2. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2/ or email PSI@nationalarchives.gov.uk

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