



Department
for Environment,
Food & Rural Affairs



Llywodraeth Cymru
Welsh Government

Mitigation Strategy for Avian Influenza in Wild Birds in England and Wales

December 2025

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We are the Department for Environment, Food and Rural Affairs. We are responsible for improving and protecting the environment, growing the green economy, sustaining thriving rural communities and supporting our world-class food, farming and fishing industries.

We work closely with our 33 agencies and arm's length bodies on our ambition to make our air purer, our water cleaner, our land greener and our food more sustainable. Our mission is to restore and enhance the environment for the next generation, and to leave the environment in a better state than we found it.



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Any enquiries regarding this publication should be sent to us at

Exotic and Endemic Disease Control
Department for Environment, Food and Rural Affairs
Seacole Building
2 Marsham Street
Westminster
London
SW1P 4DF

wildlifediseasepolicy@defra.gov.uk

www.gov.uk/defra

Version Control

Date	Version	Section Affected	Reason for Change
31 August 2022	1.0		Initial publication
27 March 2023 (published 30 March 2023)	2.0	All sections	General typographical and accessibility improvements, key updates include reflecting launch of the online reporting tool for dead wild birds, outcome of risk assessments on game bird release, waterfowl and game shooting, and carcase removal and establishment of the JNCC chaired Defra-Welsh Government Avian Influenza Wild Bird Recovery Advisory Group and linked stakeholder groups, Agreement of the Conservation of African-Eurasian Migratory Waterbirds commitments, and advice on feeding wild birds.
26 February 2024 (published 18 March 2024)	3.0	All sections (excluding sections 7, 11, 12, 13, and 30)	General typographical and accessibility improvements, key updates include addition of reference to Scottish Wild Bird Highly Pathogenic Avian Influenza Response Plan; addition of reference to the wild bird surveillance outcomes interactive map and data dashboard; addition of information on notification and reporting requirements, and Defra's international reporting obligations; additional details on euthanasia of wild birds for welfare reasons and additional details on enforcement routes
09 December 2025	4.0	All sections	General typographical and accessibility improvements, key updates include changes to order of sections, addition of information on BTO HPAI meetings to the Knowledge Exchange and Stakeholder Engagement section, addition of information on the approach to wildlife crime to the 'Enforcement' section, addition of information on wildlife rescue and rehabilitation to the 'Restrictions on activities' section, updates to the information and evidence included under the 'Restrictions on activities' section and the 'Removal of dead wild birds' section.

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1 Introduction

- 1.1 This document sets out the policies and approach the Department for Environment, Food and Rural Affairs (Defra) and Welsh Government, and their delivery agencies the Animal and Plant Health Agency (APHA), Natural England (NE) and Natural Resources Wales (NRW) take to avian influenza ('bird flu') in wild birds in England and Wales, within the remit of national law. In addition, the document sets out guidance to the general public and non-governmental organisations (NGOs) on issues which may impact them in relation to avian influenza in wild birds.
- 1.2 Animal health including disease control, and wildlife conservation and management are devolved matters, and it is for the devolved governments of the United Kingdom (UK) to assess their disease risks and impacts and respond accordingly. However, Defra and the UK devolved governments seek a consistent and coordinated response to disease control across the UK where possible.
- 1.3 While this document is applicable to England and Wales only, it aims to support the Great Britain-wide approach to avian influenza control set out in the [Notifiable Avian Disease Control Strategy for Great Britain](#). The Scottish Government's approach to avian influenza in wild birds in Scotland is set out in the [Scottish Wild Bird High Pathogenicity Avian Influenza Response Plan](#). The Department of Agriculture, Environment and Rural Affairs' (DAERA) approach to avian influenza in Northern Ireland is set out in the [Notifiable Epizootic Avian Disease Control Strategy for Northern Ireland](#).
- 1.4 The contents of this document were prepared in consultation with the United Kingdom Health Security Agency (UKHSA), Public Health Wales (PHW), the Joint Nature Conservation Committee (JNCC), veterinary and scientific experts, and sector stakeholders. The document is regularly updated to reflect the latest policies and approaches taken to understand and mitigate the impact of avian influenza in wild birds in England and Wales.
- 1.5 Within the context of wild birds and avian influenza, this document is structured to set out:
 - the background to the disease and the susceptible wild bird populations in England and Wales
 - the considerations assessed for government intervention on the issue
 - the objective of Defra and Welsh Government and their delivery agencies (APHA, NE and NRW) in assessing and responding to avian influenza in wild birds
 - the role of APHA and the avian influenza National Reference Laboratory (NRL) in surveillance for avian influenza in wild birds
 - the role of NE and NRW in collaboration with the JNCC in monitoring wild bird populations

- the role of APHA, NE and NRW in the provision of operational guidance for sites and licensing for controlled activities
- 1.6 This document is reviewed annually, however amendments to the document will only be published when substantive changes are required.

2 The pathogen and disease

- 2.1 Avian influenza refers to the disease in birds caused by infection with influenza A viruses. Wild waterbirds of the orders Anseriformes (for example, ducks, geese, and swans) and Charadriiformes (for example, gulls, terns, and waders) are considered the natural reservoir of avian influenza viruses, and their migratory patterns and interactions with poultry and other captive birds predominantly form the source of most established avian influenza transmission networks worldwide.
- 2.2 Avian influenza viruses are single-stranded, segmented, negative-sense RNA ((-)ssRNA) viruses and are placed in the family Orthomyxoviridae. At present the Orthomyxoviridae family consists of five genera: Influenzavirus A, Influenzavirus B, Influenzavirus C, Thogotovirus and Isavirus. Only viruses of the Influenzavirus A genus are known to infect birds and those isolated from birds are termed avian influenza viruses.
- 2.3 While avian influenza viruses are predominantly considered a pathogen of birds, the virus can also infect mammals including humans and hence has the potential to be zoonotic. The ease at which avian influenza viruses can infect mammals, and whether they can spread from mammal-to-mammal varies significantly between subtypes and strains. Globally, avian influenza viruses have been detected in a variety of mammalian species. Further information on this can be found in the [case definition for Influenza A \(H5N1\) in mammals](#).
- 2.4 Influenza A viruses are categorised into subtypes according to the properties of their surface proteins - haemagglutinin (HA) and neuraminidase (NA). There are 16 different HA proteins and 9 different NA proteins (H1 through H16 and N1 through N9, respectively) that are of relevance to infection in birds. Due to the segmented nature of the viral RNA of influenza viruses and the potential for genetic reassortment in mixed infections any combination of these is possible. Alongside this antigenic diversity these viruses differ in their clinical outcome in different species.
- 2.5 The H5 and H7 subtypes are considered the most important from an animal health perspective but others, for example in birds H3, H9, H7, and H10 may have zoonotic implications.

- 2.6 Avian influenza viruses can be defined as either low pathogenicity avian influenza virus (LPAIV), with generally minimal impact upon the infected birds, or high pathogenicity avian influenza virus (HPAIV), where the outcome of infection can vary in different bird species but are generally characterised by very high mortality in Galliformes. Mortality rates in other bird taxa may vary. This distinction is a result of genetic factors that can evolve from a LPAIV type to a HPAIV form following infection of different species.
- 2.7 Influenza A subtypes can also be further broken down into different genetic 'clades' and 'sub-clades', with which individual strains are associated based on their genetic sequence. The genetic sequences of the eight segments of genetic material from the avian influenza virus are used to define a 'genotype'. When two viruses infect the same animal or human there is potential for the viruses to exchange genetic material, enabling new genotypes to emerge.
- 2.8 Genetic strain nomenclature for avian influenza viruses is based on viral type (for example influenza A), host of origin (if other than human), geographic origin, strain reference number, year of isolation, and H and N type (for example A/Canada_goose/England/142157/2023_2023-12-28 H5N1).

3 Routes of incursion and spread

- 3.1 Avian influenza can spread by movement of infected birds, from bird-to-bird by contact with contaminated body fluids and faeces, either directly or through contaminated objects, surfaces, or environments, or by ingestion of infectious material. Transmission routes and excretion of live virus following infection may differ depending on the genetics of infecting virus, the dose, and the species infected.
- 3.2 Wild birds in Great Britain can be infected either directly if they come into contact with infected birds already present within the country or indirectly if they come into contact with infectious material present in the environment, or they can be infected in another country and bring the virus to Great Britain when they enter during seasonal migration activities.
- 3.3 An avian influenza outbreak can occur at any point in the year. Whilst LPAIVs are known to circulate in wild birds in the UK, HPAIV is not considered endemic in wild birds in the UK. Rather, the UK typically faces a seasonal increase in the risk of an HPAIV incursion associated with the winter migration patterns of wild birds to the UK. Since 2021 there has been an expanded geographical distribution of HPAI in the UK with unprecedented numbers of poultry infections and a broader distribution of infection in wild bird species. Infections continued over the summer months for the first time in 2022 and again in 2023 and 2025.
- 3.4 Globally, flyways are major routes used by birds for their annual migration. In late autumn or early winter two migration pathways, defined by the major movements of wild waterbirds, have the potential to carry HPAIV infected wild birds to the UK:

- the first is the Black Sea Mediterranean flyway, one of three Palaearctic-African flyways connecting Europe to Africa, which is also linked to avian influenza in the Middle East (Israel) as birds move from Europe to Africa at this time of year; European countries along this route would also include those in Central and Southern Europe. This route presents little risk to Great Britain as birds do not tend to fly north-west in the autumn, instead flying south-west
- the second is the East Atlantic flyway which includes the North European countries, particularly Scandinavia, Germany, the Netherlands, Denmark, Poland, and Great Britain, in addition to areas of Greenland, Canada. This flyway also offers onward connectivity to the Western Mediterranean and West Africa as far south as South Africa, in addition to, via Greenland, onward connectivity to the Atlantic Americas flyway (the major north-south flyway for migratory birds linking North and South America and the Caribbean)

- 3.5 There may be limited mixing between individual birds of some species on these two pathways at the edges of their breeding ranges in northern Eurasia during the summer. Moreover, there may be some overlap of the pathways particularly in north-eastern Europe.
- 3.6 There is evidence that waterbird migration distances have shortened in response to climate change with fewer birds flying over to Great Britain if conditions are mild in Europe. However, there is some evidence of more concern, for example evidence that Asian populations of some waders may now do a loop migration flying westward around the Arctic Circle as climate change warms the tundra. This increases the potential for Asian and European waterbirds to mix at their northern breeding sites.
- 3.7 Regarding risk to the UK from strains found in North America, there is only a very limited number of wild bird species that could provide a direct link between the far north of Canada and the UK and west Europe. Indeed, the direction of exchange of potentially infected wild birds is more likely to occur from Europe to North America. This has been demonstrated several times by the incursion of Eurasian avian influenza viruses into North America. The main migratory flyways into England and Wales during the autumn involve waterfowl from Northwest and Central Europe and also from Iceland and Greenland into Scotland and Northern Ireland and on to the rest of Great Britain. To date there has been no evidence of strains circulating in the Americas being detected in the UK or Europe.
- 3.8 Infected incoming migratory wild birds can subsequently infect both other recently arrived susceptible migratory wild birds and resident wild bird species resulting in onward local transmission or environmental contamination, for example, wild bird faecal contamination. Hence, the risk of avian influenza is not solely connected to the presence of infected migratory wild birds.

- 3.9 In Great Britain, the risk of avian influenza incursion during summer typically decreases as environmental conditions can reduce virus survival in the environment (warm and dry conditions together with exposure to ultraviolet from sunlight). However, whether a measurable difference in the rate of findings of avian influenza in wild birds is observed is dependent on the background level of transmission of avian influenza, together with the pathogenicity, infectivity and duration of immunity induced by the virus strains circulating at the time. In addition, intra-annual variation in climatic conditions cause variation in rates of avian influenza findings, with cool wet summers more likely to facilitate persistence of avian influenza viruses in the environment than hot dry summers.
- 3.10 The risk of avian influenza being introduced into domestic poultry or other captive birds will depend on the prevalence and pattern of virus shedding in wild birds, the level of biosecurity in place on and between poultry holdings or other captive bird premises and other factors.
- 3.11 Transmission from poultry or other captive birds on infected premises to wild birds is possible. However, swift and humane culling of poultry and other captive birds on infected premises coupled with good biosecurity are used to prevent the amplification of avian influenza and subsequent environmental contamination. This approach reduces the risk of disease spread from infected premises. Further information the this approach is set out in the [Notifiable Avian Disease Control Strategy for Great Britain](#).
- 3.12 The risk of spill-back of avian influenza virus from poultry and other captive birds to wild birds or mammals will depend on the speed at which suspicion is reported and the level of biosecurity at, and movement on and off, the premises prior to disease control restrictions coming into force.
- 3.13 Detailed epidemiological assessments are made by APHA at each premises where notifiable avian influenza is confirmed in poultry or other captive birds to identify, as far as possible, the likely source of infection, establish how long the disease may have been present on the infected premises and potential routes of spread.
- 3.14 At the time of publication, in the UK available evidence indicates that direct or indirect (through contaminated material such as faeces and feathers) contact with infected wild birds is the most likely source of infection on almost all of the premises where avian influenza has been confirmed in poultry or other captive birds, as opposed to lateral spread from other poultry or captive birds, or mammalian species.

- 3.15 There is a clear link between levels of biosecurity on premises prior to confirmation of avian influenza and the outbreaks which have occurred. Breaches in biosecurity at kept bird premises can range from repeated systemic failures to one-off lapses enabling infection to enter kept bird flocks. Further information on likely routes of incursion and potential transmission routes can be found in the APHA [avian influenza outbreak epidemiology reports](#), which contain details of the epidemiological investigations undertaken at infected premises where notifiable avian influenza has been confirmed in poultry or other captive birds in Great Britain. These reports summarise findings across an outbreak and are published following the conclusion of an outbreak season or of multiple outbreak seasons for a multi-year outbreak.

4 Reasons for government intervention

- 4.1 In England the [England Wildlife Health Strategy](#) provides a policy framework within which Defra is able to develop and make policy decisions in relation to wildlife disease management. It states that government has a responsibility to intervene in wildlife disease issues when:
- the impact of a disease is significant enough to cause a decline in the population viability of a species officially recognised as of conservation concern, or
 - in a situation where the impact is so severe that a species could become threatened.
- 4.2 In Wales the [Animal Health and Welfare Framework](#) provides the basis within which Welsh Government is able to develop and make policy decisions in relation to wildlife disease management. Its scope includes wildlife where ‘our actions affect their health and welfare or where there is a risk of wildlife transmitting disease to other animals or humans’.
- 4.3 Defra and Welsh Government’s approach to avian influenza in wild birds considers the latest scientific and ornithological evidence and veterinary advice, when considering the current and potential impact of avian influenza in wild birds.
- 4.4 This strategy and the reasons for government intervention are informed by the Reasonable Worst Case Scenario for HPAI set out in the [National Security Risk Assessment \(NSRA\)](#).
- 4.5 Evidence and advice are considered against the criteria for government intervention set out in 4.1 and 4.2 for England and Wales respectively. It is also considered against whether viable mitigation measures are available to limit any impacts in wild birds in line with international best practice. This includes best practice laid out by the [World Organisation for Animal Health](#) (WOAH) as well as the joint [Food and Agriculture Organisation of the United Nations](#) (FAO) and [Convention on the Conservation of Migratory Species of Wild Animals](#) (CMS) (also known as the Bonn Convention) [Scientific Task Force on Avian Influenza and Wild Birds](#).

5 Strategic fit with government policy

- 5.1 The approach outlined in this strategy is consistent with the UK Government's primary crisis management doctrine set out in the [Amber Book](#), concepts of risk management set out in the [Orange Book](#) and the ambitions of the [UK Biological Security Strategy](#). In addition, it is consistent with the broad animal health and biodiversity policies in England and Wales including:
- government's [Notifiable avian disease control strategy for Great Britain](#) and overarching exotic disease contingency plans ([Defra's Contingency Plan for Exotic Diseases of Animals](#), [Welsh Government's Exotic Animal Diseases Contingency Plan](#) and the [United Kingdom contingency plan for exotic notifiable diseases of animals](#))
 - the [Animal Health and Welfare Strategy for Great Britain](#) principle and the Welsh Government [Animal Health and Welfare Framework](#) commitment that 'prevention is better than cure'
 - the principles of animal health surveillance set out in the United Kingdom Surveillance Forum (UKSF) [UK approach to animal health surveillance](#)
 - ongoing obligations for the welfare and protection of wild birds including under the [Wildlife and Countryside Act 1981](#) (as amended)
 - compliance with international obligations to trading partners and the [World Organisation for Animal Health \(WOAH\)](#)
 - mitigating the risk of spread of disease to third countries
 - wildlife management policies and commitments on the protection of biodiversity including in England the [25 Year Environment Plan](#), [Environmental Improvement Plan \(EIP\)](#) and the [Environment Act 2021](#), and in Wales the [Environment \(Wales\) Act 2016](#) and [Wellbeing of Future Generations \(Wales\) Act 2015](#). This is in conjunction in England and Wales with the [Countryside and Rights of Way Act \(CROW\) Act 2000](#), the [Conservation of Habitats and Species Regulations 2017](#) and the [Marine Strategy Regulations 2010](#). Additionally, international obligations in relation to the [Convention on Biological Diversity \(CBD\)](#), the [Bern Convention](#), the CMS, the [African Eurasian Waterbird Agreement \(AEWA\)](#) and the [Convention for the Protection of the Marine Environment of the North-East Atlantic \(OSPAR\)](#).

6 Roles of government and organisational structures

- 6.1 Defra and Welsh Government are responsible for responding to outbreaks of exotic animal disease in England and Wales respectively.

- 6.2 In both England and Wales, [APHA](#) (an executive agency, sponsored by Defra, the Welsh Government, and the Scottish Government) is the primary delivery agent for animal disease control. They are further supported in England by [NE](#) (an executive non-departmental public body, sponsored by Defra) and in Wales by [NRW](#) (a Welsh Government sponsored body) with regard to environmental and wildlife impacts. APHA, NE and NRW will also liaise and seek advice where relevant from the [Environment Agency \(EA\)](#) (a non-departmental public body sponsored by Defra) in relation to issues impacting environmental standards or protections.
- 6.3 In England the Defra Secretary of State (SoS) and ministers have overall responsibility for and oversight of the outbreak response and biodiversity. In Wales Welsh Ministers are responsible for decision making related to outbreak response and biodiversity. The relevant Defra and Welsh Government minister will be involved in strategic decision making, working closely with the UK Chief Veterinary Officer (CVO) and CVO Wales, respectively, and senior officials.
- 6.4 The UKHSA and PHW are the lead bodies for the human public health response in England and Wales respectively, working with the National Health Service (NHS) in England and Wales and local authority partners who facilitate the response. Regional UKHSA and PHW Health Protection Teams work closely with Defra and Welsh Government respectively to monitor the situation and providing health advice to persons at infected premises and those who have been in close contact with infected wildlife. Appropriate action is taken by UKHSA in England to protect public health in line with the [national guidance for managing the human health risk of avian influenza in poultry and wild birds](#) and by PHW in Wales in line with Public Health Wales Avian Influenza Standard Operating Procedure.
- 6.5 The [HSE](#) (an executive non-departmental public body, sponsored by the Department for Work and Pensions) also play a critical role as the national regulator for workplace health and safety in Great Britain. In the context of avian influenza HSE's regulatory role includes ensuring that work activities that could expose employees, other people or the environment to harmful viruses are appropriately controlled.
- 6.6 [The Amber Book](#) provides a framework for how UK central government collectively responds to crises that require co-ordinated action across government.
- 6.7 The overarching command and control structures of the response to outbreaks of exotic disease are outlined in the [Contingency Plan for Exotic Notifiable Diseases of Animals in England](#) and [Welsh Government's Exotic Animal Diseases Contingency Plan](#). Scotland and Northern Ireland also maintain contingency plans.
- 6.8 The [UK contingency plan for exotic notifiable diseases of animals](#) explains how the devolved governments of the UK work together in responding to an outbreak at a UK level. Taken together, these plans and the published disease control strategies for specific exotic diseases meet the UK's obligations to our international trading partners and to WOA. H.

- 6.9 The Animal Disease Policy Group (ADPG) provides disease control policy advice and strategic recommendations at UK level which form the basis for advice to Defra ministers, Welsh Government ministers, the Cabinet Office Briefing Room (COBR) unit, Cabinet Office Resilience Directorate and other strategic decision makers. It is the forum where the disease control policy and strategic recommendations are presented, reviewed, discussed, challenged, and agreed by officials. Noting however, that decisions regarding species recovery initiatives outside of those directly linked to disease prevention and control are outside the scope of ADPG.
- 6.10 The ADPG also has an important role in ensuring that policies across the UK are consistent where possible or coordinated where different approaches are taken in the devolved governments.
- 6.11 ADPG is chaired by Defra's director for Animal and Plant Health and Welfare (APHW) and Defra's Exotic Disease Policy Response Team (EDPRT) provides the secretariat. The membership of the ADPG includes representatives from Defra policy teams, communications group, Defra legal advisers (animal health and welfare team), UK CVO, Defra Chief Scientific Advisor (CSA) representative, National Experts Group (NEG), CVOs and policy officials from devolved governments, APHA and where applicable the COBR Unit. Membership may also include food safety and public health representatives (who provide specific advice on zoonotic diseases).
- 6.12 In addition, the [Science Advisory Council Exotic and Emerging Animal Disease Sub group \(SAC-ED\)](#) of Defra's [Science Advisory Council \(SAC\)](#) provides advice to Defra on using evidence and analysis to support exotic disease control, reviews the evidence and analysis supporting Defra's disease control and recovery phase policies in the event of an exotic disease outbreak, and offers advice to the devolved governments.
- 6.13 The [Advisory Committee on Dangerous Pathogens' \(ACDP\)](#) (an expert committee of the Department of Health and Social Care (DHSC)) also have a role and provide scientific advice on the risks of exposure to various pathogens including avian influenza viruses. Additionally, the [New and Emerging Respiratory Virus Threats Advisory Group \(NERVTAG\)](#) (an expert committee of DHSC) advises the government on the threat posed by new and emerging respiratory viruses.

7 Knowledge exchange and stakeholder engagement

7.1 Ornithological Expert Panel

- 7.1.1 The Ornithological Expert Panel (OEP) is an APHA-chaired National Expert Group (NEG) established in 2004. Membership is drawn from individuals who bring unique knowledge and expertise of the area. Members are typically associated with, but not limited to, APHA, British Trust for Ornithology (BTO), British Association for Shooting and Conservation (BASC), Game & Wildlife Conservation Trust (GWCT), NatureScot, NE, NRW, Royal Society for the Protection of Birds (RSPB) and Wildfowl & Wetland Trust (WWT). However, members are invited to join the OEP as individuals and are free to share their personal opinions and expertise, which may not necessarily be those of the organisation they are affiliated to.
- 7.1.2 The OEP can be called on for the provision of expert advice to support the development of policy relating to disease control and surveillance.
- 7.1.3 The OEP is an advisory group, it does not have decision-making powers. Its role is to provide veterinary, technical, and scientific evidence in response to specific questions on a developing policy. The OEP does not advise on disease control strategy, although the evidence it gives should support a policy team in identifying options.
- 7.1.4 The OEP does not replace existing sources of expertise available to policy makers either directly or indirectly but is used where it provides the best forum for allowing interaction between experts within and across disciplines to resolve a specific issue or to supplement the existing advice. The OEP is not a stakeholder engagement forum.
- 7.1.5 The OEP may be set up in either:
- disease control mode – where advice is needed during an outbreak to answer specific questions about risk management options, or
 - policy support mode – where expertise is required during business as usual to fill a gap in knowledge (for example, define areas of uncertainty).
- 7.1.6 The timescale for assembling an OEP once the need is identified can be rapid for disease control, typically within two working days. For non-outbreak requests a meeting will be held within 10 working days. The OEP will continue to be called upon in response to any emerging issues regarding avian influenza.

7.2 **Avian Influenza Wild Bird Recovery Advisory Group**

- 7.2.1 Defra and the Welsh Government commissioned JNCC to establish an Avian Influenza Wild Bird Recovery Advisory Group for England and Wales.
- 7.2.2 The Avian Influenza Wild Bird Recovery Advisory Group, established in September 2022, gathers information from conservation, land management and wildlife disease experts from a range of organisations to assess what conservation and monitoring actions can be implemented with respect to wild bird populations impacted by avian influenza.

- 7.2.3 The Avian Influenza Wild Bird Recovery Advisory Group is an advisory group, it does not have decision-making powers, and it is not a stakeholder engagement forum.
- 7.2.4 The group is led and chaired by JNCC and made up of key bird conservation experts from organisations including NE, NRW, RSPB, BTO, National Trust, Wildlife & Countryside Link, WWT, BASC, and GWCT.
- 7.2.5 All wild bird species are in scope, however there is a focus on seabirds, waterbirds, and raptors.
- 7.2.6 Whilst the Avian Influenza Wild Bird Recovery Advisory Group will host ad hoc keeping in touch meetings with members, the objective of the group is largely focused on delivery of knowledge exchange.
- 7.2.7 At the time of publication, the group has held two workshops to facilitate information exchange, highlight evidence needs and discuss possible management options. The first of these was in November 2022, co-hosted by JNCC and BTO, and focussed on evidence of impact and future planning ([BTO Research Report 752](#)). The second, hosted by JNCC in October 2023, focussed on research needs to support conservation management (report available on request from JNCC).

7.3 **Joint Statutory Nature Conservation Bodies Working Group on Avian Influenza**

- 7.3.1 The Group, when active, is coordinated by JNCC and brings together the Chief Scientific Officers (CSO) and Directors from the Statutory Nature Conservation Bodies (SNCBs); NE, NRW, NatureScot, the Northern Ireland Environment Agency (NIEA) and the JNCC. It facilitates sharing of operational practice from each country and enables activities that are more effectively delivered through joint working at the UK level.

7.4 **Defra Group Avian Influenza in Wild Birds Working Group**

- 7.4.1 The Defra Group Avian Influenza in Wild Birds Working Group, established in June 2022, is a government working group bringing together knowledge and expertise from individuals and teams from across Defra and its delivery agencies APHA and NE, together with JNCC who have a policy or implementation responsibility associated with avian influenza in wild birds.
- 7.4.2 Cross-government working by the group is supported by representatives from UKHSA and HSE. Welsh Government, NRW and PHW representation on the group supports cross-administration working and the delivery of this shared mitigation strategy for avian influenza in wild birds.
- 7.4.3 Issues for decision are escalated from the Defra Group Avian Influenza in Wild Birds Working Group to the ADPG (further information can be found in section 6.9) and Defra ministers where relevant.

- 7.4.4 Stakeholder organisations should contact the Exotic Disease Policy Response Team (EDPRT) Outbreak Communications Cell at edc.outbreak.comms@defra.gov.uk for further information on this group.

7.5 **Avian Influenza Outbreak and Biosecurity Communications Stakeholder Group**

- 7.5.1 The Avian Influenza Outbreak and Biosecurity Communications Stakeholder group is a stakeholder engagement forum established in January 2021 and hosted by Defra on behalf of the Great Britain administrations and attended by organisations representing backyard, hobby, commercial and specialist bird keepers and ornithological NGOs.
- 7.5.2 The group meets regularly during outbreaks with a focus on sharing latest situation updates on the outbreaks of avian influenza in both wild and kept birds together with horizon scanning information from APHA's international disease monitoring programme and information on disease prevention, mitigation, and control measures.
- 7.5.3 In addition, ad-hoc focus groups are convened with subsets of stakeholders focused on particular topics such as birds of prey, game birds and waterfowl.

7.6 **Welsh Wild Bird Avian Influenza Strategic Response Group**

- 7.6.1 The Welsh Wild Birds Avian Influenza Strategic Response Group is a joint group between Welsh Government, NRW and relevant stakeholder organisations and experts that represent sectors of conservation and animal welfare across Wales.
- 7.6.2 The group takes a holistic and strategic forward-looking approach to avian influenza in all wild birds, including released game birds in Wales. It provides a platform to discuss and develop a strategic and evidence-based response to mitigating the impacts of avian influenza in wild birds and contribute towards building resilience and recovery of affected populations in Wales.
- 7.6.3 The Group has developed a Wales framework in planning for and reacting to an outbreak of avian influenza in either live or dead wild birds that have tested positive. A triage approach ensures a consistent approach is adopted across Wales in response to avian influenza outbreaks quickly and efficiently.
- 7.6.4 The scope is limited to Wales and does not include the undertaking of research, though relevant research and evidence will be drawn from the UK and elsewhere. Where evidence gaps are identified and recognising the migratory nature of wild birds and avian influenza, these will actively be shared with groups or organisations which undertake or coordinate research across the UK and wider, including the Avian Influenza Wild Bird Recovery Advisory Group.

7.7 **BTO HPAI meetings**

- 7.7.1 This informal group of eNGO and statutory organisations, including from Crown Dependencies and the Republic of Ireland, have met regularly since June 2022. Meetings were at first weekly but are now held on a quarterly basis. The group meets to discuss wild bird surveillance activities and for rapid information exchange about the disease in wild bird populations across Great Britain and Ireland.
- 7.7.2 Attendees vary between meetings but have included BTO, RSPB, National Trust, WWT, RSPCA, DAERA, NatureScot, NE, NRW, JNCC, Defra, APHA, Scottish Government and from outside the UK, the Isle of Man Government, BirdWatch Ireland, NPWS and the Government of Guernsey.
- 7.7.3 This is the group to which summaries of dead bird mortalities from the Epicollect BirdTrack and WeBS are reported on a weekly basis (see section 17.10), providing a key mechanism for the sector to track the extent and spread of impacts on wild birds.

7.8 Core groups

- 7.8.1 Defra host a number of 'core groups' for exotic diseases, of relevance to avian influenza in wild birds are the Avian Core Group and the Wildlife Disease Core groups. Both these groups are small groups of individuals who are recognised as experts and influencers across the UK kept bird and wildlife sector respectively, including industry, sector councils, academia, and other non-governmental organisations, who can contribute to the development of avian and wildlife disease control policy respectively and are able to communicate effectively with wider stakeholders. The groups provide an open and frank forum for the exchange of views with government and its delivery agencies to formulate and develop policy that is more effective in achieving the intended outcomes for disease prevention, mitigation and control.

8 Objectives of disease prevention, mitigation and control measures

- 8.1 Defra and Welsh Government's disease control measures seek to contain the number of animals that need to be culled, either for disease control purposes or to safeguard animal welfare. The approach aims to reduce adverse impacts on the rural and wider economy, the public, rural communities, and the environment (including impact on wildlife), whilst protecting public health and minimising the overall cost of any outbreak.
- 8.2 Defra and Welsh Government's objective in tackling any outbreak of avian influenza in kept birds is to eradicate the disease as quickly as possible from the UK poultry and captive bird population and attain WOA self-declared zonal freedom from HPAI in poultry for Great Britain and where relevant Northern Ireland.

- 8.3 Defra and Welsh Government's approach in kept birds is set out in the [Notifiable Avian Disease Control Strategy for Great Britain](#). In summary following confirmation of notifiable avian influenza in poultry and other captive birds, swift and humane culling of kept birds on infected premises coupled with good biosecurity aims to prevent the amplification of avian influenza and subsequent environmental contamination. This will in turn reduce the opportunity for new mutation events to occur or new genotypes to arise and reduce the risk of spread from infected premises to other kept birds, wildlife or people.
- 8.4 Current policy is in line with international standards of best practice for disease control. It reflects Defra, Welsh Government and APHA's experience of responding to past outbreaks of exotic animal disease.
- 8.5 In wild birds, Defra and Welsh Government's approach to avian influenza seeks to align with our targets on protecting species abundance and diversity. Managing disease in wild bird populations is one aspect of species conservation and recovery.
- 8.6 Defra and Welsh Government aim to monitor, through surveillance, the spatial and temporal distribution of avian influenza in the different wild species to inform our understanding and:
- help government understand what the risk posed to and from poultry and other captive birds from avian influenza virus is and inform the requirements for instigating proactive infection prevention measures in kept birds
 - improve our scientific knowledge on what virus strains are currently circulating and how they are evolving, including estimating from infection outcomes what bird species may be more resistant to avian influenza virus strains
 - inform risk mitigation measures in birds to reduce disease burden thereby reducing infection pressure in the environment and subsequent risk of mammalian infection and subsequent viral adaptation that could drive zoonotic potential
 - inform risk mitigation targeting human behaviours to reduce the risk of zoonotic transmission occurring from animals to humans
 - understand the risk to, and impact on, populations of wild birds of conservation concern or species that are at risk of becoming threatened. This will inform future species recovery programmes and allow government to take action where possible, in accordance with international best practice and the latest evidence.
- 8.7 The following sections of this strategy break down the actions undertaken or necessary to deliver the eight sequential activities of the resilience cycle (also known as the risk life cycle: anticipation; assessment; prevention and mitigation; preparation; validation and assurance; response; recovery; learning and improvement) which are needed to holistically prepare for, respond to and recover from the impacts of avian influenza in wild birds and achieve the aims outlined in 7.6. Further information on the resilience cycle can be found in the [UK Government Resilience Action Plan](#) and the [Amber Book](#).

9 Horizon scanning

- 9.1 APHA carry out routine surveillance of disease risks both in the UK and around the world to help government anticipate future threats to animal health. APHA closely monitor both the national and global avian influenza situation as part of this work.
- 9.2 APHA virologists and epidemiologists collaborate with colleagues in Europe and around the world to closely analyse viruses involved in both outbreaks in poultry and other captive birds and those found in wild birds and both kept and wild mammals, with the aim of trying to understand what makes these viruses different and how they might change in the future. This work is facilitated through WOA and FAO international and the UK's national reference laboratory for Avian Influenza located at APHA Weybridge.
- 9.3 The latest risk and outbreak assessments by APHA are published and available on gov.uk as part of the [Animal diseases: international and UK monitoring](#) collection.
- 9.4 Further information on APHA's wider work to monitor avian disease threats can also be found in the annual [Avian: GB disease surveillance and emerging threats reports](#) and the [Wildlife: GB disease surveillance and emerging threats reports](#) on gov.uk.

10 Notification and reporting requirements

- 10.1 Notification and reporting requirements for avian influenza are set out in England by [The Avian Influenza and Influenza of Avian Origin in Mammals \(England\) \(No.2\) Order 2006](#) (as amended) and in Wales by [The Avian Influenza and Influenza of Avian Origin in Mammals \(Wales\) \(No.2\) Order 2006](#) (as amended).
- 10.2 'Listed diseases' are all animal diseases that must be notified or reported to government as a result of statutory provisions.
- 10.3 'Notifiable diseases' are listed diseases which require notification on suspicion, without confirmatory testing. Notification can be made by anyone.
- 10.4 'Reportable diseases' are listed diseases which only require notification following detection in diagnostic testing in a laboratory, the field or other setting.
- 10.5 Avian influenza is a notifiable disease in poultry and other captive birds. Infection with an avian influenza virus (influenza of avian origin) is also a notifiable disease in kept mammals and wild mammals.
- 10.6 Avian influenza is not a notifiable disease in wild birds. You do not have to report suspicion of avian influenza in live wild birds. In Great Britain, the public are encouraged to report dead wild birds using the [online reporting service](#) or by calling the Defra helpline (03459 33 55 77) if they find dead wild birds (further information can be found in section 14).
- 10.7 Whilst not notifiable, avian influenza in wild birds is a reportable disease in England. As such, in England, if you analyse a sample taken from a dead or live wild bird and you detect avian influenza virus or antibodies to avian influenza virus, you must report it to the competent authorities.

- 10.8 Full details of notification and reporting requirements for avian influenza including how and to whom detections of avian influenza or antibodies to avian influenza virus in wild birds should be reported are set out in the [Avian Influenza and Influenza of Avian Origin: Diagnostic Testing, Controls and Reporting Obligations](#) guidance.

11 Defra's international reporting obligations

- 11.1 Avian influenza is a World Organisation for Animal Health (WOAH) listed disease. As a WOAH member country, Defra must report on behalf of the UK:
- all HPAIVs, irrespective of their subtypes, detected in birds (domestic and wild)
 - all LPAIVs, in domestic or captive wild birds, that have proven natural transmission to humans with severe consequences
- 11.2 The UK may and does voluntarily report LPAIVs detected in wild birds that have not been associated with natural transmission to humans with severe consequences. The UK may report this to WOAH through the voluntary report on non-WOAH-listed diseases in wildlife.
- 11.3 The information the UK provides to WOAH is reported through WOAH's [World Animal Health Information System](#) (WAHIS). WAHIS acts as an early warning system for the management of alert notices and as an ongoing global monitoring system for avian influenza and other WOAH-listed and new and emerging diseases.
- 11.4 Collaboration and knowledge exchange between WOAH member countries regarding matters concerning all wildlife is promoted through the UK's [WOAH National Focal Point for Wildlife](#).
- 11.5 Additionally, Defra shares information on avian influenza through other fora, such as [the Agreement on the Conservation of Albatrosses and Petrels \(ACAP\) working group on epidemiology, disease risk assessment, and management](#) (the Intersessional Group on High Pathogenicity Avian Influenza), to support the global response to the disease.
- 11.6 Further information on Defra's international reporting obligations can be found in [Avian Influenza and Influenza of Avian Origin: Diagnostic Testing, Controls and Reporting Obligations](#) guidance on gov.uk.

12 Clinical signs of avian influenza

- 12.1 The main clinical signs of High Pathogenicity Avian Influenza (HPAI) in birds (which can include any or a combination of the following) are:
- sudden and rapid increase in the number of birds found dead
 - several birds affected in the same area
 - swollen head

- closed and excessively watery eyes
- discoloured or loose watery droppings
- drooping of the wings or dragging of legs
- twisting of the head and neck
- swelling and blue discolouration of combs and wattles
- haemorrhages on shanks of the legs and under the skin of the neck
- head and body tremoring
- respiratory distress such as gaping (mouth breathing), nasal snicking (sneezing sound), gurgling or rattling
- lethargy and depression
- recumbency and unresponsiveness
- incoordination and loss of balance
- loss of appetite or marked decrease in feed consumption
- sudden increase or decrease in water consumption
- fever or noticeable increase in body temperature
- cessation or marked reduction in egg production or viability of eggs

12.2 Clinical signs can vary between species of bird and some species (for example ducks and geese) may show minimal clinical signs.

12.3 Low Pathogenicity Avian Influenza (LPAI) in birds is usually less serious and the birds may show more vague clinical signs. For example, it may cause mild breathing problems but affected birds will not always show clear signs of infection. The severity of infection with an LPAIV depends on the type of bird and its general health status and the genetics of the infecting virus.

12.4 While the clinical signs outlined above can indicate avian influenza, the presence of avian influenza virus can only be confirmed through laboratory tests. Wild birds are susceptible to a range of diseases and injuries and not all sick or dead birds will have been infected with avian influenza.

13 National Reference Laboratory

- 13.1 HPAs are high consequence pathogens listed under [The Specified Animal Pathogens Order 2008 \(as amended\)](#) (as applies to England) and [The Specified Animal Pathogens \(Wales\) Order 2008 \(as amended\)](#) (as applies in Wales) (equivalent requirements apply in Scotland and Northern Ireland). HPAs are also listed on the Advisory Committee on Dangerous Pathogens (ACDP) approved list of biological agents. Under the requirements of the [Control of Substances Hazardous to Health Regulations 2002 \(as amended\)](#) (COSHH), work with avian influenzas (on either an employed or voluntary basis) also comes under the legal requirements of COSHH in order to protect workers and others from hazards associated with the viruses.
- 13.2 Subsequently in most scenarios HPAs need to be handled at a high-containment SAPO Containment Level 4 licenced facility, as a result further post-mortem examinations are not typically conducted on wild bird carcasses which have tested positive for avian influenza.
- 13.3 Further information on requirements and obligations of individuals, private veterinary surgeons and laboratories with regard to biosafety and reporting to the competent authority for avian influenza and influenza of avian origin in mammals can be found in the [Avian Influenza and Influenza of Avian Origin in Mammals: Diagnostic Testing, Controls and Reporting Obligations](#) guidance available on gov.uk.
- 13.4 The Official Control Regulation (OCR) ([EU Reg 2017/625](#); as amended and retained in UK legislation under [SI 2020/1481](#)) sets out a comprehensive and consistent risk-based regime of official controls across the entire agri-food chain. It defines two different categories of laboratories at which official activities and other official activities can be undertaken – National Reference Laboratories (NRL) and Official Laboratories (OL).
- NRLs are the most senior laboratory for a given pathogen. They provide expertise and advice to UK administrations, diagnostics for notifiable diseases, and training and standardisation of the relevant OLs.
 - OLs undertake other official activities as defined by the OCR. This includes sample analysis as necessary for trade, surveillance, or other testing requirements, under the guidance of an NRL.
- 13.5 The National Reference Laboratory (NRL) for Avian Influenza is:
- Animal and Plant Health Agency (APHA)
Weybridge Laboratory
Woodham Lane
Addlestone
KT15 3NB
ENGLAND

- 13.6 APHA is also an avian influenza International Reference Laboratory (IRL) which is designated as a [WOAH avian influenza reference laboratory](#) and a [FAO Reference Centre for Animal Influenza](#).
- 13.7 Further information on designated official laboratories and the UK NRLs can be found on gov.uk. Information on what activities must be undertaken at an NRL or OL can be found in the [Avian Influenza and Influenza of Avian Origin in Mammals: Diagnostic Testing, Controls and Reporting Obligations](#) guidance available on gov.uk.
- 13.8 Both the NRL and IRL operate under the relevant containment requirements of SAPO, COSHH and Schedule 5.
- 13.9 All influenza diagnostic testing conducted at the avian influenza NRL and IRL uses [United Kingdom Accreditation Service \(UKAS\)](#) validated tests and is in line with WOAHS standards as set out for [Avian Influenza in the WOAHS Terrestrial Manual](#). APHA's laboratories are accredited to International Organization for Standardization (ISO) 17025 and have ISO 9001 certification and comply with the principles of Good Laboratory Practice. Further information on the UK's assurance landscape can be found in the [UK Multi-Annual National Control Plan \(MANCP\)](#) and the [UK assurance system for official controls in the agri-food chain](#) guide.
- 13.10 Details of all UKAS validated front line diagnostic assays used by the avian influenza NRL and IRL can be found in the public domain at [FluGlobalNet: Laboratory Protocols](#).
- 13.11 Advisory information from the APHA NRL on the use of influenza antigen tests (also known as lateral flow tests or penside tests) with samples from animals including wild birds has been published and is available in the [APHA Briefing Note 47/22](#).

14 Avian influenza wild bird surveillance

- 14.1 APHA carries out year-round avian influenza surveillance of dead wild birds submitted via public reports and warden patrols across Great Britain on behalf of Defra, Welsh Government and Scottish Government.
- 14.2 The avian influenza surveillance programme is flexible and responsive to changes in risk which are determined by weekly disease monitoring.
- 14.3 The public are encouraged to report findings of dead wild birds using the [online reporting service](#) or by calling the Defra helpline (03459 33 55 77). The online reporting service launched on 13 December 2022 is available to use 24/7 (as is the Defra helpline), making it simpler and quicker for the public to submit reports whilst collecting data in real time.
- 14.4 Reports to the Defra Helpline and [online reporting service](#) for found dead wild birds are triaged and not all birds will be collected. Further information on the triaging of reports can be found on [GOV.UK](#).

- 14.5 The same range of details are captured on reports of dead wild birds made by users self-serving through the [online reporting service](#) as those calling the Defra Helpline, where call operatives complete the online form on a caller's behalf.
- 14.6 APHA and their contractors then collect [some of the birds reported](#) for testing at the APHA NRL to help understand what the risk posed to poultry and other captive birds is, in addition to the risk to different species groups of wild birds through understanding how the disease is distributed geographically and in different types of wild bird.
- 14.7 The surveillance programme will not collect further wild bird carcasses from the same location (defined as the first part of the postcode – the 'outward code' – where the birds were found) and once carcasses have been collected from a given location, APHA and their contractors will not collect any more carcasses of the same species for at least 14 days.
- 14.8 A maximum of 5 birds will be collected from a particular location for testing when a mass die-off is reported.
- 14.9 Testing becomes unreliable as carcasses decompose so, if after four days from the report there has been no collection or no contact can be made with the person reporting the whereabouts of the carcasses, the carcasses will not be collected for testing and will need to be disposed of appropriately (further information can be found in section 23).
- 14.10 Collection and submission of dead wild birds which have been identified by APHA as required for avian influenza surveillance purposes will be arranged by APHA through their carcass collection contractor, who will deliver the collected carcasses to an official veterinary laboratory for post-mortem inspection and testing at the avian influenza NRL.
- 14.11 Carcass collection contractors are encouraged to be vigilant for signs of wildlife crime. Where suspected, wildlife crime will be reported appropriately and evidence will be preserved where possible until further advice has been sought.
- 14.12 APHA publish a report (updated weekly) on [findings of HPAI in wild birds in Great Britain](#), these should be reviewed in combination with the details of the [collection thresholds](#) for the surveillance programme. As changes in these thresholds can affect the number of dead wild birds that APHA collects and therefore tests, therefore impacting the sensitivity of the surveillance.
- 14.13 Further details on how APHA monitors avian influenza in wild birds in Great Britain can be found in the [avian influenza \(bird flu\) infection in wild birds and wild mammals](#) information.

15 Diseases of Wildlife Scheme

- 15.1 In England and Wales, the APHA Diseases of Wildlife Scheme (DoWS) provides surveillance in wildlife for new and emerging diseases on behalf of government. Since 2009, surveillance for vertebrate (apart from cetacean) wildlife disease in Great Britain has been the responsibility of the Great Britain Wildlife Health Partnership (GBWHP), chaired by the APHA DoWS.
- 15.2 The GBWHP includes APHA, Scotland's Rural College (SRUC) Veterinary Services, Centre for Environment, Fisheries and Aquaculture Science (Cefas), Forestry England, the Veterinary Medicines Directorate, WWT, NE, Institute of Zoology (IoZ) and the Garden Wildlife Health ([GWH](#)) project. To facilitate knowledge exchange and decision-making representatives of Defra, Welsh Government and Scottish Government also attend GBWHP meetings.
- 15.3 Wild birds are susceptible to a range of diseases and injuries and not all dead birds will have been infected with avian influenza.
- 15.4 The APHA DoWS supports the work of the avian influenza NRL, together with investigating wild bird mortality or morbidity events in wild birds where avian influenza is either not suspected or suspicion has been negated.
- 15.5 Under the APHA DoWS scheme for those birds that test negative for avian influenza a full post-mortem examination may be undertaken to investigate the potential cause of mortality. A post-mortem will only be undertaken if the carcass is in a suitable condition and a post-mortem is considered likely to yield further information relevant to surveillance for or investigation of new and emerging diseases or other areas where reasons for government intervention have been identified.
- 15.6 In addition, while avian influenza viruses are predominantly considered a pathogen of birds, the virus can infect mammals. APHA routinely undertakes diagnostic testing of wild mammals found dead under the DoWS. Additionally, in coordination with the [Cetacean Stranding Investigation Programme \(CSIP\)](#) for marine mammals, where appropriate wild mammals submitted to DoWS and CSIP are tested for influenza of avian origin in collaboration with the APHA avian influenza NRL.
- 15.7 The APHA DoWS work closely with the [Wildlife Incident Investigation Scheme \(WIIS\)](#), administered by HSE and run by NE, Fera and Devolved Governments. WIIS makes enquiries, where possible, into the death or illness of wildlife, pets and beneficial invertebrates that may have resulted from pesticide and rodenticide poisoning (including cases with suspected wildlife crime), with the objective of providing information to the regulator on hazards to wildlife and companion animals and beneficial invertebrates from pesticides and rodenticides, and to enforce the correct use of pesticides and rodenticides, identifying and penalising those who deliberately or recklessly misuse and abuse pesticides or rodenticides.

- 15.8 Dead wild birds, not directly reported to WIIS, which are submitted to APHA and where poisoning is subsequently suspected are investigated by DoWS in collaboration with WIIS where infection with avian influenza has been negated. In all other instances further investigation is pursued where it is possible to handle carcasses or samples at appropriate biocontainment levels (further information can be found in section 13).
- 15.9 Where evidence of wildlife crime is apparent in found dead wild birds investigated by DoWS. APHA will collaborate with the police and relevant agencies as appropriate.
- 15.10 The [Predatory Bird Monitoring Scheme](#) (PBMS), run by the UK Centre for Ecology and Hydrology, and the [Wildlife Disease Risk Analysis and Health Surveillance](#) (DRAHS) programme, run by the IoZ, also receive birds for chemical monitoring and disease surveillance purposes, respectively. When carcasses are received directly to PBMS or DRAHS they are swabbed on arrival, with samples sent to APHA for HPAI testing. All carcasses that test positive are destroyed (following biosafety protocols), whereas carcasses that test negative enter into the schemes as standard. Where poisoning is suspected, samples are sent on to WIIS. Samples can also be sent from WIIS to PBMS or DRAHS after incidents have been closed.

16 Avian influenza research

- 16.1 The integration of surveillance activities with research is essential to continue the expansion of our understanding of avian influenza virus biology and epidemiology. For wildlife populations, this includes identifying new host species and viral reservoirs, understanding the potential and scale of carryover effects in previously infected birds, and supporting horizon scanning for virus strains circulating globally which may threaten the UK. In combination with molecular and virological studies, research may allow the identification of viral subtypes of particular concern (such as those expressing molecular patterns associated with increased virulence, viral replication, or cross-species transmission including zoonotic risk) and help to focus resources where they are likely to be of greatest benefit.
- 16.2 Defra continues to invest in avian influenza research and monitors the situation in Europe and globally. Defra funds research directly or by leveraging funding through [UK Research & Innovation \(UKRI\)](#), a [Department for Science, Innovation and Technology \(DSIT\)](#) funded non-governmental public body of which the [Biotechnology and Biological Sciences Research Council \(BBSRC\)](#) is a research council partner.
- 16.3 In addition to supporting international collaboration through specific research projects, international collaboration and knowledge exchange is facilitated through discussions between the UK CVO and representatives from the APHA avian influenza NRL and IRL, and their counterparts in the European Union (EU) and globally through the Quadripartite (WHO, FAO, WOA, UN Environment Programme (UNEP)) partners and allied projects.

- 16.4 Knowledge exchange is facilitated through the [STAR-IDAZ International Research Consortium](#), which is run by a partnership including Defra, BBSRC, WOAH, CAB International and Kreavet BV. STAR-IDAZ is a global initiative aiming to coordinate research programmes at the international level and to contribute to the development of new and improved animal health strategies for priority diseases, infections, and issues, including avian influenza.
- 16.5 Further information on [research at APHA](#) can be found on gov.uk together with further information on APHA's avian influenza research portfolio, published outputs and collaborations on [FluGlobalNet](#).
- 16.6 The BTO coordinated publication of relevant wild bird research in two dedicated issues of its science journal [Bird Study](#): Volume 71, Issue 4 (2024) and Volume 72, Issue 1 (2025). The papers included form a comprehensive collection of research on the impacts of HPAI on wild bird populations, including some aspects of management to reduce impact, and are from a number of research organisations across the UK and internationally.

17 Wild bird population monitoring

- 17.1 Through the APHA wild bird surveillance scheme avian influenza has been detected in an array of different species and species groups of wild birds in Great Britain. While the species of wild bird in which avian influenza is detected varies between outbreaks, the most frequent detections are in waterbirds, seabirds, and bird of prey species. However, detection rates are influenced by the numbers and types of wild birds reported by the public, which may be biased by the size and visibility of different species.
- 17.2 The latest information on wild bird species in which avian influenza has been detected can be found in the APHA outbreak assessments which are published and available as part of the [Animal diseases: international and UK monitoring](#) collection on gov.uk together with APHA's [weekly reports of HPAI findings in wild birds in Great Britain](#) and [interactive data dashboard](#) of findings of avian influenza virus in wild birds.
- 17.3 Of particular concern is when avian influenza detected in wild bird species of conservation concern, such as those listed red and amber in the UK Birds of Conservation Concern ([BoCC5](#)), [BoCC5a](#) (addendum to BoCC covering the update on the status of the UK's breeding seabirds) and [BoCC4 Wales](#), or those listed as 'near threatened', 'vulnerable', 'endangered' or 'critically endangered' on the Great Britain IUCN Red List. These include species that are rare or experience serious declines, or for which the UK hosts large proportions of global populations. The additional impacts of HPAI can have serious implications for the conservation of these species.

- 17.4 The impacts of HPAI on wild bird populations are difficult to assess and quantify as impacts may be direct or indirect, and there is likely to be a lag period between these impacts and their detection through monitoring programmes. Long-term population monitoring, including measures of abundance, breeding success, and survival, and targeted research is crucial to understanding the impacts of avian influenza on England and Wales's wild bird populations.
- 17.5 Monitoring of seabird populations in England and Wales (and the rest of the UK) is done under the BTO and JNCC [Seabird Monitoring Programme \(SMP\)](#), which is jointly funded by the BTO and JNCC, in association with the RSPB. In addition, periodic full censuses of Britain and Ireland's breeding seabirds is undertaken, coordinated by JNCC for the UK. The results of the latest census (Seabirds Count) completed between 2015 and 2021 were published in 2023 ([Seabirds Count | JNCC](#)), providing a critical baseline against which to determine the impacts of HPAI.
- 17.6 The BTO, RSPB and JNCC [Wetland Bird Survey \(WeBS\)](#), the BTO, JNCC and NatureScot [Goose and Swan Monitoring Programme \(GSMP\)](#), the BTO [Winter Gull Survey](#) population counts, in addition to the BTO and JNCC [Avian Demography Schemes](#) that monitor breeding success and survival, all provide important information for assessing population changes. The BTO, JNCC and RSPB [Breeding Bird Survey \(BBS\)](#) also provides trends for a wide range of commoner breeding species and would be relevant for detecting any impacts on for example corvids and common raptors. Further, the [Rare Breeding Birds Panel](#) monitors population change in some of our rarer species. Together, these schemes provide assessments of the status of species populations and provide insights on drivers of change.
- 17.7 Further information on trends in [Wild bird populations in the UK](#) is available on GOV.UK and on the BTO's website ([BirdTrends](#))
- 17.8 Further to these long-term population monitoring schemes, from November 2022 NE, NRW and NIEA have operated a targeted wild bird mortality reporting system to gather detailed information on wild bird mortality from site managers at key sites for wild birds in England and Wales, using the [Epicollect](#) mobile data gathering platform.
- 17.9 In addition, there are also now options for recording mortality of wild birds through the BTO-run [BirdTrack](#) and [WeBS systems](#), which cover the whole of the UK.
- 17.10 The wild bird mortality data gathered by Epicollect, BirdTrack and WeBS is shared between relevant stakeholders on a regular basis (weekly at the time of publication). These data help to support the APHA's work on monitoring the spread of HPAI and helps to assess the impacts of HPAI and other causes of wild bird mortality on wild bird populations in England and Wales. Understanding these impacts aims to help inform species recovery programmes and measures to mitigate the impacts of the disease.

- 17.11 Reporting mortality via Epicollect, BirdTrack or WeBS does not replace the reporting of dead wild birds to Defra, either through the [online reporting service](#) or via the Defra Helpline (03459 33 55 77), which is essential for disease surveillance purposes. Further details on this surveillance can be found in section 14.
- 17.12 Users of [EpiCollect](#), BirdTrack and WeBS are encouraged to also report to the [Defra reporting service](#), and to include their Defra report reference number as part of their wild bird mortality record in other systems.

18 Support for species recovery

- 18.1 The UK's wild birds are seen as an important part of our natural heritage, and Defra and Welsh Government are committed to protecting them, not least as part of our commitment to hand the environment onto future generations in a better state.
- 18.2 England and Wales support internationally significant populations of birds and many of these species are species of conservation concern in the UK and Wales ([BoCC](#) Red- or Amber-listed).
- 18.3 Defra and Welsh Government recognise the significant threat HPAI poses to our wild bird populations, particularly where populations are of conservation concern are effected. The Avian Influenza Wild Bird Recovery Advisory Group (further information on the group can be found in section 7.2) gathers information from conservation, land management and wildlife disease experts from a range of organisations to assess what conservation and monitoring actions can be implemented with respect to wild birds.
- 18.4 In addition, the Welsh Wild Bird Avian Influenza Strategic Response Group (further information on the group can be found in section 7.6) provides a platform to discuss and develop a strategic and evidence-based response to mitigating the impacts of avian influenza in wild birds and contributes towards building resilience and recovery of affected populations in Wales.
- 18.5 Internationally, Defra and Welsh Government continue to engage with the [OSPAR](#) Biodiversity Committee, [ACAP](#) and [WOAH](#) to share best practice and mitigation measures. This engagement has resulted in species-specific guidance such as the [Guidelines for working with albatrosses and petrels during high pathogenicity avian influenza \(HPAI\) H5Nx panzootic](#).
- 18.6 The UK is also a Contracting Party to the [Agreement on the Conservation of African-Eurasian Migratory Waterbirds](#) (AEWA), a multilateral environmental agreement which aims to coordinate international effort for the conservation and management of migratory waterbirds including seabirds. The treaty is legally binding and implementation in the UK is undertaken through the legal protection of species and sites (many of which are designated in recognition of their international importance for migratory bird species), as well as direct conservation action.
- 18.7 The UK is heavily engaged in AEWA, and the Agreement contributes significantly to many biodiversity and recovery policy objectives.

- 18.8 Amongst significant UK contributions Defra continue to promote and encourage the full implementation of AEWA's International Single Species Action Plans for relevant breeding waterbirds such as Eurasian Curlew, Greenland White-fronted Goose, Barnacle Goose and Bewick's Swan. Coordinated action through international plans can significantly contribute to species recovery.
- 18.9 At [AEWA's 8th Meeting of Parties \(MOP\)](#) in September 2022, the UK proposed additional measures to improve collaboration on and monitoring of avian influenza across the treaty area (Africa & Europe) – these were adopted by all Contracting Parties.
- 18.10 Defra have established a Seabird Conservation Coordination Group comprising UK and devolved governments, technical experts, environmental NGOs and offshore wind industry representation. The group is considering the recommendations in Natural England's [English Seabird Conservation and Recovery Pathway report](#) (ESCaRP) and the current available delivery mechanisms. The ESCaRP actions, if implemented, could help restore and increase the resilience of seabird populations in England.
- 18.11 Welsh Government have consulted on a Seabird Conservation Strategy which will cover 29 species. Underpinning the strategy are individual species cards, highlighting pressures and threats using best available evidence with a sensitivity assessment using the Feature Activity Sensitivity Tool (FeAST). Exposure assessments have also been undertaken and combined with sensitivity for vulnerability assessments. Following this, work is now progressing to develop recommendations with a number of high-level actions to support the conservation of seabirds addressing pressures and threats. Publication of the Strategy is expected by early 2026.
- 18.12 In parallel in work to specifically address threats to seabird populations, Defra and Welsh Government are looking to improve resilience in existing seabird populations and has built a comprehensive network of Marine Protected Areas (MPAs), which include Special Protection Areas (SPAs) to protect seabirds. Defra are conducting a review of the English MPA network to look at whether sites are in the right places with the right protection. The review will explore ways to update protection and management approaches to better address a number of issues impacting seabird resilience, including biodiversity loss and climate change.
- 18.13 Following consultation, Defra introduced a prohibition on fishing for sandeel in all English waters of the North Sea from 26 March 2024 to improve the resilience of the marine ecosystem (including seabirds and other marine wildlife) by shielding sandeel as an essential food source for predatory species.

- 18.14 Further measures aimed at improving the conservation status and resilience of seabird populations include Defra-funded research on the accidental capture (bycatch) of seabirds in fishing gear, which has highlighted possible impacts on some species in UK waters and helped target and develop mitigation measures. In August 2022, the UK Government and Devolved Administrations published the [Marine Wildlife Bycatch Mitigation Initiative](#). This initiative outlines policy objectives and actions to achieve part of the Fisheries Act's ecosystem objective, including improving our understanding of where and how much bycatch occurs and implementing effective mitigation measures to minimise and, where possible, eliminate bycatch.
- 18.15 In addition, Defra has contributed funding over three years (2023 to 2026) to protect seabird islands from invasive non-native mammalian predators through the '[Biosecurity for England](#)' seabird biosecurity project, managed by the RSPB. This continues the work of the Biosecurity for LIFE project, also managed by RSPB in collaboration with NE, NRW, NatureScot, JNCC, [Great Britain Invasive Non-Native Species Secretariat \(INSS\)](#), Defra, Marine Scotland, and DAERA. The Welsh Government has provided £250,000 for the '[Biosecurity for Wales](#)' programme which helped fund the UK's first conservation detection dog Jinx, who is trained to detect rats on Welsh seabird islands. More recently, a further £100,000 has been provided to enable the continuation of the programme ensuring prevention, surveillance and response protocols are maintained in Wales.
- 18.16 The UK faces a persistent threat from avian influenza associated with the migratory patterns of wild birds and avian influenza outbreaks should be considered an ever-evolving situation. Species population monitoring may reveal species which have been significantly impacted in the short or longer term, together with information on the ability of populations to recover from HPAI impacts and the effectiveness of conservation measures.
- 18.17 The potential for further incursion and circulation of strains of avian influenza which are not currently circulating in wild birds, and the potential for these strains affecting different wild bird species or affecting populations in different ways than strains currently circulating in wild birds cannot be discounted.

19 Biosecurity in natural settings

- 19.1 This section of the guidance is aimed at landowners and organisations responsible for natural areas where the general public have access to, or who undertake activities involving wild birds. Further information on carcase removal is also available in section 23.

- 19.2 **Contingency plans** consider possible scenarios that may arise in the future and should incorporate designing strategies to manage these potential risks and threats. Contingency planning is essential for ensuring a rapid, coordinated and well-informed response to animal disease outbreaks. Organisations responsible for the management of land where wild birds may be found should have contingency plans in place in the event of an increased risk of avian influenza being detected on their land, or that avian influenza is confirmed to be present in birds whether kept or wild on their land, or that influenza of avian origin has been detected in mammals on their land. These contingency plans should be integrated into the general site management plans and be readily available to staff, and staff should be familiar and trained in their operation in advance.
- 19.3 General occupational health and safety guidance can be found on the [HSE website](#) together with information on [Working with Avian influenza virus \(hse.gov.uk\)](#) and the HSE's [Avian influenza](#) guidance.
- 19.4 **Communication** is a key measure in mitigating risk of transmission of avian influenza between birds and protecting public health. During periods of increased risk from avian influenza signage should be displayed at key access and other points on sites warning the general public of the risk of avian influenza and highlighting the measures they can take to protect themselves, their pets and kept and wild birds from the virus. Example posters are provided by APHA and are available for use at:
- [Bird flu \(avian influenza\): posters for land managers](#)
 - [Bird flu \(avian influenza\): posters for bird keepers](#)
- 19.5 Further information on [how to keep pets safe from avian influenza](#) can be found in Defra's guidance.
- 19.6 Details of the national risk of incursion of avian influenza are published on [gov.uk/bird-flu](#). Details of the scientific and ornithological evidence which underpins these risk levels can be found in the APHA risk and outbreak assessments published and available on gov.uk at as part of the [Animal diseases: international and UK monitoring](#) collection.
- 19.7 **Cleansing and disinfection**, localised or targeted use of disinfectants, including cleansing and disinfection of clothing, footwear, equipment and vehicles, should be considered at key access points to sites and activities where people or equipment come into contact with wild birds or their environment. However, appropriate use and disposal of disinfectants so they do not damage the environment is essential. The [list of Defra-approved disinfectants](#) sets out which products should be used for avian influenza as a statutory disease control measure, and the concentration of the disinfectant you must use. Further information is provided on gov.uk in the [Defra-approved disinfectants guidance](#).
- 19.8 Spraying of the environment with disinfectant is considered counter-productive, harmful to the environment and not effective from a disease control perspective.

20 Restrictions on activities

20.1 All disease prevention and control measures are kept under regular review and are based on the latest scientific and ornithological evidence and veterinary advice.

20.2 Bird ringing

- 20.2.1 Ringing activity is undertaken by ornithologists, researchers and volunteers overseen by the BTO on behalf of the UK SNCBs. Ringing permits issued by the BTO allow the catching of birds for ringing purposes in England and Wales under the [Wildlife and Countryside Act 1981](#).
- 20.2.2 The information gathered provide data on the survival and breeding success of bird species that enable evaluation of the drivers of population change.
- 20.2.3 During outbreaks or periods of increased risk of avian influenza incursion it is essential that appropriate measures are in place to ensure that bird ringing activity can continue where possible to enable continuity in population monitoring activity whilst mitigating the risk of increasing transmission of avian influenza to, within, between, and outside of bird populations under study and protecting public health of those involved in the activity.
- 20.2.4 The [BTO HPAI Ringing Framework](#) and [BTO information for volunteer field workers](#) set out guidance for bird welfare and biosecurity when ringing birds. All BTO ringers have access to this guidance.
- 20.2.5 Defra, Welsh Government, NE, NRW, JNCC and APHA worked with BTO to develop their [HPAI Ringing Framework](#) which provides a summary of current permissions set out by NE and NRW in England and Wales, respectively (together with the relevant agencies in Scotland and Northern Ireland). These restrictions are based on a risk-based approach, taking into account site and species knowledge, with the objective of managing avian influenza associated risk so that ringing activity does not present a risk to study species.
- 20.2.6 Advice on any restrictions on ringing activity are kept under regular review by Defra, Welsh Government, NE, NRW, JNCC, APHA and the BTO. Consideration is given to the [national avian influenza risk levels](#) in addition to the likelihood of infection, conservation status, habitat and behaviour of the different taxonomic groups of birds for which ringing activities are undertaken when assessing the need for SNCBs to apply either national, regional or localised restrictions on ringing activities.
- 20.2.7 Where active suspensions on ringing are in place NRW and NE, supported by advice from BTO, where relevant, will consider requests for exemptions where the value of the data collected is deemed to be significant with respect to national monitoring priorities, including those relating to avian influenza impact assessments and when the risks to public health can be mitigated.

- 20.2.8 The [BTO HPAI Ringing Framework](#) mandates how ringers should respond if sick or dead birds are encountered during ringing activities. Visits to, for example, seabird colonies by ringers to assess colony health, check affected birds for rings, and carry out standard monitoring can yield valuable data if they can be undertaken in a manner in which health and safety and biosecurity risks can be adequately controlled and the risk of onward or zoonotic transmission can be managed.
- 20.2.9 Even where wild birds are not showing signs of infection, it is not safe to assume that the virus is not circulating, and appropriate biosecurity and hygiene precautions should be adopted when carrying out any activities within or near any wild bird populations. Bird ringers must follow the latest [BTO HPAI Ringing Framework](#) and [information for volunteer field workers](#) guidance on bird welfare and biosecurity.
- 20.2.10 In addition, Defra, Welsh Government, NE and NRW in association with UKHSA and PHW, work directly and through BTO where relevant with specialist groups involved in ringing activities to provide guidance on recommended restrictions and permissions on ringing activities during avian influenza outbreaks and periods of increased risk including, for example, the King's Swan Marker and the Worshipful Companies of Vintners and Dyers.

20.3 Access to sites

- 20.3.1 For areas where an [Avian Influenza Prevention Zone \(AIPZ\)](#) is in force, access to areas where poultry and other captive birds are kept must be restricted to only essential personnel.
- 20.3.2 In addition, access to premises where notifiable avian influenza has been confirmed in poultry or other captive birds is restricted. Access to infected premises would only be permitted following a veterinary risk assessment and under licence from the APHA.
- 20.3.3 Outside of these restrictions, there is no legal requirement for government, local authorities, or landowners to limit access to public areas or close rights of way due to avian influenza.
- 20.3.4 However, where findings of avian influenza in wild birds have occurred in public areas, local authorities and other land managers may take a precautionary approach to protect the health and welfare of birds and to limit the risk of infection being transferred on footwear and other fomites to other areas by restricting access to areas where wild birds frequently congregate, where this does not impact public rights of way. Applying access restrictions should be assessed by land managers on a case-by-case basis.

20.4 Feeding wild birds

- 20.4.1 The feeding of wild birds in the open is not an offence either through the AIPZ measures or other avian influenza legislation. However, some wild birds, particularly waterbirds such as ducks, geese, and swans, are known to carry avian influenza and may not show clinical signs.

- 20.4.2 We encourage anyone feeding wild birds to do so responsibly and not feed them in the vicinity or on the same premises as poultry or other captive birds as this may cause wild birds to gather and facilitate the spread of avian influenza and other pathogens.
- 20.4.3 In addition, consideration should be given to whether feeding wild birds will cause them to congregate together at unnaturally high densities and therefore increase the risk of transmission between the wild birds either directly or indirectly by increasing local environmental contamination with infectious material (for example faeces and feathers). Conversely, consideration should be made by landowners and land managers regarding advising against feeding wild birds in an area, as this may cause the wild bird populations to move to other areas and this perturbation of populations can risk spreading infection to wider or new areas. Decisions on advice regarding feeding of wild birds in an area should be taken by land managers on a case-by-case basis. Defra have published [posters for land managers](#) to support communication of this advice.
- 20.4.4 All bird keepers must comply with the mandatory biosecurity requirements of any AIPZ or disease control zones in force and prevent direct or indirect contact between their birds (poultry and other captive birds) and wild birds.
- 20.4.5 In areas where an AIPZ is in force released game birds must not be fed within 500m of the restricted access part of a premises where 500 or more poultry or other captive birds are kept where this area is under the control of the keeper. Find out more in the guidance on [Bird flu: rules if you keep game birds](#)
- 20.4.6 If you feed wild birds in your garden, read advice from the [BTO to keep feeders and water baths clean](#). This will help to stop avian influenza and other diseases spreading between different birds.
- 20.4.7 Wash your hands with soap and water after feeding wild birds.
- 20.4.8 Take steps to minimise the risk of transferring virus from the environment between wild bird feeding areas and to areas where poultry or other captive birds are kept by undertaking appropriate cleansing and disinfection of footwear, vehicles, equipment etc. with a [Defra approved disinfectant](#).

20.5 **Wildlife rescue and rehabilitation**

- 20.5.1 Wildlife rehabilitation facilities should operate in accordance with the British Wildlife Rehabilitation Council's (BWRC) [10 Principles of Wildlife Rehabilitation](#).
- 20.5.2 People involved in wildlife rehabilitation should take appropriate precautions with regard to avian influenza risks from sick and injured birds. A high level of biosecurity should be adhered to at all times, including the appropriate use of PPE and RPE.

20.5.3 When wild birds are taken into a wildlife rehabilitation centre they are classed as captive birds (animals remain classed as 'wild' rather than 'captive' for the first 14 days in care, as long as they are fully isolated from all captive birds on the premises using isolation protocols equivalent to that of a Balai Directive approved premises). Consequently, it is a legal requirement for wildlife rehabilitation centres to report any suspicion of avian influenza in birds in their care immediately by calling APHA on:

- 03000 200 301 if you're in England
- 03003 038 268 if you're in Wales

20.5.4 Appropriate systems should be put in place to avoid bringing potentially infected wild birds into a shared environment with other wild birds and animals within the centre. The British Veterinary Association's (BVA) [Avian influenza \(AI\) advice for vets dealing with wild birds and backyard poultry](#) guidance has more information on the considerations that should be made when dealing with wild birds that are potentially infected with avian influenza.

20.6 Shooting

20.6.1 Defra and Welsh Government have explored the benefit of introducing wildfowl hunting restrictions to help limit the spread of avian influenza. At the time of publication, some shooting activities which disturb significant numbers of birds are considered on the basis of risk assessment to have the potential to increase the dispersal of avian influenza beyond that of routine movement of infected wild birds. However, given the variety of locations and scale at which shooting activities occur, there is likely to be variation in risk between different shooting activities. A proportionate approach to mitigating these variable risks, balanced against the burdens they impose has therefore been taken and are kept under review as and when new evidence is available.

20.6.2 Restrictions on shooting for control purposes, including those applied with regard to this risk, are laid out in section 20.7.

20.6.3 Further restrictions on shooting activities may be applied if an avian influenza strain of significant public health concern is detected in wild birds (further information can be found in section 21).

20.6.4 Details of the evidence which supports these assessments is available on gov.uk as part of the [Animal diseases: international and UK monitoring](#) collection. The evidence is regularly reviewed and any decisions on further restrictions are based on the latest scientific and ornithological evidence and veterinary advice.

20.6.5 While the [risk assessments](#) undertaken consider the generic risk and impacts from shooting, land managers should review on a case-by-case basis the impact shooting activities may have on species of conservation concern which are present on, or close to, their land.

- 20.6.6 Defra and Welsh Government actively work with shooting and game keeping organisations to communicate biosecurity best practice to waterfowlers and others involved in the gamekeeping community.

20.7 Lethal control licences

- 20.7.1 Some species of wildlife have legal protection. NE issue licences on behalf of Defra in England and NRW issue licences as a competent licensing authority in Wales that allow activities affecting protected species that are otherwise prohibited. Some of these licences allow lethal control.
- 20.7.2 Before issuing a licence, the wildlife licencing authorities in England and Wales carefully consider the circumstances of a case, whether there is an alternative satisfactory solution, the justification for it, whether lethal control will contribute to resolving the problem and the impact on the species as a whole in accordance with the latest evidence.
- 20.7.3 NE and NRW review individual licence applications to consider the risks both to the target species from control activities and the likelihood that control activity may contribute to HPAI dissemination.
- 20.7.4 In addition, [in England, Defra](#) (Natural England from 2026) and [in Wales, NRW](#) issue a range of general licences for controlling certain wild birds for different purposes. You do not need to apply for a general licence, but you must comply with the licence conditions.
- 20.7.5 It is recognised that disturbing wild bird management activities could represent a risk to other wild birds through increased mixing of disturbed birds. NE has considered the potential for licensed activities to result in avian influenza spreading in wild bird populations, beyond expected spread in the absence of those activities. They consider the risk of increased spread is high enough in certain circumstances to require measures to reduce that risk. For three of its wild bird management general licences ([GL40-42](#)), NE will as of 1 January 2026 introduce a new licence condition that for operations on or next to Sites of Special Scientific Interest (SSSIs), users must avoid excessive disturbance of certain species or types of birds. This is to reduce the risk of spreading avian influenza among the wild bird populations of most conservation importance. The licences include advice on what this means in practice and allow users flexibility to determine how to avoid excessive disturbance on their site.
- 20.7.6 The control of avian influenza infection in wild bird populations through culling, as used in poultry or other captive birds, is not considered an effective or feasible approach and is not used by Defra or Welsh Government. Further information about this can be found in section 22.

20.8 Game bird release

- 20.8.1 As defined by the [Avian Influenza and Influenza of Avian Origin in Mammals \(England\) \(No. 2\) Order 2006 \(as amended\)](#) and [Avian Influenza and Influenza of Avian Origin in Mammals \(Wales\) \(No 2\) Order 2006 \(as amended\)](#) and declarations derived from these orders, under avian influenza rules in England and Wales respectively, 'game' bird means any pheasant, partridge, grouse (or moor game), black (or heath) game or ptarmigan or ducks bred for shooting. A 'wild game bird' means a bird which lives freely in the wild and is hunted for human consumption.
- 20.8.2 Definitive requirements within any disease control zone or AIPZ currently in force in England can be found in the [Notifiable animal disease cases and control zones case finder](#) and in Wales in the [Avian influenza \(bird flu\): latest update](#) information. The location of disease control zones currently in force can be viewed using the [APHA avian influenza interactive map](#). Further guidance on the rules in England can be found in the Defra [Bird flu: rules in disease control zones in England](#) guidance, and for Wales on the Welsh Government [Avian influenza \(bird flu\): latest update](#) pages.
- 20.8.3 Release of game birds is not permitted in disease control zones surrounding infected premises where avian influenza has been confirmed in poultry or other captive birds (England: Schedule 4, paragraph 13 [Avian Influenza and Influenza of Avian Origin in Mammals \(England\) \(No. 2\) Order 2006 \(as amended\)](#); Wales: Schedule 4, paragraph 13 [Avian Influenza and Influenza of Avian Origin in Mammals \(Wales\) \(No 2\) Order 2006 \(as amended\)](#)).
- 20.8.4 Prior to release game birds are considered to be poultry and subject to all the same rules as other poultry species, including requirements of any disease control zone or AIPZ in force. However, once game birds have been released, they are classed as wild birds for avian influenza rules and the person who released the game birds is no longer 'the keeper' of the birds. Further information can be found for England in the Defra [Bird flu: rules if you keep game birds](#) guidance, and for Wales on the Welsh Government [Avian influenza \(bird flu\): latest update](#) pages.
- 20.8.5 During outbreaks, there are controls on the release of game birds in areas of known high risk. The release of game birds is not permitted in any avian influenza disease control zone, nor are game bird releases permitted while an AIPZ with mandatory housing measures is in force. Additional biosecurity measures for game bird operations may be included in AIPZs when in force to reflect the specific disease risks associated with the sector.
- 20.8.6 Where an avian influenza strain of significant public health concern is detected in wild birds, additional control measures may be put in place for game bird releases. Further information on the legal basis for this can be found in section 21.

- 20.8.7 To ensure Defra and Welsh Government's approach to disease control in poultry and captive birds reflects any risk these activities pose, APHA has assessed the impact pheasant releases have on the likelihood of transmission of avian influenza to wild birds, and between wild birds and kept birds. This risk assessment has been published and can be found in as part of the [Animal diseases: international and UK monitoring](#) collection.
- 20.8.8 NE have also published a [risk assessment](#) evaluating the risks from HPAI to wild birds associated with the release of captive-reared mallards for recreational shooting in winter 2023 to 2024.
- 20.8.9 In England, additional rules apply to the release of common pheasants or red-legged partridges into the wild on designated European sites or within 500 metres of their boundary. In determining these rules NE undertake a Habitats Regulations Assessment (HRA) as required under the [Conservation of Habitats and Species Regulations 2017](#). Further information on the rules, related licences and how decisions on these are made can be found in Defra and NE's protected sites and species [gamebird release licensing](#) guidance and NE's [gamebird release individual licensing](#) guidance.

20.9 **Catching up game birds**

- 20.9.1 Catching up game birds from the wild outside the [shooting season for the species](#) is not permitted.
- 20.9.2 Once caught up, previously wild game birds are classed as poultry. They are subject to all the same avian influenza rules as other poultry. Caught up game birds brought together from more than one location must follow the [rules for bird gatherings](#).
- 20.9.3 In an AIPZ, wild game birds caught up in the open season must not be moved for at least 21 days from the date of catching up. The 21-day rule applies from the date the last bird was caught up or the date the last bird arrives at the premises where they'll be kept.
- 20.9.4 Outside of an AIPZ, the 21-day rule should be considered best practice to protect the health and welfare of birds and reduce the risk of avian influenza spreading.
- 20.9.5 Further information can be found for England in the Defra [Bird flu: rules if you keep game birds](#) guidance, and for Wales on the Welsh Government [Avian influenza \(bird flu\): latest update](#) pages.
- 20.9.6 Government have also joined with organisations involved in game bird management to issue guidance on avian influenza and the way it can affect the activities of game bird rearers. This guidance has been prepared by game shooting, research, and game conservation bodies. It is endorsed by Defra, Scottish Government, Welsh Government and DAERA and is available on the [Game Farmers Association \(GFA\) Website](#).

21 Avian influenza strains of significant public health concern

- 21.1 Multiple strains of avian influenza have caused public health concern including H7N9, H9N2, H5N6, H5N8 and H5N1. None of these strains easily infect people and are not usually spread from human to human. Globally human spillover cases are not common but do occur. As such government and individuals should take precautionary steps to mitigate this risk to humans as much as possible.
- 21.2 Government scientists undertake epidemiological monitoring and genomic surveillance work to inform the assessment of the risk of avian influenza to human health. Genomic analysis of samples from the APHA national and international avian influenza reference laboratory are a key contributor to these assessments. Further information is available in UKHSA's [Avian influenza: guidance, data and analysis](#) collection.
- 21.3 UKHSA and PHW monitor public health risks related to avian influenza, including close collaboration with APHA in relation to reported detections of HPAI in kept or wild birds in England and Wales respectively. Appropriate action is taken by UKHSA in England to protect public health in line with the [national guidance for managing the human health risk of avian influenza in poultry and wild birds](#) and by PHW in Wales in line with Public Health Wales Avian Influenza Standard Operating Procedure.
- 21.4 Where an avian influenza strain with significant public health concern (as assessed by the UKHSA and PHW for England and Wales respectively) is detected in wild birds, additional control measures may be put in place surrounding the wild bird finding.
- 21.5 Potential actions which may be taken in this scenario are set out in the [Notifiable Avian Influenza Disease Control Strategy for Great Britain](#) (in line with the [Avian Influenza \(H5N1 in Wild Birds\) \(England\) Order 2006 \(as amended\)](#) in England and the [Avian Influenza \(H5N1 in Wild Birds\) \(Wales\) Order 2006 \(as amended\)](#) in Wales). Their application will be subject to a veterinary risk assessment based on the latest scientific and ornithological evidence and veterinary advice, in addition to the consideration of trade implications and UKHSA and PHW's public health advice.
- 21.6 In summary, measures taken may include the declaration of wild bird control area (WBCA) and wild bird monitoring area (WBMA) surrounding findings in wild birds. The size and shape of these areas may be based on an assessment of the risk of disease spreading to poultry or other captive birds, taking into account:
- geographical features
 - administrative boundaries (for example county or unitary council boundaries)
 - those relating to the water environment in the locality
 - ecological factors
 - the extent of the outbreak

- monitoring facilities
- location and extent of poultry and other captive birds

- 21.7 When zones surrounding findings of avian influenza in wild birds are declared, movement restrictions may apply within the WBCA and WBMA to poultry and captive birds and items associated with their keeping for example poultry litter and poultry products (further details available in the [Notifiable Avian Disease Control Strategy for Great Britain](#)). Enhanced biosecurity potentially including housing measure may also apply to poultry and other captive birds in the areas. The definitive requirements and who and what they apply to within any WBCA or WBMA in force will be set out in the declaration for the area published for England in the [Notifiable animal disease cases and control zones case finder](#) and for Wales in the [Avian influenza \(bird flu\): latest update](#) information and their locations viewed using the [APHA avian influenza interactive map](#).
- 21.8 When declared, a WBCA must remain in force for at least 21 days from the date of collection of samples from the infected wild bird, unless otherwise indicated by successful completion of all surveillance in poultry and other captive birds required in the area, no suspect premises under investigation in the area and the favourable outcome of a veterinary risk assessment.
- 21.9 When revoked following the successful completion of any relevant disease control and surveillance activities, the area which comprised the WBCA is merged with and becomes part of the WBMA. WBMA must remain in force for at least 30 days from the date of collection of samples from the infected wild bird. WBMA will only be revoked following the successful completion of any disease control and surveillance activities required within the area.
- 21.10 While the majority of restrictions and surveillance activities within WBCA and WBMA apply to poultry and other captive birds, other restrictions may be applied to activities associated with wild birds, including:
- 21.10.1 The prohibition of hunting of wild birds or 'otherwise take them from the wild' in a WBCA or WBMA except under licence (England: Schedule 1, paragraph 17 [Avian Influenza \(H5N1 in Wild Birds\) \(England\) Order 2006 \(as amended\)](#); Wales: Schedule 1, paragraph 17 [Avian Influenza \(H5N1 in Wild Birds\) \(Wales\) Order 2006 \(as amended\)](#)).
- 21.10.2 The release of game birds in a WBCA or WBMA (England: Schedule 1, paragraph 18 [Avian Influenza \(H5N1 in Wild Birds\) \(Wales\) Order 2006 \(as amended\)](#); Schedule 1, paragraph 18 [Avian Influenza \(H5N1 in Wild Birds\) \(Wales\) Order 2006 \(as amended\)](#)).
- 21.11 All decisions on whether to apply these control measures within any WBCA or WBMA in force will be subject to the outcome of a veterinary risk assessment containing the latest scientific and ornithological evidence and veterinary advice supported by public health risk assessments.

22 Culling for disease control and euthanasia on welfare grounds

- 22.1 The control of avian influenza infection in wild bird populations through a stamping out policy, as used in poultry or other captive birds, is not considered effective or feasible from a logistical, environmental and biodiversity perspective.
- 22.2 Defra and Welsh Government's approach to not cull wild birds for disease control purposes is in line with FAO and WOAHA's best practice, and our international obligations under [CMS](#), the [Ramsar Convention](#) and [AEWA](#).
- 22.3 However, the euthanasia of sick wild birds, provided it can be carried out in a safe and humane manner, may be considered based on animal welfare grounds.
- 22.4 Defra, Welsh Government and APHA do not provide a field response to sick or injured wild birds. Sick or injured wild birds should not be reported through the [online dead wild bird reporting service](#) or to the Defra Helpline. In England and Wales sick or otherwise injured birds can be reported to local wildlife rescues who, dependent on the situation, may be able to offer assistance. Other local private veterinary clinics or wildlife rehabilitation centres may also be able to assist. This may include euthanasia, if appropriate, for the welfare of the bird. Appropriate health and safety precautions around handling of sick birds must be followed (further information can be found in UKHSA's [advice for the public to reduce the risk of catching avian influenza](#)).
- 22.5 Veterinary practitioners are obliged to provide appropriate first aid and emergency care under the [Royal College of Veterinary Surgeons \(RCVS\) Code](#), but this will not always be immediate.
- 22.6 Intervention with or without subsequent euthanasia is not always the most appropriate course of action for wild bird welfare. A blanket approach that all wild birds displaying clinical signs indicative of avian influenza are euthanised is not appropriate. Where wild birds are injured and show no clinical signs of avian influenza then a normal approach to first aid and emergency care in British wildlife should be taken.
- 22.7 Further information for veterinary practitioners on the assessment of sick wild birds where clinical signs indicative of infection with an avian influenza virus are identified and appropriate methods of euthanasia suitable for outside of the veterinary practice premises can be found in the BVA [Avian influenza \(AI\) advice for vets dealing with wild birds and backyard poultry \(bva.co.uk\)](#) guidance.

- 22.8 Wild birds are protected under the [Wildlife and Countryside Act 1981](#) (as amended) (WCA). The level of protection may vary according to the species and time of year. Under [chapter 69, part 1, section 1\(1\)\(a\) of the WCA](#) it is an offence to kill, injure or take from the wild any wild bird. However, in some circumstances, wild birds may be killed for disease-related purposes by appropriately authorised person (as defined by the WCA). In addition, certain species of bird can be killed and taken during their open season, and the wildlife licencing authorities in England and Wales issue lethal control licences for activities that are otherwise prohibited. Further information on this can be found in sections 20.6 and 20.7. Certain methods of killing are specifically prohibited under the WCA.
- 22.9 If sick or injured wildlife are taken under human control, they become protected by the [Animal Welfare Act 2006](#) (as amended). This includes then a duty to protect them from pain, suffering, injury, and disease during this time. In some cases, humane killing using an appropriate method is necessary to avoid further suffering.
- 22.10 Any suspected breaches of animal welfare legislation in relation to wild animals should be taken very seriously and reported to the police or relevant local authority.

23 Removal and disposal of dead wild birds

- 23.1 Wild birds are susceptible to a range of diseases and injuries, and not all dead birds will have been infected with avian influenza. However, our general advice to the public is to not touch or pick up any dead or visibly sick birds that they find if this can be avoided.
- 23.2 Members of the public are encouraged to report findings of dead wild birds using the [online reporting service](#) or by calling the Defra helpline (03459 33 55 77) (further information on this surveillance programme can be found in section 14).
- 23.3 Where dead birds are not required for avian influenza surveillance purposes, they may be eligible for other surveillance schemes such as [DoWS](#), [GWH](#), [WIIS](#), [PBMS](#) or [DRAHS](#) further information on these schemes can be found in section 15). However, there are many reasons why birds die, and further investigation is not required or warranted in many circumstances.
- 23.4 In general, we do not recommend that wild bird carcasses are removed, however there are certain scenarios when removal of carcasses may be warranted. If removal is warranted it is the landowner or local authority's responsibility to safely arrange disposal of the carcasses. Further information on recommendations when removal of carcasses may be warranted is provided in section 23.6 and 23.7.
- 23.5 Landowners are responsible for any costs associated with removal and disposal of dead wild birds. If removal is warranted (see 23.6 and 23.7) where dead birds are on public land it is the local authority's responsibility to arrange disposal of the carcasses.

23.6 Birds are the natural hosts of avian influenza viruses. However, avian influenza viruses can also infect mammals. Keepers of poultry, other captive birds and kept mammals (including those that are extensively grazed) must ensure any wild bird carcasses are removed from areas that poultry, other captive birds or kept mammals have access to or areas which are associated with their keeping, for example bedding storage areas. AIPZs and some game bird release licences (see section 20.8) may require keepers of game birds to search the area surrounding release pens for carcasses of dead game birds and dead wild birds and appropriately dispose of any carcasses not required for avian influenza testing. Definitive requirements can be found in the respective zone declarations or licence conditions.

23.7 Outside of these areas there is no obligation on landowners or local authorities to remove found dead wild birds when they are not causing a public health or environmental hygiene risk, however consideration of their removal is recommended when dead wild birds are found:

- at residential premises, particularly in areas which may be accessed by children or pets
- in urban or suburban areas or rural access routes, for example on footpaths, with frequent human footfall
- in areas where there is likelihood of significant exposure of carcasses to other wild birds (or other susceptible species) for example areas where carcasses can be easily scavenged, or carcasses are in key feeding, breeding, and roosting areas.

This assessment will be highly site-specific and should be made based on an assessment of the location and species of bird present.

23.8 The carcasses of wild animals, including wild birds, which are suspected of being infected with a disease which can spread to people or animals such as avian influenza, if removed, must be disposed of as a category 1 Animal by Products (ABP). Further information can be found in the Defra [Animal by-product categories, site approval, hygiene and disposal](#) guidance and Welsh Government [Animal by-products: guidance](#).

23.9 Derogations from the rules governing ABP disposal of wild birds suspected of being infected with avian influenza may be available in a very limited set of situations, including disposal in remote areas. Derogations must be approved by APHA and will be assessed on a case-by-case basis. For further information contact the APHA ABP team at csconehealthabp@apha.gov.uk. Additional authorisations from the EA, NE, NRW and other relevant agencies may also be required dependant on the situation.

- 23.10 To ensure our approach to avian influenza risk mitigation in wild birds and advice on carcase removal reflects any risk these activities pose, on behalf of Defra, Welsh Government and Scottish Government, the Epidemiology, Population health and Infectious disease Control ([EPIC](#)) [Scotland Centre of Expertise on Animal Disease Outbreaks](#) has assessed the likelihood of onward transmission of HPAI H5N1 to other wild birds, other wildlife, and poultry and other captive birds, if carcasses of wild birds believed to be infected with HPAI H5N1 are removed in the event of mass mortality in Great Britain compared to leaving carcasses *in situ*.
- 23.11 The [EPIC assessment](#) (2022) concluded that:
- 23.11.1 In areas of high bird density (for example, seabird nesting sites), carcase removal is likely to be least effective at reducing the overall viral load due to extensive environmental contamination which has already occurred from both live and dead birds. Human access to remove carcasses at high density locations is likely to result in disturbance of live wild birds. Impacts will vary by species and site, but this could result in increased movement of birds, both at the original location and to other sites, with potential for greater spread of infection. Stress due to disturbance from carcase removal also has the potential to increase the birds' susceptibility to infection.
 - 23.11.2 In areas of low bird density (for example, beaches with few live birds present), background levels of environmental contamination are likely to be lower, hence removal of carcasses may have relatively more impact on the local viral load in the environment. In those circumstances, the likelihood of disturbance to birds and other wildlife species is also likely to be low.
 - 23.11.3 Carcase removal is likely to have the greatest impact on reducing the viral load in the environment if carried out as soon as possible after death, when the levels of virus present in carcasses is highest.
 - 23.11.4 Scavenging appears to be the main route where direct transmission from infected carcasses to susceptible birds and carnivorous mammalian wildlife is likely to occur. Carcase removal may therefore help to reduce the likelihood of infection in wild birds and mammals which scavenge on wild bird carcasses. This impact for scavenging animals is greater than the impact for the wild bird population as a whole, where the risk of transmission from live birds or the environment likely outweighs the risk from carcasses.
- 23.12 However, the overall uncertainty in the risk estimates in the EPIC assessment were high for all outcomes due to limited evidence, particularly around the quantification of the relative contribution of carcasses to onward transmission of the virus, and of the completeness of carcase removal.

- 23.13 Since the EPIC assessment was produced, emerging evidence from seabird colonies in continental Europe has indicated that carcase removal may be effective in reducing the incidence of mortality linked to HPAI infection in some species. [Knief and colleagues \(2024\)](#) found that the removal of carcasses was associated with lower levels of mortality in HPAI-affected Sandwich Tern colonies. [Ewing and Bouwhuis \(2025\)](#) concluded that daily carcase removal may have helped to reduce environmental transmission of HPAI at affected Common Tern colonies. A further study by [Liu and colleagues \(2025\)](#) modelled HPAI transmission in wild waterfowl and found that carcase removal reduced disease transmission substantially. An [expert elicitation process](#) ranked carcase removal as the intervention most likely to be effective, but with high uncertainty leading to recommendations of further testing, and there is likely to be substantial variability in effectiveness of carcase removal across species groups which should be taken in to account in decision making regarding its use as a mitigation measure.
- 23.14 The decision on removal of carcasses should be made by land managers on a case-by-case basis, taking into account the considerations outlined in 23.7, and factoring in biosecurity measures to prevent spread of the virus by those undertaking collection, wild bird welfare or disturbance implications of collection activities, site accessibility, ability to dispose of carcasses in line with ABP disposal rules and the health protection of those involved.
- 23.15 If landowners or managers decide to proceed with carcase removal, all necessary requirements for appropriate disposal in line with ABP disposal rules and the requirements of COSHH must be in place prior to commencing removal and disposal activities, including the provision and use of appropriate personal protective equipment (PPE) and respiratory protective equipment (RPE) by individuals involved in the removal.
- 23.16 As further evidence on the effectiveness of carcase removal on reducing incidence of avian influenza in wild birds emerges from sites in the UK or overseas, this guidance will be updated to reflect any relevant evidence and corresponding advice.
- 23.17 Where dead birds are not required for avian influenza surveillance purposes (further information can be found in section 14) and a decision has been taken to remove the carcasses, follow the guidance for the appropriate scenario set out below. This guidance can also be found for England at [Removing and disposing of dead wild birds](#) and for Wales at [Report and dispose of dead birds](#).
- 23.18 The disposal guidance below is applicable to incidents where the risk to public health from the circulating avian influenza virus is determined as either low or very low as assessed by UKHSA and PHW. Further information on risk level of relevant strains can be found in UKHSA's [Avian influenza: guidance, data and analysis](#) collection.

Scenario 1: small numbers of garden birds at domestic premises

- If you find small numbers of dead wild [garden birds](#) (for example songbirds (such as sparrows, tits, blackbirds, finches, starlings and robins), pigeons and doves) at your home (domestic residential properties only) which are not required for avian influenza surveillance purposes or for the other surveillance schemes outlined in 23.3, you can dispose of them in your household or municipal waste bin, or you can bury them.
- There is lower suspicion of avian influenza when birds are species typically found in residential gardens and are found dead in small numbers, which means disposal as a category 1 ABP is not required. However, care must still be taken to minimise health and safety risks as far as possible by following the steps outlined here.
- These disposal methods are not applicable to disposing of larger birds or large numbers of birds. If a bird carcass is too large for effective bagging and disposal in domestic waste, residents should follow the advice in scenario 2.

Disposal of small numbers of garden birds in household or municipal waste refuse

If you dispose of a dead wild bird with your household or municipal waste, you should:

1. Pick it up wearing disposable gloves or a plastic bag over your hand.
2. Put the bird in a plastic bag and tie it. Make sure the bird does not touch the outside of the bag.
3. Put the bird in a second (preferably leak proof) plastic bag, along with the gloves or plastic bag you used to pick it up and tie it. Take care not to touch the outside of the gloves with bare hands.
4. Put it in your outside household or municipal waste bin.
5. Wash your hands thoroughly with soap and water.

Burial of small numbers of garden birds

If you bury a dead wild bird, you should:

1. Not bury it near any watercourses or in a place where it could contaminate local water supplies.
2. Wear gloves or use a plastic bag if you need to pick up the bird.
3. Dig a hole at least 60cm deep to stop animals digging it up.
4. Not bury it in a plastic bag (if you use a plastic bag or gloves to pick the bird up put it in your outside household or municipal waste bin, take care not to touch the outside of the gloves or inside of the bag which has been in contact with the dead bird with bare hands).
5. Wash hands thoroughly with soap and water.

Scenario 2: larger numbers of dead garden wild birds or non-garden wild bird species at domestic premises

There is a higher suspicion of avian influenza when there are deaths of multiple birds in a specified location. There is also greater uncertainty if the found dead wild birds are not bird species typically found in residential gardens (including songbirds (such as sparrows, tits, blackbirds, finches, starlings, and robins), pigeons and doves). Therefore, additional precautions for the collection and disposal of birds in these scenarios is advised.

If the dead wild birds are not required for surveillance purposes, residents should dispose of the carcasses by:

- enlisting the services of an ABP waste disposal service at their own expense; or
- contacting the environmental health service of their local authority who may be able to provide further advice on ABP waste disposal service or assist with disposal

Individuals involved with collection and disposal of ABP should follow the PPE guidance as outlined in Scenario 3 below. Exceptions include when avian influenza is not suspected (consult the guidance regarding Scenario 4 for further information).

Scenario 3: public, managed estates, or other private land where avian influenza has been confirmed or avian influenza is suspected but without testing or prior to test results

This scenario includes, but is not limited to, the following:

- wild bird deaths relating to confirmed avian influenza incidents (such as birds which are part of a mass die-off in which avian influenza has been confirmed)
- bird deaths during periods, and in geographical areas, where avian influenza is known to be circulating in wild bird populations as reported on gov.uk/bird-flu
- larger numbers of dead wild birds (or 'die-offs') of unknown cause, for example five or more in the same location.

Where dead birds are on public land, and where a decision has been made to remove and dispose the carcasses, it is the local authority's responsibility to safely dispose of the carcasses as ABP Category 1 material. Local authorities may themselves have a contract with specialist providers to ensure that the dead birds are collected and disposed of biosecurely in line with ABP guidance.

Where the land is privately owned, and where a decision has been made to remove and dispose of the carcasses, it is the landowner's responsibility to safely dispose of the carcasses at their own expense, as ABP Category 1 material, by:

- enlisting the services of a commercial ABP waste disposal service; or
- contacting the environmental health service of their local authority who may be able to provide further advice on ABP waste disposal service or assist with disposal.

Personal protective equipment

Individuals involved in collection and disposal under Scenarios 2 and 3 will, subject to risk assessment and the other requirements of COSHH, need the appropriate PPE including:

- disposable or polycotton coverall with head coverage of [CE](#) type 5 & 6
- Filtering Face Piece (FFP) 3 respirator, following a fit test. Further guidance is available in the [Fit testing basics - Respiratory protective equipment \(RPE\) \(hse.gov.uk\)](#) guidance from HSE
- goggles
- rubber or polyurethane boots
- disposable gloves

Footwear should be cleansed and disinfected using a Defra approved disinfectant at the correct dilution rate and coveralls either disposed of or washed. Staff should receive training to cover the safe methods required including getting PPE on and off without contamination (further information can be found in [HSE - Skin at work: Removing gloves without contaminating your hands](#) guidance).

The HSE provide further advice on PPE and RPE in relation to avian influenza risks in their [Avoiding the risk of infection when working with poultry that is suspected of having H5 or H7 notifiable avian influenza \(hse.gov.uk\)](#) guidance document.

Additional public health actions where avian influenza is confirmed

The activities outlined in Scenario 3 may also require consideration of antiviral prophylaxis and human health surveillance, where avian influenza is confirmed or in specific circumstances (consult the [national guidance for managing the human health risk of avian influenza in poultry and wild birds for further details](#) for further information). UKHSA in England and PHW in Wales will provide advice on this when notified of such incidents.

Scenario 4: larger numbers of dead garden wild birds or non-garden wild bird species at domestic premises, or public, managed estates or other private land where avian influenza is not suspected

Where there is no suspicion of a disease communicable to humans or animals, and a decision has been taken by the landowner to remove the carcasses, the carcasses of wild animals, other than wild game (including game birds), are exempt from the ABP rules in the UK.

The determination of whether avian influenza is suspected in any given scenario should be informed by the individual circumstances of the situation and the national picture with regard to avian influenza outbreaks in poultry and other captive birds or findings in wild birds.

Larger numbers of dead garden wild birds or non-garden wild bird species at domestic premises, dead wild birds on public, managed estates or other private land must not be disposed of by burial or household or municipal waste refuse (as set out in Scenario 1) and a specialist waste contractor may need to be utilised to facilitate removal.

Individuals involved in collection and disposal are advised where applicable to follow their employer's relevant health and safety policies and procedures for the disposal of carcasses and, as a minimum:

- wear disposable protective gloves when picking up and handling dead wild birds and placing the dead bird in a plastic bag
- wear coveralls and disinfectable footwear
- cleanse and disinfect footwear and dispose of or wash coveralls
- wash hands thoroughly with soap and water when finished

Further information on the use of disinfectants can be found on gov.uk in the [Defra-approved disinfectants guidance](#).

23.19 Reporting ringed birds

Any birds found wearing a metal ring with a museum or institute address, where the details on the ring can safely be viewed or photographed, please make a note of the full ring number and address and report the details via [Euring Web Recoveries \(bto.org\)](#)

Birds may also be wearing plain or inscribed colour rings and where the metal ring is not present or detectable these colour marks can also be reported via the appropriate page at [Euring Web Recoveries \(bto.org\)](#)

Please make a note of both the colour of the ring(s) and the colour and details of any inscription as well as the position of the rings and on which leg where possible.

24 Vaccination

- 24.1 The cross government and industry [avian influenza vaccination task force](#), established in February 2023 explores options and develops recommendations for the use of vaccination to prevent the spread of avian influenza in the UK. Focus of the task force is on the potential for use of avian influenza vaccination as a preventive measure in poultry and other captive birds. Defra and Welsh Government have no plans to vaccinate the wild bird population against avian influenza.
- 24.2 The use of avian influenza vaccination in kept and wild birds is controlled by legislation. Defra's and Welsh Government's policy on vaccination is set out in the [Notifiable Avian Disease Control Strategy for Great Britain](#) and Defra's [Avian influenza \(bird flu\) vaccination](#) guidance.
- 24.3 In England, the vaccination of birds against avian influenza, except those kept in [licensed zoos](#) in England subject to authorisation by APHA, is not currently permitted.
- 24.4 Wales has a no-vaccination policy in all birds.
- 24.5 Swift and humane culling of poultry and other captive birds on infected premises coupled with good biosecurity, including the separation of poultry and other captive birds from wild birds and disease surveillance, remains the most effective means of controlling avian influenza in kept birds and protecting other animals, including preventing spill back of infection in poultry and other captive birds to wild birds. This policy is in line with international standards of best practice for disease control.

- 24.6 While authorised avian influenza vaccines are available in the UK, these vaccines are unlikely to provide full protection for the current strains of HPAI circulating in the UK and continental Europe, or cross-protection for other strains which may circulate in the future. At present, vaccination can help to reduce mortality, but it is likely that some vaccinated birds would still be capable of transmitting avian influenza if they became infected. This would increase the time taken to detect and eradicate the virus, and since it is difficult to differentiate infected from vaccinated birds, this leads to issues relating to exporting poultry and their products to other countries.
- 24.7 Defra and Welsh Government, in conjunction with the Veterinary Medicines Directorate (VMD), will continue to monitor the development and availability of vaccines for their utility in preventing and responding to avian influenza outbreaks as they are put forward for market authorisation by vaccine manufacturers.
- 24.8 Avian influenza vaccination policy is kept under regular review in light of any scientific developments in the availability of effective vaccines. In practice, existing vaccines, and those currently under development, can only be administered via injection. This precludes any widespread use in wild birds.
- 24.9 The avian influenza vaccination taskforce published an [interim statement](#) on 7 March 2025, and published their [initial report](#) on the 24 July 2025. The taskforce considered that sector-specific vaccination in poultry is likely to be the most effective approach but did not make a final recommendation in the report. Instead, the taskforce set out a series of next steps to gather more information, including: a targeted on-farm vaccination trial in turkeys; further investigation into laboratory and veterinary capacity; research to better understand likely uptake among poultry keepers; further engagement with trading partners; and exploration of the potential for vaccination in the game bird sector.
- 24.10 The avian influenza vaccination taskforce continues to review the reliability and validity of new vaccination data. This includes the definition of the epidemiological unit and how it affects the surveillance sampling and testing regime for vaccinated flocks. It also includes the costs, benefits, trade impacts and practicalities of different surveillance options.
- 24.11 The taskforce recognises these issues and supports the principles of vaccination to help mitigate the animal and public health impacts of HPAI. However, its advice will need to adapt to the dynamic nature of infectious diseases. This includes where the UK continue to see significant spread of avian influenza in kept birds, despite control measures, such as culling of poultry and other captive birds on infected premises, biosecurity and housing measures.
- 24.12 Species of wild birds of conservation concern and specifically those which have a significant degree of human intervention, for example wild birds which form part of translocation and head starter programmes, have been identified as key areas for future consideration regarding the potential benefits of avian influenza vaccination. However, significant challenges remain regarding how wild birds (including kept birds destined for release into the wild) might be included in vaccination and associated surveillance programmes.

- 24.13 Further information on Defra's approach to [avian Influenza \(bird flu\) vaccination](#) is available GOV.UK.

25 Compensation

- 25.1 Compensation, as set out in the [Animal Health Act 1981](#), is not payable for wild birds or for consequential losses, including business interruption caused by control measures and other costs associated with avian influenza in wild birds, for example disposal costs.
- 25.2 Compensation paid for birds culled by HM Government for disease control purposes is designed to promote prompt reporting of suspicion of disease and is only payable for healthy kept birds.
- 25.3 The amount of compensation paid for poultry or other captive birds is established by APHA using the relevant valuation rate card or for specialist stock following assessment by a specialist valuer. Further information can be found in the Defra and APHA [Compensation for animals culled to control animal diseases](#) guidance.

26 Enforcement

- 26.1 Avian influenza controls are enforced by Local Authorities Animal Health Function (LAAHF), which is normally situated with the Trading Standards or Environmental Health Service of a local authority. Find details of your Local Authority using the [postcode tool](#). The [Chartered Institute of Trading Standards postcode tool](#) can also be used to find details of how to contact the relevant LAAHF with any reports of non-compliance.
- 26.2 HSE are responsible for licensing and enforcement of laboratory activities involving biological agents, including avian influenza, in relation to [The Specified Animal Pathogens Order 2008 \(as amended\)](#) and [The Specified Animal Pathogens \(Wales\) Order 2008 \(as amended\)](#) (in addition to the [The Specified Animal Pathogens \(Scotland\) Order 2009 \(as amended\)](#)) and [COSHH](#). Uncontrolled releases, injuries or dangerous occurrences resulting from deliberate work with hazardous biological agents covered under the requirements of SAPO and COSHH should be reported to HSE's Microbiological and Biotechnology Unit at bioagents@hse.gov.uk (or if you cannot report online contact HSE on 0300 003 1647). Further information on SAPO and its enforcement, including what is in scope of SAPO with regard to avian influenza, can be found in the avian influenza and influenza of [avian origin: diagnostic testing, controls and reporting obligations](#) guidance available on gov.uk.
- 26.3 In addition, certain specified animal pathogens also fall under the [Anti-Terrorism, Crime and Security Act 20019 \(ATCSA\)](#) which is the responsibility of the Home Office. Any incident resulting from a breach of security, act of terrorism or deliberate vandalism involving specified animal pathogens is a matter for the police.

- 26.4 Failure to report suspicion or detection of avian influenza should be reported to the APHA Intelligence Unit by using the [APHA Intelligence Online Report Form](#) or contacting intelunit@apha.gov.uk. This includes a failure to report:
- suspicion of avian influenza in poultry or other captive birds anywhere in Great Britain.
 - suspicion of influenza of avian origin in kept or wild mammals anywhere in Great Britain
 - detection of avian influenza virus or antibodies to avian influenza virus in poultry other captive birds, kept mammals or in wild mammals anywhere in Great Britain
 - detection of avian influenza virus or antibodies to avian influenza virus in wild birds from England.
- Further information on reporting requirements can be found in the [Avian influenza and influenza of avian origin: diagnostic testing, controls and reporting obligations](#) guidance available on gov.uk.
- 26.5 APHA may refer reports of non-compliance or other breaches of requirements to the Defra Investigation Service for further investigation, or to the Royal College of Veterinary Surgeons if they are relevant to professional standards of veterinary professionals. Read more information in [Defra's enforcement policy statement](#).
- 26.6 With regards to wildlife crime, all wild birds are protected by law in England and Wales under the [Wildlife and Countryside Act 1981](#) (as amended). Wildlife crime is unacceptable and there are strong penalties in place for offences committed against wild birds. Defra is a principal funder of the National Wildlife Crime Unit (NWCU), which helps prevent and detect wildlife crime (including crimes against wild birds) by obtaining and disseminating intelligence, undertaking analysis which highlights local or national threats and directly assisting law enforcers in their investigations.
- 26.7 Any found dead wild birds reported to Defra and that are able to be collected and investigated by APHA where wildlife crime is suspected will be investigated appropriately where this can be undertaken whilst mitigating the impact to public health from birds infected with HPAI.

Annex A – Abbreviations

ABP – Animal by Products
ACAP - Agreement on the Conservation of Albatrosses and Petrels
ACDP – Advisory Committee on Dangerous Pathogens
ADPG – Animal Disease Policy Group
AEWA – Agreement of the Conservation of African-Eurasian Migratory Waterbirds
AIPZ – Avian Influenza Prevention Zone
APHA – Animal and Plant Health Agency
APHW – Animal and Plant Health and Welfare
BASC – British Association for Shooting and Conservation
BBS – Breeding Bird Survey
BBSRC – Biotechnology and Biological Sciences Research Council
BoCC5 – Birds of Conservation Concern 5
BTO – British Trust for Ornithology
BVA – British Veterinary Association
Cefas – Centre for Environment, Fisheries and Aquaculture Science
CMO – Chief Medical Officer
CMS – Convention on the Conservation of Migratory Species of Wild Animals
COBR – Cabinet Office Briefing Rooms
COSHH – Control of Substances Hazardous to Health
CRoW – Countryside and Rights of Way
CSA – Chief Scientific Advisor
CSIP – Cetacean Stranding Investigation Programme
CVO – Chief Veterinary Officer
DAERA – Department of Agriculture, Environment and Rural Affairs
Defra – Department for Environment, Food and Rural Affairs
DIST – Department for Science, Innovation and Technology
DoWS – Diseases of Wildlife Scheme
DRAHS - Disease Risk Analysis and Health Surveillance
EA – Environment Agency
EDPRT – Exotic Disease Policy Response Team
EIP – Environmental Improvement Plan
EPIC - Epidemiology, Population health and Infectious disease Control
ESCaRP – English Seabird Conservation and Recovery Pathway
EU – European Union
FAO – Food and Agriculture Organisation
FeAST – Feature Activity Sensitivity Tool
FFP – Filtering Face Piece
GBWHP – Great Britain Wildlife Health Partnership
GFA - Game Farmers Association
GSMP – Goose and Swan Monitoring Programme
GWCT – Game & Wildlife Conservation Trust
GWH – Garden Wildlife Health
HA (or H in subtyping nomenclature) – Haemagglutinin
HPAI – High Pathogenicity Avian Influenza
HPAIV – High Pathogenicity Avian Influenza Virus
HSE – Health and Safety Executive
INSS –Invasive Non-Native Species Secretariat
IoZ – Institute of Zoology
IRL – International Reference Laboratory
ISO – International Organization for Standardization

JNCC – Joint Nature Conservation Committee
 LAAHF – Local Authorities Animal Health Function
 LPAI – Low Pathogenicity Avian Influenza
 LPAIV – Low Pathogenicity Avian Influenza Virus
 MANCP – Multi-Annual National Control Plan
 MOP – Meeting of Parties
 MPA – Marine Protected Area
 NA (or N in subtyping nomenclature) – Neuraminidase
 NE – Natural England
 NEG – National Experts Group
 NGO – Non Governmental Organisation
 NHS – National Health Service
 NIEA – Northern Ireland Environment Agency
 NRL – National Reference Laboratory
 NRW – Natural Resources Wales
 OEP – Ornithological Expert Panel
 OSPAR - Convention for the Protection of the Marine Environment of the North-East Atlantic
 PHW – Public Health Wales
 PPE – Personal Protective Equipment
 RNA - Ribonucleic acid
 RPE – Respiratory Protective Equipment
 RSPB – Royal Society for the Protection of Birds
 RSPCA – Royal Society for the Prevention of Cruelty to Animals
 SAC – Science Advisory Committee
 SAC-ED – Science Advisory Council Exotic and Emerging Animal Disease Sub Group
 SAPO – Specified Animal Pathogens Order
 SMP – Seabird Monitoring Programme
 SNCB – Statutory Nature Conservation Bodies
 SoS – Secretary of State
 SPA – Special Protected Areas
 SRUC – Scotland's Rural College
 UNEP – UN Environment Programme
 UK – United Kingdom
 UKAS – United Kingdom Accreditation Service
 UKHSA – United Kingdom Health Security Agency
 UKRI – United Kingdom Research and Innovation
 WAHIS – World Animal Health Information System
 WBCA – Wild Bird Control Area
 WBMA – Wild Bird Monitoring Area
 WeBS – Wetland Bird Survey
 WIIS – Wildlife Incident Investigation Scheme
 WinGS – Winter Gull Roost Survey
 WOA – World Organisation for Animal Health
 WWT – Wildfowl & Wetlands Trust
 ZSL – Zoological Society of London

Annex B - Definitions

As defined with [The Avian Influenza and Influenza of Avian Origin in Mammals \(England\) \(No.2\) Order 2006](#) (as amended), [The Avian Influenza and Influenza of Avian Origin in Mammals \(Wales\) \(No 2\) Order 2006](#) (as amended) and Council Directive 2005/94/EC within this strategy, unless otherwise stipulated:

- “avian influenza virus” means any highly pathogenic avian influenza virus or low pathogenic avian influenza virus.
- “bird carcase” means the carcase of any bird and includes any part of a bird carcase
- “carcase” means any bird carcase or mammal carcase;
- “highly pathogenic avian influenza virus” means—
 - (a) influenza A virus of the subtype H5 or H7 with genome sequences containing multiple basic amino acids at the cleavage site of the haemagglutinin gene similar to that observed for other highly pathogenic avian influenza viruses, indicating that the haemagglutinin protein can be cleaved by a host ubiquitous protease; or
 - (b) influenza A virus with an intravenous pathogenicity index in six-week-old chickens greater than 1.2;
- “influenza of avian origin” means an infection of a mammal with avian influenza virus
- “keeper” means any person responsible for birds or animals, whether on a permanent or temporary basis, but does not include a person responsible for them solely because he is transporting them.
- “kept mammal” means a mammal kept in captivity, in the possession of or under the charge of a person;
- “low pathogenic avian influenza virus” means an avian influenza virus of subtype H5 or H7 other than an avian influenza virus of subtype H5 or H7 which causes highly pathogenic avian influenza.
- “mammal” means any mammal, except man
- “mammal carcase” means the carcase of any mammal and includes any part of a mammal carcase
- “occupier” means the person in charge of premises
- “other captive bird” means a bird kept in captivity which is not poultry and includes a pet bird and a bird kept for shows, races, exhibitions, competitions, breeding or for sale
- “poultry” means a bird reared or kept in captivity for the purposes of –

- (i) the production of meat or eggs for consumption or other poultry products;
- (ii) restocking supplies of games; or
- (iii) any breeding programme for the production of such categories of birds or products specified in sub-paragraphs (i) and (ii);

but does not include any bird that is kept for the purposes of a single household, where the bird and its keeper have no direct or indirect contact with other poultry or poultry facilities, and the bird and products of the bird are used exclusively within, or for the purposes of the same household

- “premises” includes any land, building or other place
- “surveillance zone” means a surveillance zone declared under article 28 (1) to (4);
- “temporary control zone” means a temporary control zone declared under article 13(c);
- “surveillance” for the purposes of this document is defined as the systematic, continuous or repeated, measurement, collection, collation, analysis, interpretation and timely dissemination of animal health and welfare related data from defined populations.
- “temporary movement restriction zone” means a temporary movement restriction zone declared under article 13(a);
- “veterinary surgeon” means a person who is registered in the register of veterinary surgeons maintained by the Royal College of Veterinary Surgeons or in the supplementary register maintained by the College;
- “wild birds” means birds which are not poultry or other captive birds.
- “wild game bird” means a wild bird which lives freely in the wild and is hunted for human consumption;
- “wild game bird product” means any carcass, egg or any other thing originating or made (whether in whole or in part) from a wild game bird or from the carcass of a wild game bird and includes any by products of a wild bird game bird;
- “wild mammal” means a mammal which lives freely in the wild and is not in the possession or under the charge of any person;
- “wildlife rescue and rehabilitation centre” means any facility dedicated to the sole purpose of providing treatment and temporary care of injured, orphaned or sick wild animals, including any facility for their housing, feeding and treatment under the supervision of a veterinary surgeon for the primary purpose of their release back into the wild.