



# Lessons identified from the UK highly pathogenic avian influenza outbreaks for emergency management

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**3-5 April 2023**

Maison de la Chimie, Paris, France



# Overview of the Outbreak



Department  
for Environment  
Food & Rural Affairs

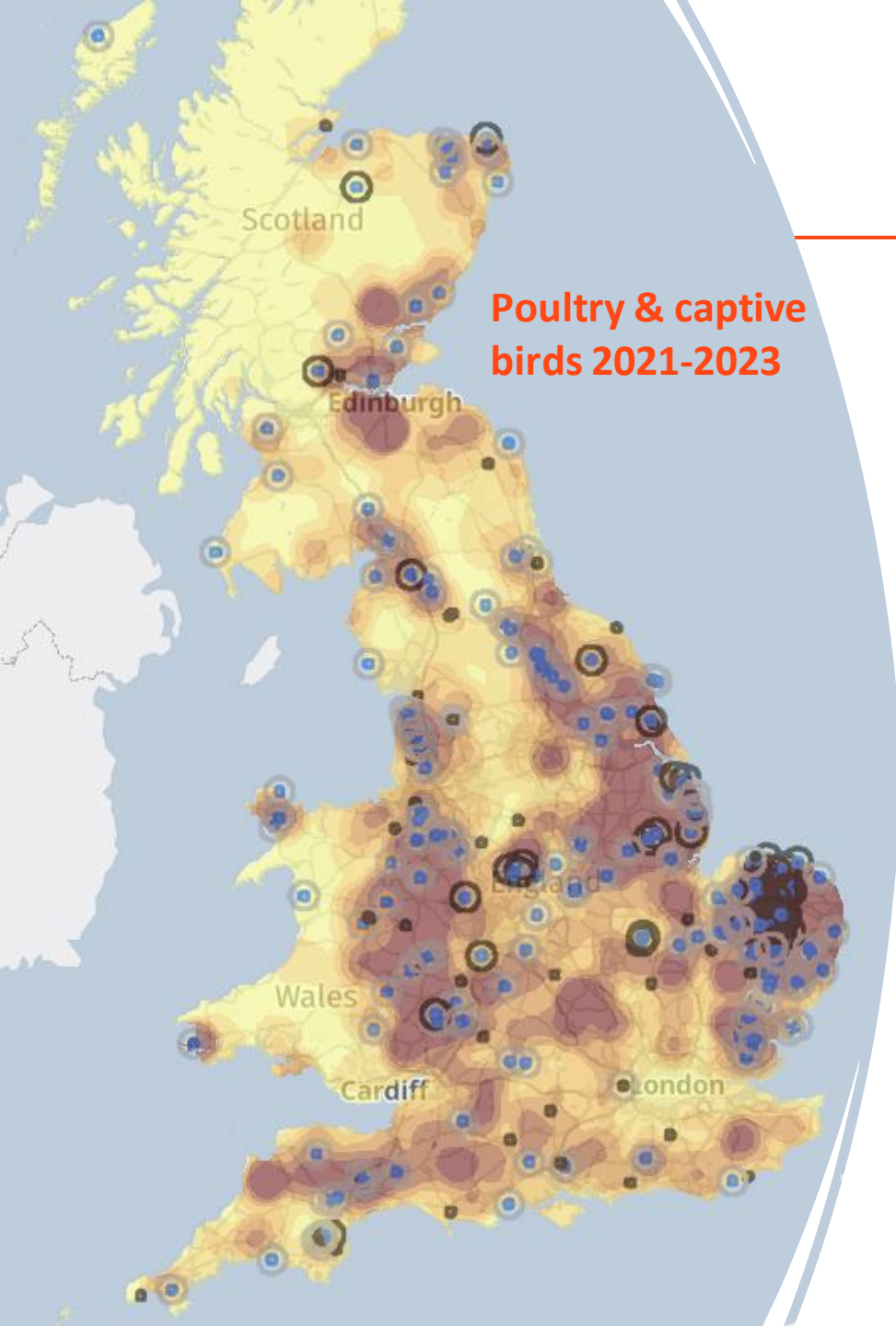
- Avian influenza outbreaks have occurred at an unprecedented scale globally with over 9,300 detections in wild and kept birds in 37 countries in Europe since October 2021. Cases reported in Asia, North and South America.
- Since October 2021, 334 cases have been confirmed in the UK – of these 176 have been since 1 October 2022. Of these 149 are in England.
- 8.0 million birds died or been culled in the last two seasons;
- Although very significant impact, represent <0.6% of our poultry sector
- Minimal impact on food supplies although seasonal turkey and geese producers more badly affected. This compares to 20 million birds slaughtered every week for human consumption
- Major impact on state veterinary resources and industry



# UK Outbreak



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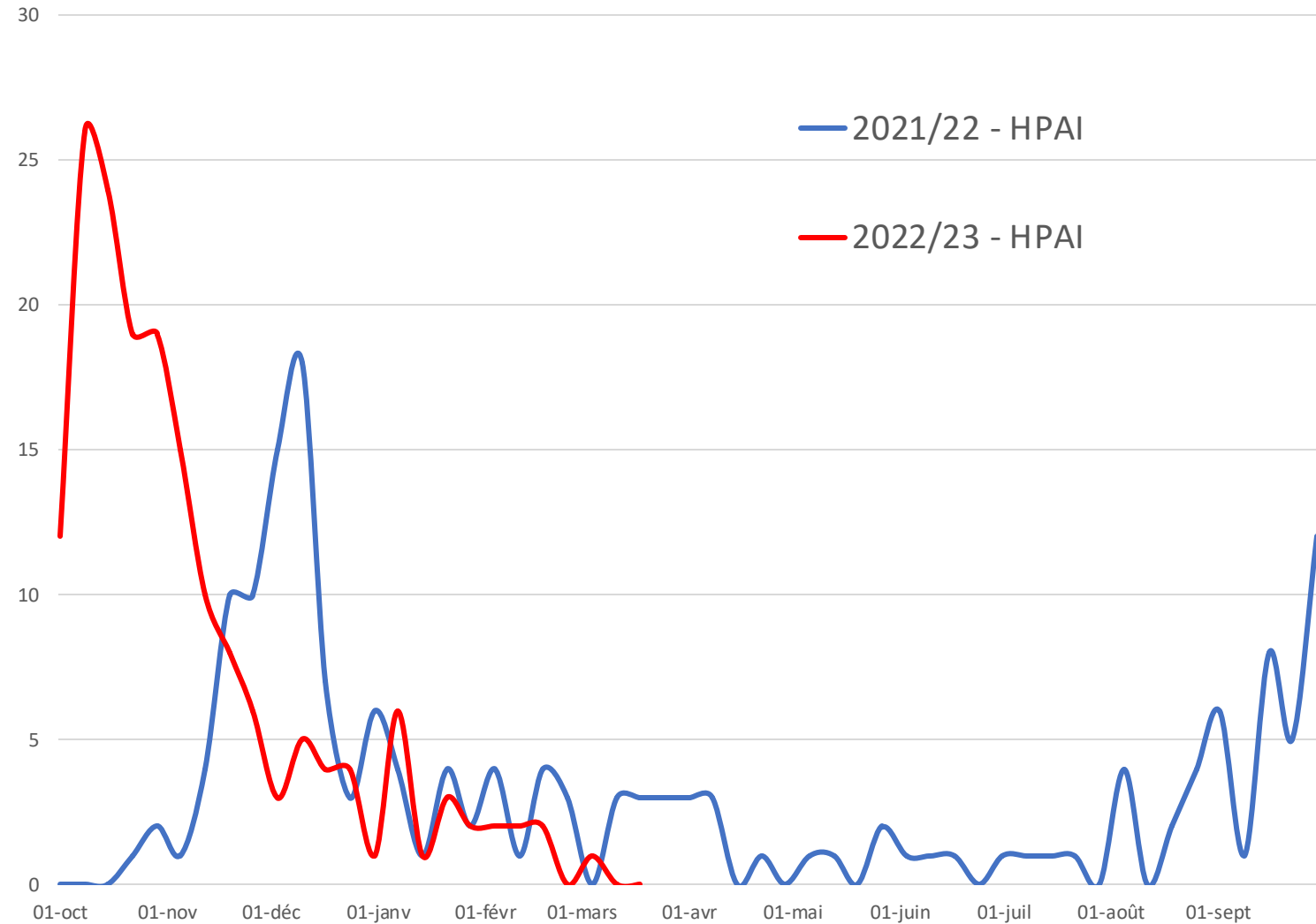
- Like many countries 2021/22 outbreak season did not really end and infection over-summered in colony nesting seabirds
- Outbreaks started much earlier and not associated with usual inward migration of migratory waterfowl
- Almost all outbreaks assessed to be the result of direct or indirect contact with wild birds. Very little evidence of lateral spread
- Evidence of poor biosecurity or lapses in protocols identified in most cases
- Most poultry cases in poultry dense areas



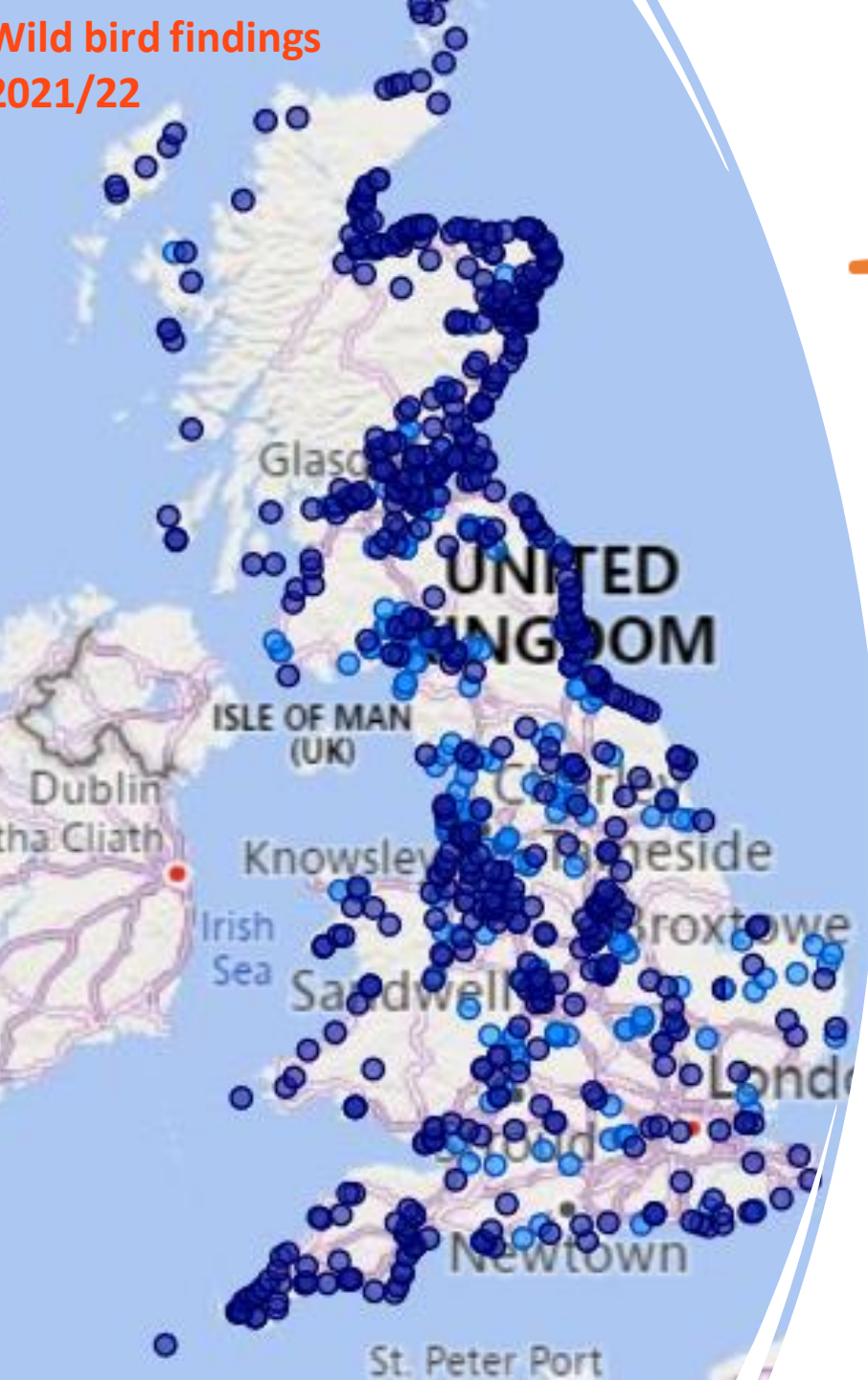
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# Overview of the Outbreak

Highly pathogenic avian influenza H5N1– New cases per week







## Cases in wild birds and mammals

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- 1637 findings in 73 species in 2021/22
- 827 findings in 47 species to date in 2022/23
- 23 findings in wild mammals since October 2021, all but were retrospective findings in stored samples
- Defra works closely with public health agencies to monitor to risk to public health

# Integrated emergency management approach

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# Integrated emergency management approach

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# Understand



Understand - the biological risks that we face today and could face in the future.

- All policies and mitigations are evidence based therefore need access to:
  - Scientists
  - Vets
  - Epidemiologists
  - Ornithologists
  - Economists and analysts
  - National Reference Lab plays key role
- Research programme and international collaboration
- Agile research capability to respond to latest situation – environmental persistence, virus characteristics incl wet science and access to genomics etc.
- Risk assessments quantitative and qualitative



## Prevent - biological risks from emerging (where possible) or from threatening the UK and UK interests.

- Horizon scanning and outbreak assessments
- Communication of changed risk levels and risk mitigation
- Consistent use of risk terminology helps communication
- Biosecurity
  - at border
  - at national level
  - at premises level



### [15 March 2023: Highly pathogenic avian influenza \(HPAI\) in the UK and Europe](#)

PDF, 1.96 MB, 20 pages

This file may not be suitable for users of assistive technology.

▶ [Request an accessible format.](#)



### [6 February 2023: Highly pathogenic avian influenza \(HPAI\) in the UK and Europe](#)

PDF, 2.12 MB, 19 pages

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### [31 January 2023: Scientific opinion on the incursion of High Pathogenicity Avian Influenza \(HPAI\) H5N1 into housed or not housed poultry flocks and captive birds](#)

PDF, 1.36 MB, 22 pages

This file may not be suitable for users of assistive technology.

<https://www.gov.uk/government/collections/animal-diseases-international-monitoring>

# Prevent



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## Prevent - biological risks from emerging (where possible) or from threatening the UK and UK interests.

- Horizon scanning and outbreak assessments
- Communication of changed risk levels and risk mitigation
- Consistent use of risk terminology helps communication
- Biosecurity
  - at border
  - at national level
  - at premises level
- Bird keepers have a key role in preventing the introduction and spread of avian influenza
- Close working with industry and proactive comms

Press release

### Avian influenza: Housing order to be introduced across England

A national housing order will be introduced across England on Monday 7 November making it a legal requirement to house flocks

From: [Department for Environment, Food & Rural Affairs](#) and [Animal and Plant Health Agency](#)

Published 31 October 2022



Mandatory housing measures for all poultry and captive birds are to be introduced to all areas of England from 00:01 on Monday 7 November, following a decision by the United Kingdom's Chief Veterinary Officer.



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**Detect - characterise and report biological risks when they do emerge as early and reliably as possible.**

- Early detection is key to effective control
- Passive and active surveillance. Both HPAI and LPAI are notifiable on suspicion or detection in lab samples
- Availability of official vets 24/7 and 365 days a year
- Availability of swabs, blood tubes etc
- Access to suitably qualified and accredited couriers
- National Reference Laboratory capacity & capability and accredited test protocols
- Process for confirming disease – amber teleconference

# Respond (*Prepare, Respond & Recover*)



Respond to biological risks that have reached the UK or UK interests, to lessen their impact and allow the rapid return to business as usual.

- Planning
  - Identify/model the realistic worst case scenario and most likely scale
  - Legislation and control plans
  - Infrastructure, people, equipment and consumables
  - Capability and capacity – *core, vs contracted vs surge plans*
- Exercising – local, regional, national or international
- Detect early & respond quickly – precautionary but proportionate. Go hard and ease back when have facts
- Rapid and transparent decision making structures and processes
  - involve the right people incl. public health
  - rapid information flows up and down and externally
  - Animal Disease Policy Group

## Contingency Plan for Exotic Notifiable Diseases of Animals in England

Including Foot and Mouth Disease,  
Avian Influenza, Newcastle Disease  
and all other exotic notifiable diseases  
of animals

Updated on 18 July 2022

Presented to Parliament pursuant to Section 14A  
of the Animal Health Act 1961 (as amended by  
Section 18 of the Animal Health Act 2002)



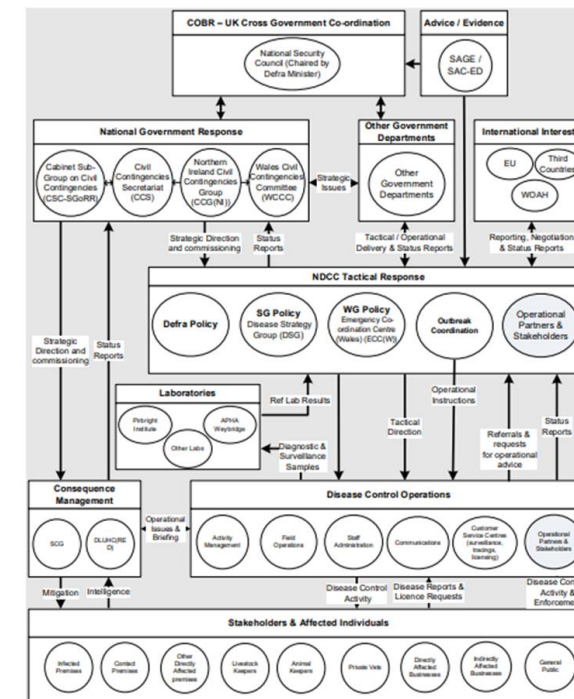
# Respond (*Prepare, Respond & Recover*)

- Battle rhythm agreed adjusted as required
- Command, Control & Communication (C3) structures
- Empowered decision making at the right level – many decisions do not need to be escalated to CVO or Policy
- Record decisions and the reasons
- Resilience – wary of burn out, rotas and deputies
- Management Information is key
- Don't underestimate the recovery activities – zone lifting and secondary C&D
- Communication can always be improved

STRATEGIC

TACTICAL

OPERATIONAL



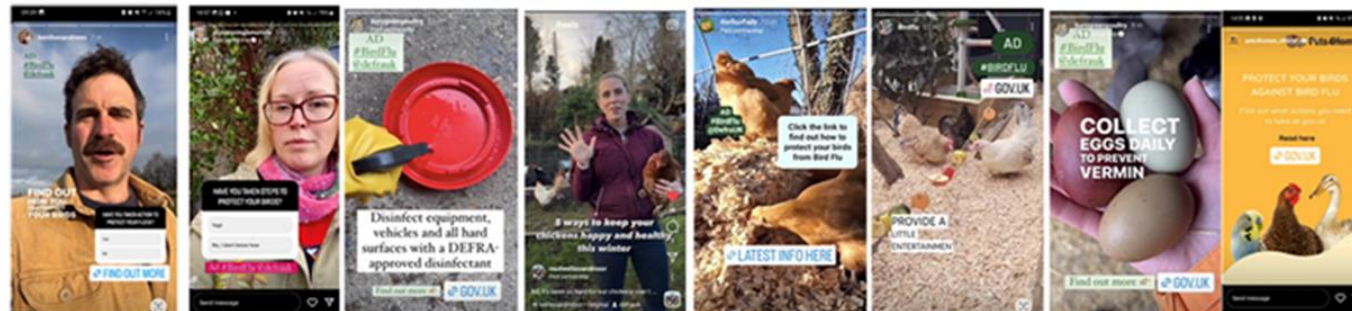
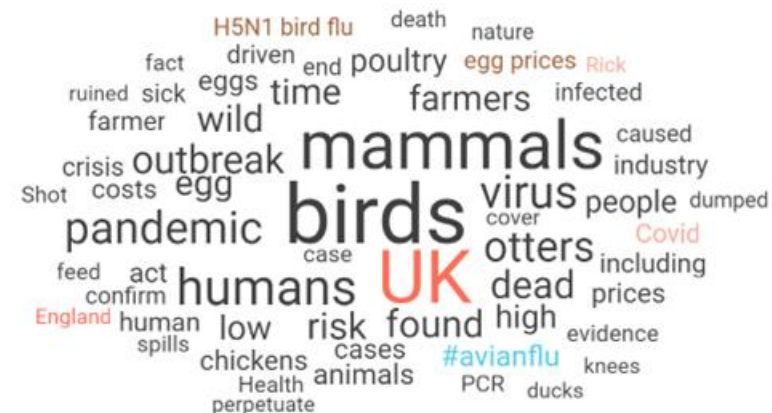
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1095427/Contingency\\_Plan\\_for\\_Exotic\\_Notifiable\\_Diseases\\_of\\_Animals\\_in\\_England.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1095427/Contingency_Plan_for_Exotic_Notifiable_Diseases_of_Animals_in_England.pdf)





# Proactive social media and other comms

- CVO Interviews and media
- GOV.UK
- Webinars for industry and individual companies
- Text alerts
- Videos
- Paid for advertising on social media
- Use of social media influencers
- Close working with industry



**PROTECT YOUR BIRDS FROM AVIAN INFLUENZA**

✓ Think about how you could house your birds and start preparing a suitable shelter for the winter

#BIRDFLU

Animal & Plant Health Agency

SEARCH 'AVIAN INFLUENZA' AT GOV.UK

**LATEST UPDATE**

Poultry and captive bird housing measures to be introduced across the United Kingdom

BIRD FLU ALERT

Animal & Plant Health Agency

SEARCH 'AVIAN INFLUENZA' AT GOV.UK

# Some of the lessons identified and next steps



Some of the areas where we are working with industry to be better prepared:

- Develop proposals for vaccination
- Review of policies & legislation – engagement & consultation e.g. mandatory registration for all birds
- Work with NGOs on threats to and from wild birds
- Close working with public health colleagues to monitor public health risk
- Work with industry on contingency and business continuity plans
- Actively engage with harder to reach groups – backyard, rescue centres, captive bird keepers etc.
- Highlight and communicate areas where biosecurity can be improved
- Review contracts for culling & disposal and vet resources
- Engage with insurers to explain risks and processes
- Review effectiveness of communications campaigns
- Increased surveillance in wild birds and wild mammals
- Learn from others and share best practices



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# Thank you

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**This event is supported by funding from:**



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Co-funded by  
the European Union