Biosecurity Spotlight:

Stopping the Spread of Al

February 2022

LIVELE

Livetec

Building the **future** of **livestock** protection

Contents

Avian Influenza Outbreak 2021 - 2022	3
What is Avian Influenza?	4
Our extensive range of solutions	5
Industry responsibility	6
What happens	7
How to detect AI	9
How has AI spread?	10
Protecting your flock	11
Livetec can help	12
The implications	13
Bespoke Biosecurity Services	14



Avian Influenza Outbreak 2021 - 2022

Cases of highly pathogenic avian influenza (HPAI) cases across the UK and Ireland hit a new high between November 2020 and March 2021, with a record 26 cases being reported.

Fast forward to the 15th October, the UK saw its first case of AI on a swan sanctuary in Worcester, affecting an estimated 49 mixed captive, non-poultry birds. This first case occurred a little bit earlier than the start of a normal outbreak season, which typically starts in November.

By December, the UK and Ireland were plunged into the largest outbreak of bird flu on record, more than doubling the number of cases that had occurred in the year before.

This avian influenza (AI) season, expected to last until at least March 2022, has quickly become an unprecedented and hard to control situation. As of 19th January 2022, there has been 81 reported cases of H5N1 across England, Scotland, Wales and Northern Ireland. The tragic outbreak has so far resulted in a loss of animal life entering the millions, from captive poultry to wild birds.



What is Avian Influenza?

Also known as bird influenza or bird flu, AI is a highly contagious, viral type of influenza spread amongst birds affecting their respiratory, digestive and/or nervous system. Whilst AI can occur naturally amongst wild aquatic birds, it can have a catastrophic impact on domestic poultry such as chickens, turkeys and ducks, causing severe disease and high mortality rates.

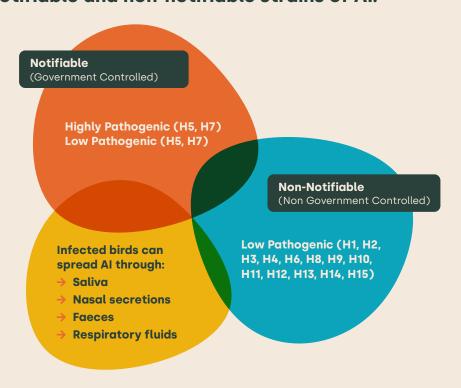
Whilst we know that outbreaks can occur at any time, there are times throughout the year that AI is a more common occurrence. Due to the winter migration patterns of wild birds, this is usually between November and March, which is where Livetec's biosecurity services can help.

AI falls into two categories: low pathogenic avian influenza (LPAI) and highly pathogenic avian influenza (HPAI). Whilst LPAI is typically less serious and a more mild disease, if left untreated it can mutate into HPAI, which can completely depopulate a premise within a matter of days, as there is no cure.

Most strains of AI fall under the notifiable disease category, which means legally should you suspect AI in poultry, captive or wild birds, you must immediately report it to the Department for Environment, Food and Rural Affairs (Defra).

In any scenario, Livetec is equipped to prevent and deal with both notifiable and non-notifiable diseases.

Notifiable and non-notifiable strains of Al.



Our extensive range of solutions can help prevent the introduction of AI.

Ultimately, Livetec wants to stop the introduction of any disease to farms, but in the worst case scenario, as partners to APHA and Defra we quickly mobilise our team to support affected premises across the UK and Ireland.

Utilising our years of experience and scientifically-backed on-farm operations, our team organises, mobilises and mitigates disease spread discreetly, leaving farms cleaner and more biosecure.

We help by:



Depopulating infected poultry, using our bespoke on-farm solutions taking into consideration the welfare of animals and staff on-site.

Completing a biosecure disposal of the affected animals in the safest and most efficient way possible.

Cleansing and disinfecting the affected and surrounding areas to ensure the premise is clear of disease and the further spread can be avoided.

Ensuring that all procedures are compliant with all regulations and legislation pertaining to the circumstances using our deep understanding and experience.

Industry responsibility

In an effort to stop the spread, both APHA and Defra have been implementing reactive measures. Utilising our partnership with both organisations, we have been supporting their protocols with a range of on-farm operations and biosecurity advice.

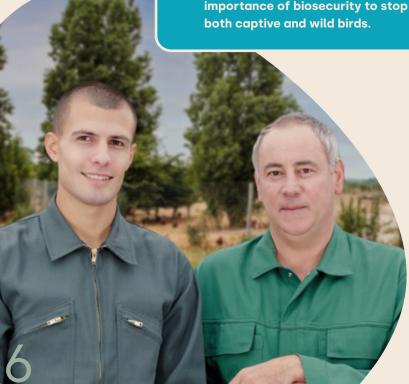
Industry Response

Animal and Plant Health Agency (APHA)

- → Taking control of any farms affected by AI, limiting movement.
- → Deploying staff across the UK and Ireland to carry out industry standard protocols to halt further infections.
- → Updating their interactive disease outbreak map, showing the exact locations of the disease control zones in force, with declarations and requirements for those zones.

Department for Environment, Food & Rural Affairs (Defra)

- → Introduced heightened biosecurity measures, requiring flock owners to keep captive birds indoors and to follow strict biosecurity measures.
- → Hosting a string of stop the spread webinars, outlining the importance of biosecurity to stop the introduction and spread of AI both captive and wild birds



Whilst we know that outbreaks can occur at any time, there are times throughout the year that AI is a more common occurrence. Due to the winter migration patterns of wild birds, this is usually between November and March, which is where Livetec's biosecurity services can help.



What happens when AI is suspected on a premise?

Immediately after contacting APHA, bird owners are subject to a consultation to establish whether or not AI can be ruled out. If it can't, the premise is subjected to restrictions forbidding anything or anyone from entering or leaving the farm.

Following the consultation, APHA will contact the farm's personal vet to procure the history of the disease and the premise, which should be outlined in the biosecurity plan.

A regional veterinary officer is contacted and deployed within 30 minutes to launch an investigation, with a clinical inspection and examination on all birds, the number of staff on-site and the movement on and off of the farm, which should also be outlined in the biosecurity plan.

Samples are then taken and sent to APHA to determine which disease is spreading. According to APHA it can take as long as 6 days to get a definite answer about the presence or absence of disease on a premise, shutting operations down for longer.

Should the worst happen, having Livetec as your biosecurity partner can drastically reduce downtime by as much as 75%, enabling operations to resume as quickly as possible.

24 hours prior to the culling, a full valuation of the birds is completed to understand the size of the impact. The depopulation itself could take a number of days depending on the number of animals affected.

After the depopulation and disposal of the affected poultry, two stages of C&D must be carried out, which can take a number of days depending on the size of the site. Once considered effective, the secondary stage of C&D must be completed and paid for by the premises. Without both stages of C&D, the requirements to lift restrictions are not fulfilled.

It can take a considerable amount of time to handle and mitigate the impacts of an AI outbreak, leading to a complete stop of operations impacting your business and animals.



The only way to prevent the likelihood of one occurring is to enforce strict biosecurity measures and protocols.

Although we can help should the worst happen, we want to prevent the outbreaks happening at all. We are the go-to partner for biosecurity measures across the industry.



of a disease outbreak on your farm by Livetec



How to detect Al

Should you detect AI on your farm, you must immediately notify APHA. This can either be done by the farm owner or through their private vet.

Al can be seen as soon as 24 hours after the initial infection. Some of the key symptoms to look out for are:

- Diarrhoea
- Swollen head
- Loss of appetite
- Cyanosis: Blue discoloration of the head, comb, wattles
- Difficulty breathing: A gaping beak, coughing, sneezing and gurgling
- Fewer eggs laid or eggs with watery whites
- Increased mortality

Signs can vary between each species of bird. Whilst chickens and turkeys may exhibit a range of these symptoms, ducks and geese may display a minimal amount.

Biosecurity is a farm business owners best line of defence against disease outbreak

Livetec are experts in biosecurity

Flock keepers should reassess all of their biosecurity measures immediately."

Dr Robert Huey, Northern Ireland's Chief Veterinary Officer

How has AI spread?

With years of experience in the field and our hands-on involvement in a number of the outbreaks, our Livetec Operations team have diagnosed the key reason for the rapid spread of AI across the UK and Ireland.

In nearly every circumstance, there was a severe or complete lack of any temporal, pharmaceutical and structural biosecurity measures on all premises.

Mitigate the risk of an outbreak by partnering with Livetec









Excellent biosecurity measures and protocols, followed by every person on and off the farm remains any premises' best defence against all and any disease outbreaks.

Biosecurity is a combination of measures that are taken to reduce the risk of disease introduction and to stop the spread of disease between your birds and others.

In order to prevent your flock it is important to be well versed on the ways in which the disease can enter your farm and spread, and implement measures that once in place can severely reduce that likelihood.

Livetec can help mitigate the risks of disease

A complete lack of, or even small gaps in your biosecurity processes can encourage a disease outbreak on your farm. These are some of the common biosecurity issues:

Bedding Management

Personnel and Equipment

Building Maintenance and Design

Cleansing and Disinfection

Record Keeping Building Locations

We have been involved in all UK Poultry Notifiable Diseases outbreaks since 2011.

Working with farms of all sizes, we provide a range of technical services and on-farm operations to protect the future of your farm.

Livetec has a biosecurity service tailored to you, using our years of scientific and academic research and experience. The risks of disease outbreak can be mitigated with biosecurity



Significant Reputational Impacts

An outbreak can affect the way a premise is viewed by every stakeholder. A farm can face backlash from the entire supply chain after an outbreak, especially suppliers and customers. **Livetec can protect your reputation.**

Great Financial Loss

From the costs associated with losing and replacing an entire flock, to the essential secondary cleansing and disinfection measures, outbreaks are very costly. **Livetec prevents financial losses.**

Lack of Animal Welfare

When there is a lack of biosecurity, the welfare of animals comes into question. This lack of concern can cause grave issues. **Livetec improves animal welfare.**

Mental Health Impacts

The toll that an outbreak can take on farmers is huge. The high levels of stress and uncertainty can severely affect mental health and wellbeing. **Livetec** enhances the mental well-being of farmers.

Operational Downtime

In an outbreak APHA restricts all movement on the premises. This forces all operations to stop immediately for as long as needed. **Livetec improves the standard of your operations.**

Bespoke Services

Our Livetec team offers on-site operational biosecurity advice for your business to help protect the future of your business, proactively reducing the risk of financial loss, declining animal welfare and reputation hits.

- On-site biosecurity consultation and advice (farm visit only)
- Mapping services
- Cleansing and disinfectant schedule of work writing
- New-build structural biosecurity consultancy
- Disease outbreak exercise
- Assurance scheme pre-audit biosecurity check
- Company policies and declarations

5 year contingency planning package

Working in collaboration with you, our unique 5-year contingency planning service provides you with a clear roadmap of what to do should you face an outbreak. These plans are designed to minimise delays, downtime and stress to both you and your animals.

Risk assessment

Biosecurity plan

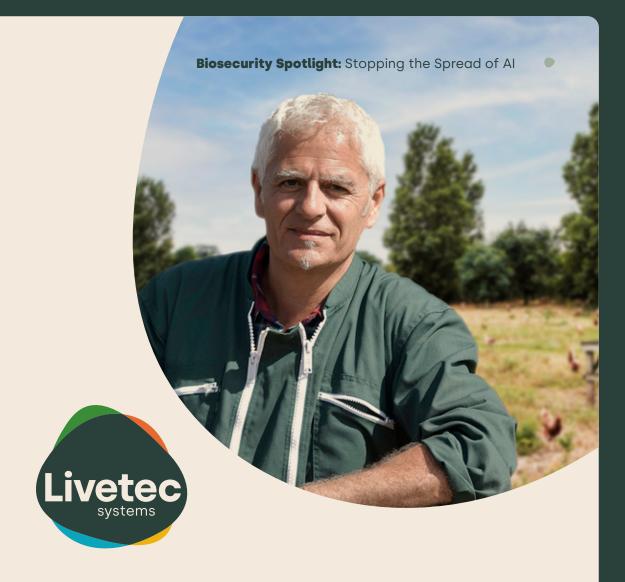
National outbreak plan

Two copies of the infected premises plan

Cleansing and disinfection plan

All of our plans are designed in line with the latest APHA and Defra Guidance to keep you compliant, and are acknowledged by insurance underwriters to help ensure you have the right level of cover for your farm.





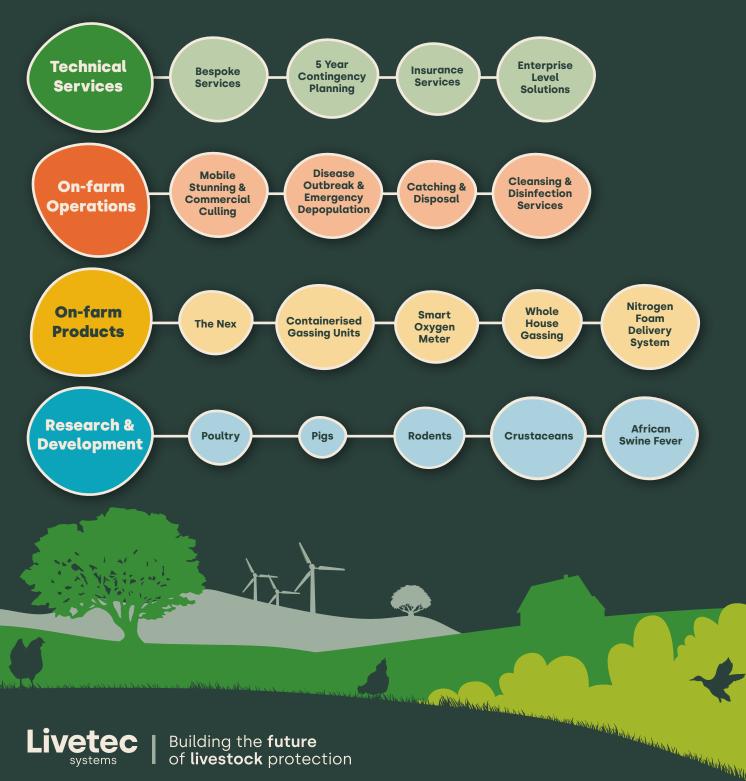
Your trusted partner

Livetec is the leading supplier for Defra, APHA, the British Poultry Council (BPC) and the affinity partner for service delivery to the National Farmers Union (NFU). Contact our team of biosecurity experts to find out how Livetec can help you and your business today.

Find out more information visit www.livetecsystems.co.uk

Livetec is the industry leader for livestock protection and biosecurity, the go-to partner for all livestock issues across the industry.

We provide an extensive range of innovative solutions for our clients:



Livetec Systems Ltd

info@livetecsystems.co.uk

www.livetecsystems.co.uk