HPAI Stakeholder Meeting

Monday 19th January 2026

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Veterinary and Technical Operations (VTOT)
Animal & Plant Health Agency

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Key point – a tiny infectious dose: One bird infected is enough

- ❑ Multiple potential points of entry, but **it has got to reach a susceptible bird**
- ❑ Tiny amounts of virus introduced to the birds
- ❑ It takes a **very small dose** to infect your birds
  - One or two birds infected at start
  - Quickly spreads to other birds in group or in immediate area
  - Incubation period approx. 48 to 72 hours
  - Exponential rise in mortalities
  - Potential spread within and from the site

Commonest presentation but are exceptions e.g. many birds initially infected with much swifter rise in mortalities e.g. if many exposed to a common source of infection such as flooding or contaminated bedding

- ❑ Potentially 1000s -10000s of infectious doses in one wild bird dropping
- ❑ Virus survival can be prolonged in cool, damp conditions with lower levels of ultraviolet light

Date	Mortality
12/11/2021	0
13/11/2021	1
14/11/2021	1
15/11/2021	3
16/11/2021	1
17/11/2021	0
18/11/2021	0
19/11/2021	0
20/11/2021	0
21/11/2021	4
22/11/2021	16
23/11/2021	64
24/11/2021	342
25/11/2021	1000 +

- Findings based on very many **detailed on-farm investigations**
- The **biggest risk is the area around your buildings** and walking the virus in
- **Structural integrity of buildings**.
- Protect the **entrances to your sheds**.
- **Make it easy** for your staff / visitors to practise biosecurity effectively
- Look at all the activity on your site – how can you **minimise movements** on to the site and into the sheds?
- **Rodent Control**
- **Co-located mammals**
- **Contingency planning**

Bio-what ?

BIOSECURITY

=

The application of a set of **management**, **behavioural** and **physical** measures designed to reduce the risk of **introduction**, **establishment** and **spread** of pathogenic agents **to, within and from** an animal population.

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BRITISH POULTRY COUNCIL

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23 February 2023

Biosecurity photobook highlights good practice

Vision(s): 01 03

Poultry Health and Welfare Group collaborate with Government to compile photo gallery showing good biosecurity practice

The Poultry Health and Welfare Group (PHWG) have partnered with Government to produce a photo gallery that highlights good examples of biosecurity practice. Farmers are encouraged to familiarise themselves with the photos and apply excellent biosecurity on farm as part of the national effort to tackle the toughest outbreak of bird flu to date.

Biosecurity measures are not just a set of rules. They are part of the culture of keeping birds – effective and practical measures all poultry keepers must take to reduce the likelihood of getting an incursion of disease and prevent becoming a tracing or dangerous contact. A failure to efficiently plan your biosecurity means a failure to prevent disease spread, pointing to a failure to protect your birds.

The British Poultry Council's biosecurity checklist encourages all bird keepers, from commercial to pet keepers, to check their biosecurity steps consistently.

BPC Chief Executive, Richard Griffiths, said: "*Our focus remains on stamping out disease and controlling the spread. Whilst we may have seen a reduction in cases very recently the risk to poultry is still high. We, as ever, urge all poultry keepers across the country to remain vigilant and look out for signs of the disease in your birds or bird.*"

Please find a copy of the photobook below or download here.

Latest Articles

BPC Antibiotic Stewardship Report 2025: Design principles at work
10 September 2025

BPC warns illegal meat imports threaten UK food security.
8 September 2025

Oxford Economic Report 2025 – The Economic Impact of the Poultry Meat Industry
1 August 2025

Biosecurity photobook updated to highlight good practice
11 July 2025

"The right move for businesses, for consumers, and for the economy," says BPC Chief Executive
19 May 2025

"The right call made for the right reason," says BPC Chief Executive
8 May 2025

"Stand firm on British food standards," says BPC Chief Executive
16 April 2025

"What if we…" webinar focuses on true cost of food waste
7 March 2025

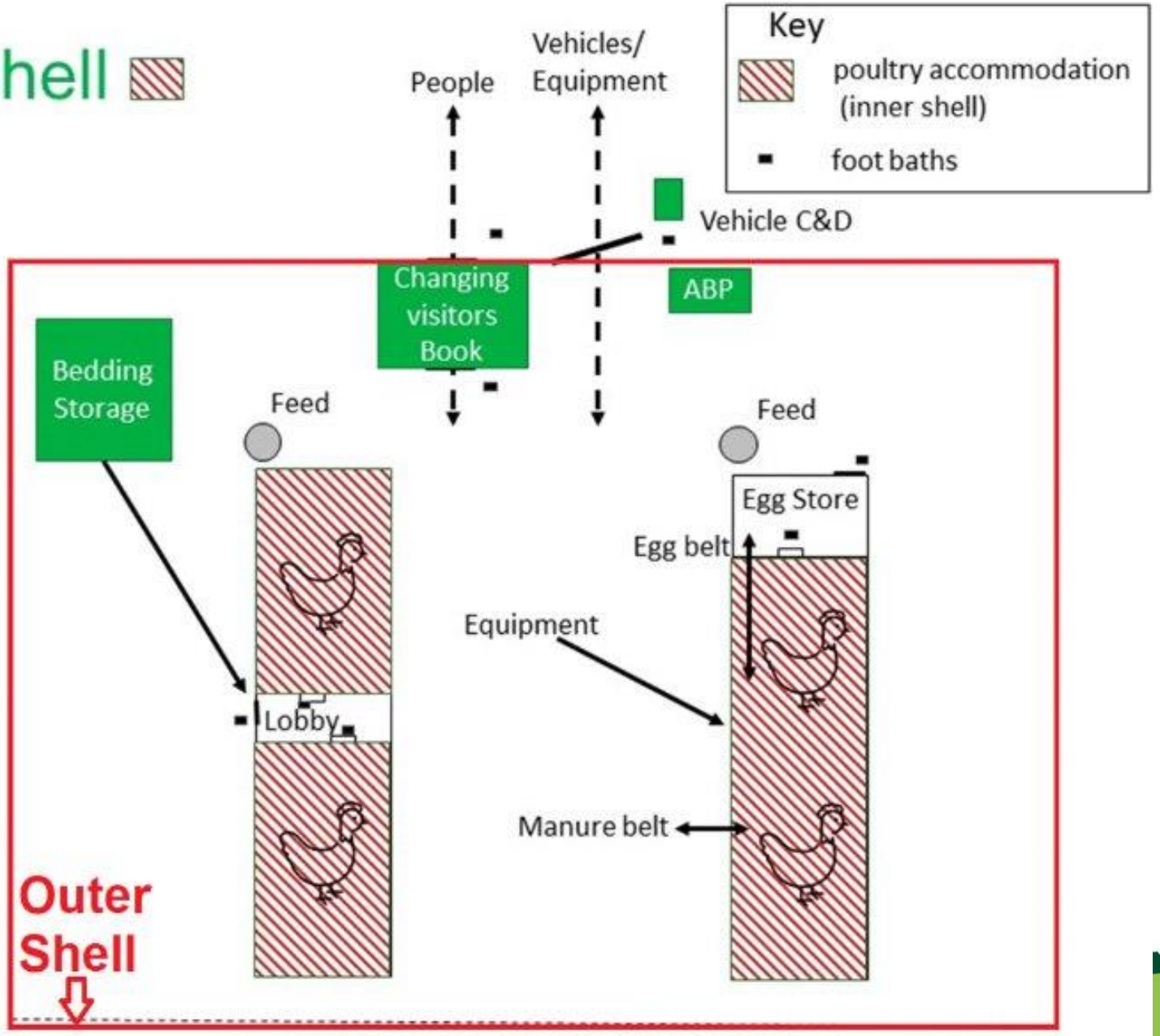
"What if we…" webinar on land management for a sustainable poultry industry

https://britishpoultry.org.uk/biosecurity-photobook/

The “Hard Inner Shell”

Inner Shell

- Building integrity
  - Rain
  - Wild birds
  - Vermin
- People
- Bedding
- Equipment
- Muck belt
- Egg belt
- Feed
- Water
- Poultry



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Site Entrance

Well demarcated perimeter fencing at site entrance

Water tank to feed a pressure washer for cleansing vehicle wheels. However, limited amounts of disinfectant available to thoroughly disinfect vehicle wheels after cleansing and wheels likely to become immediately re-contaminated by a muddy road surface which could be contaminated by infected wild bird faeces

Generally muddy environment on the approach to the poultry housing

Vehicle wheel washes can help to remove gross contamination from wheels/wheel arches but are subject to become contaminated with organic matter (e.g. leaves) which may reduce disinfectant efficacy and any disinfectant is liable to be diluted below the recommended concentration by rainwater. Would require regular complete emptying and replenishing with freshly made-up approved disinfectant

Signage requiring use of C&D point but a small watering can unlikely to be able to effectively and evenly disinfect vehicle wheels and the road surface is visibly muddy which would reduce efficacy of disinfectant once applied

ABP bins kept at perimeter of premises thus reducing the need for the ABP collection vehicle to enter the site. However, doubtful whether there is sufficient disinfectant in such a small knap sack spray to effectively C&D vehicles entering the site.

Areas surrounding buildings

Well maintained concrete around poultry buildings and tidy sites free of vegetation that may attract wild birds and vermin

ABP bins at perimeter of site. Visible biosecurity signage in place. If wrapped bedding needs to be stored outside it is important to discard any bales with damaged wrapping and disinfect them before moving inside poultry accommodation

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Generally muddy yard around poultry housing with lots of standing water acting as a potential source of gross contamination on approach to the buildings

Well maintained concrete around poultry buildings and tidy sites free of vegetation that may attract wild birds and vermin

Clean well maintained concrete walkways between houses with disinfectant foot dips with in-built brushes at either end

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Buildings / Housing

Well meshed windows

Gap in roof structure may allow entry of small wild birds and potentially contaminated fomites such as leaves and wild bird feathers

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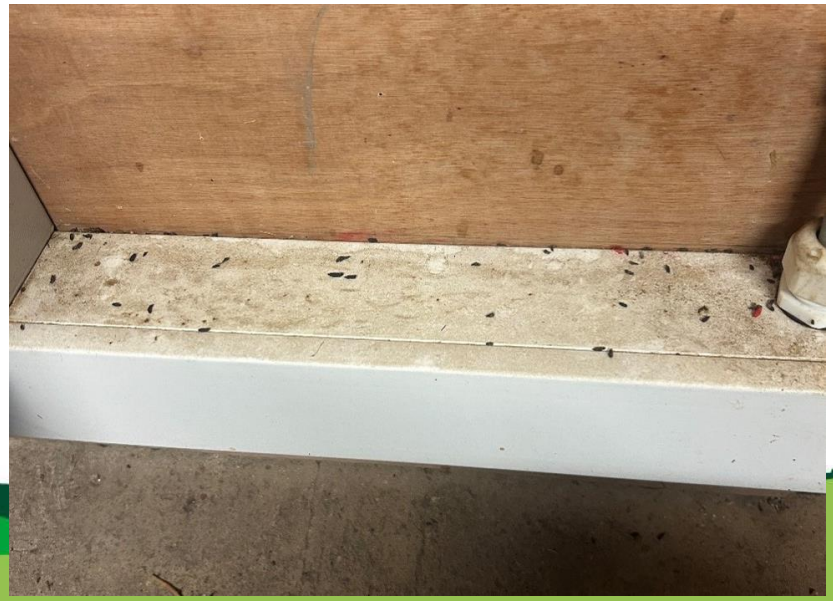
Wide guage mesh walls can allow entry of rodents and potentially small wild birds

Gap between mesh wall and polytunnel covering can allow entry by small wild birds

Damage to building structure can allow entry of small wild birds and rodents

Mouse droppings within the affected house



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Apparent damage to secondary netting covering gaps between the biosecurity lobby and polytunnel structure can allow entry of small wild birds

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Damage to secondary netting and gaps between the biosecurity lobby and polytunnel structure can allow entry of small wild birds
Gaps between meshed wall and rest of polytunnel structure

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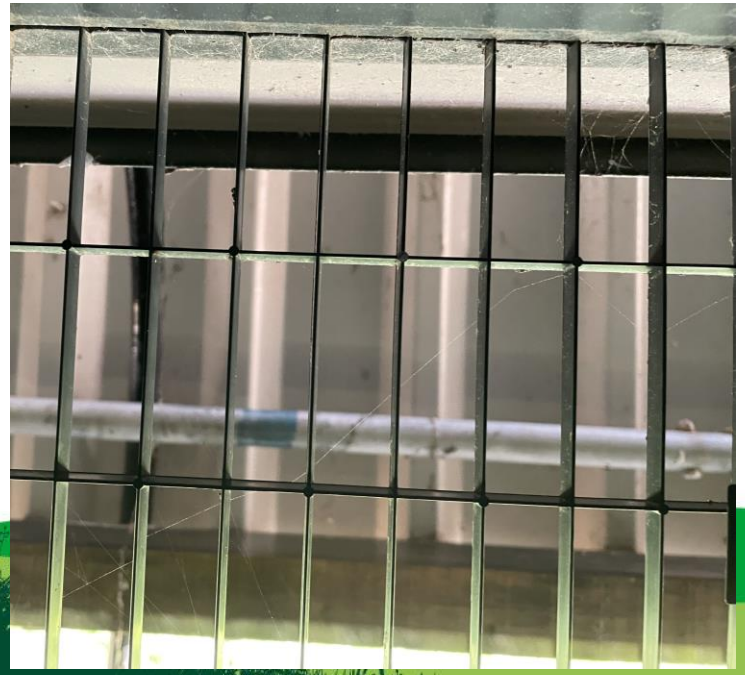
Ventilation



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Bedding Management / Storage

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Bedding stored under cover

Bedding stored under cover and inaccessible to wild birds and rodents

Well maintained dedicated bedding store protecting against contamination by wild birds and rodents

Additional bedding already in situ in poultry housing prior to flock placement

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Feed storage

Standing water below feed silos may contain wild bird faeces and virus (especially if any feed spillages had previously attracted wild birds) and risk contaminating feed vehicle feed hoses if they dip into the water

Flooding

- Almost **certainly a source in several outbreaks** over the years
- It is a breach of biosecurity that **requires immediate action** to clear up and **prevent**
- **Potentially too late once it has happened**
- **Washes a viral soup in from outside**
- “Splashing a bit of Virkon” around not enough

Generally muddy yard with considerable amounts of standing water which may contain a “viral soup” and contaminate vehicles / equipment / personnel

Entrance to Poultry Accommodation

Covered foot dips located on well-maintained clean concrete. However, in both examples the foot dip would be better placed on the other side of the door to minimise risk of recontamination of footwear after dipping and before entering the building – and ideally directly in front of the doors if they open inwards to facilitate stepping inside directly after disinfection without needing to step onto the concrete

Danger of footwear becoming re-contaminated after disinfection by stepping onto dirty / undisinfectable / muddy areas

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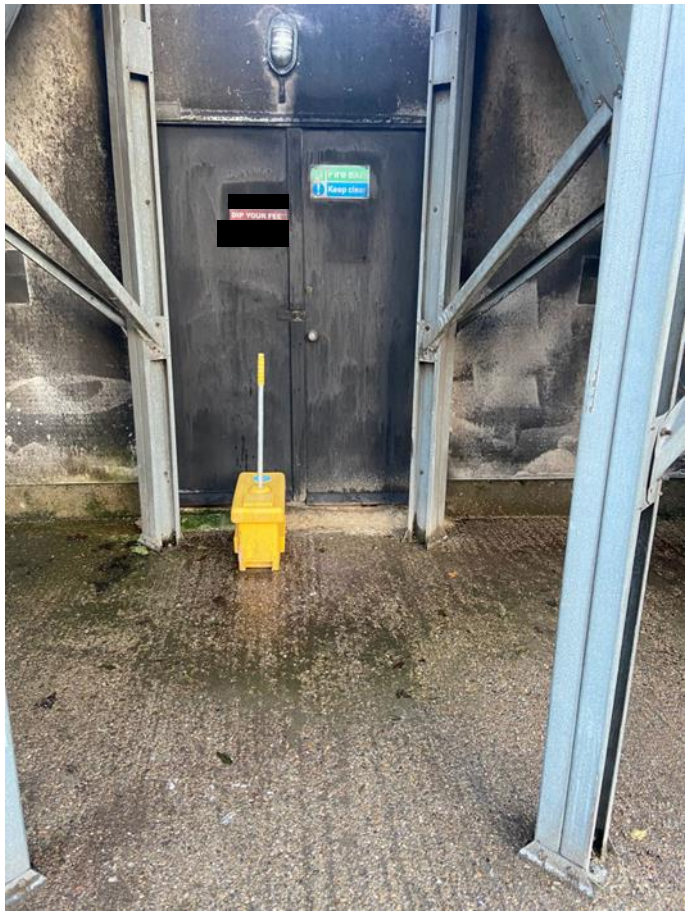
Plastic boot covers may easily become damaged / torn especially if stepping onto areas of sharp hardcore after disinfection. Dedicated house specific internal footwear to step into on entering housing would be preferable

Examples of footwear likely to become re-contaminated by mud / organic matter after disinfection

Footwear likely to become re-contaminated by mud / organic matter after disinfection

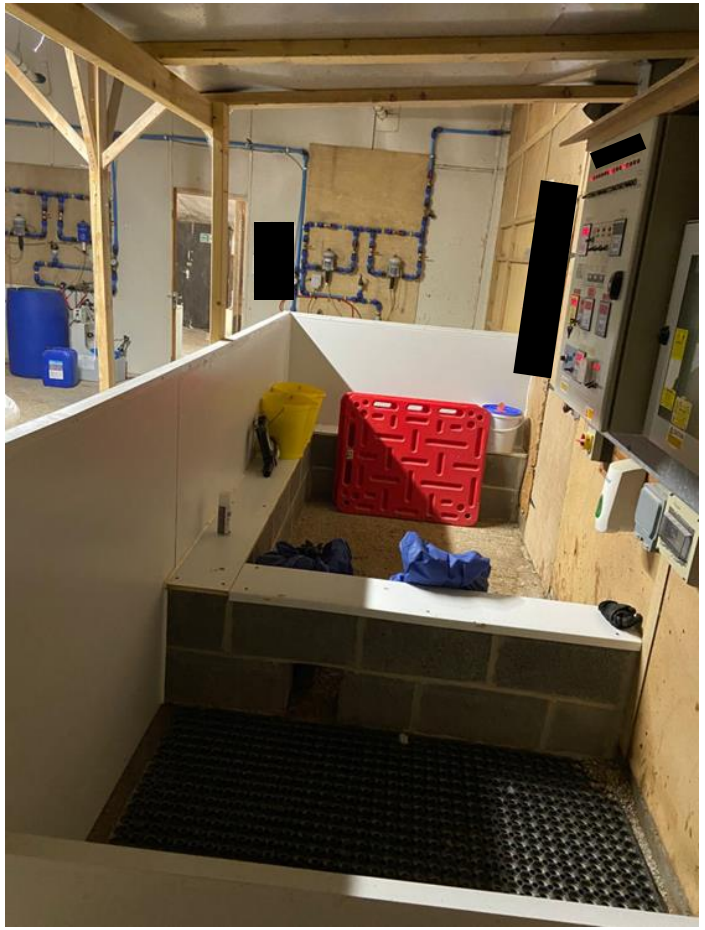
Use of plastic gridding to try and avoid recontamination of footwear after boot dipping but it is very narrow and visibly contaminated – use of e.g. concrete paving slabs to provide an easily cleansable and disinfectable surface to walk on after dipping and before entering buildings may be a better option.

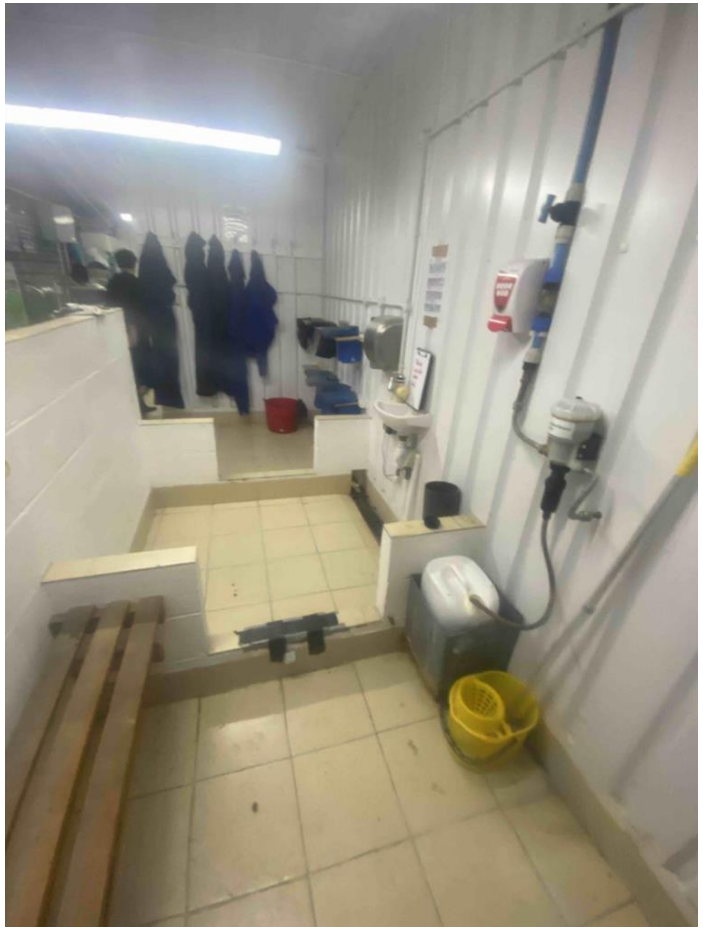


Covered foot dip with in-built brushes positioned close to door but evidence of moss / algal growth present on concrete

Covered foot dips and foot dips with in-built brushes to aid cleaning of footwear

Well positioned step-over biosecurity point directly in front of building entrance reduces the chance of footwear becoming re-contaminated after disinfection. However, need to ensure that foot dips are of a suitable size to easily allow complete immersion of the boots to at least ankle level and provision of a stiff bristled brush to aid thorough cleaning and disinfection of boots/boot treads is strongly recommended





Examples of clean and tidy swing-over / step-over hygiene barriers before entry to bird areas (the “hard inner shell”)

Covered foot dip (reduces dilution by rainwater and contamination by organic matter such as leaves) located on clean well-maintained concrete

Hand washing facilities and hand sanitiser provided

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Visible contamination on both sides of the step over hygiene barrier

Visitors' book

- This is **key tracings information**.
- It protects the rest of your integrated company.
- **All visitors** must be recorded.
- Even **staff members** need to be recorded somewhere - rotas.
- Many visit **unrecorded or incomplete detail – manager visits**.
- Issues with **legibility**.
- Doesn’t give confidence in the “controlling mind”.
- If in doubt we will go for the precautionary principle
- If you are asking for licencing this is **part of the evidence of activity for the risk assessment**

Non- Commercial Sector

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Good examples

Supplementary finer guage meshing can be attached for additional protection at times of heightened risk

Additional Resources

View this email in your browser

Biocheck.UGent Newsletter

Nr. 27 – December 2025

Why boots are a critical biosecurity risk?

Boots are one of the most frequently used items on a farm, which makes them also one of the biggest biosecurity risks. Boots pick up manure, litter, and moisture throughout the day, and these materials can protect bacteria and viruses. Pathogens such as E. coli, salmonella, avian influenza, and African swine fever virus can survive on boot surfaces for many hours and sometimes much longer. Because boots move repeatedly through different barns and age groups, a tiny amount of contaminated material can be enough to spread disease farm-wide.

Despite this risk, scientific research on boot hygiene is surprisingly scarce. Most existing studies examine either cleaning or disinfection alone and none have yet evaluated both together under real farm conditions. A few studies have found that in order for boots to be adequately disinfected by using a boot bath, the boots need to be submerged for prolonged periods of time, which supports the reasoning behind advocating for the use of barn specific boots which are cleaned and disinfected regularly.

https://mailchi.mp/7500d8ab1b83/improving-sustainability-through-biosecurity-17472692?e=1ffb219d76

What best practices look like

a. Always clean boots thoroughly before disinfecting: Manure and dirt form a protective layer that hinders disinfectants from doing their job. Jumping directly into a disinfection bath without prior cleaning yields poor results.

b. Use soap + mechanical cleaning methods: a brush, boot washer, or pressure washer is advised. If using a high-pressure washer, take care not to splash manure around and further spread contamination.

c. Prefer company-specific or barn/compartment-specific boots: even better than relying solely on disinfectant baths. Having a dedicated set per barn or animal group reduces cross-contamination risks and simplifies hygiene routines.

d. Apply cleaning and disinfection on a regular, consistent schedule: This ensures that disinfectants have sufficient contact time and that built-up manure and dirt don't accumulate over time.

e. For larger farms: use visual markers or color-coding for boots per barn/department to avoid confusion or misuse. Such simple organizational measures help everyone follow protocols more reliably.

Image: Ghent University

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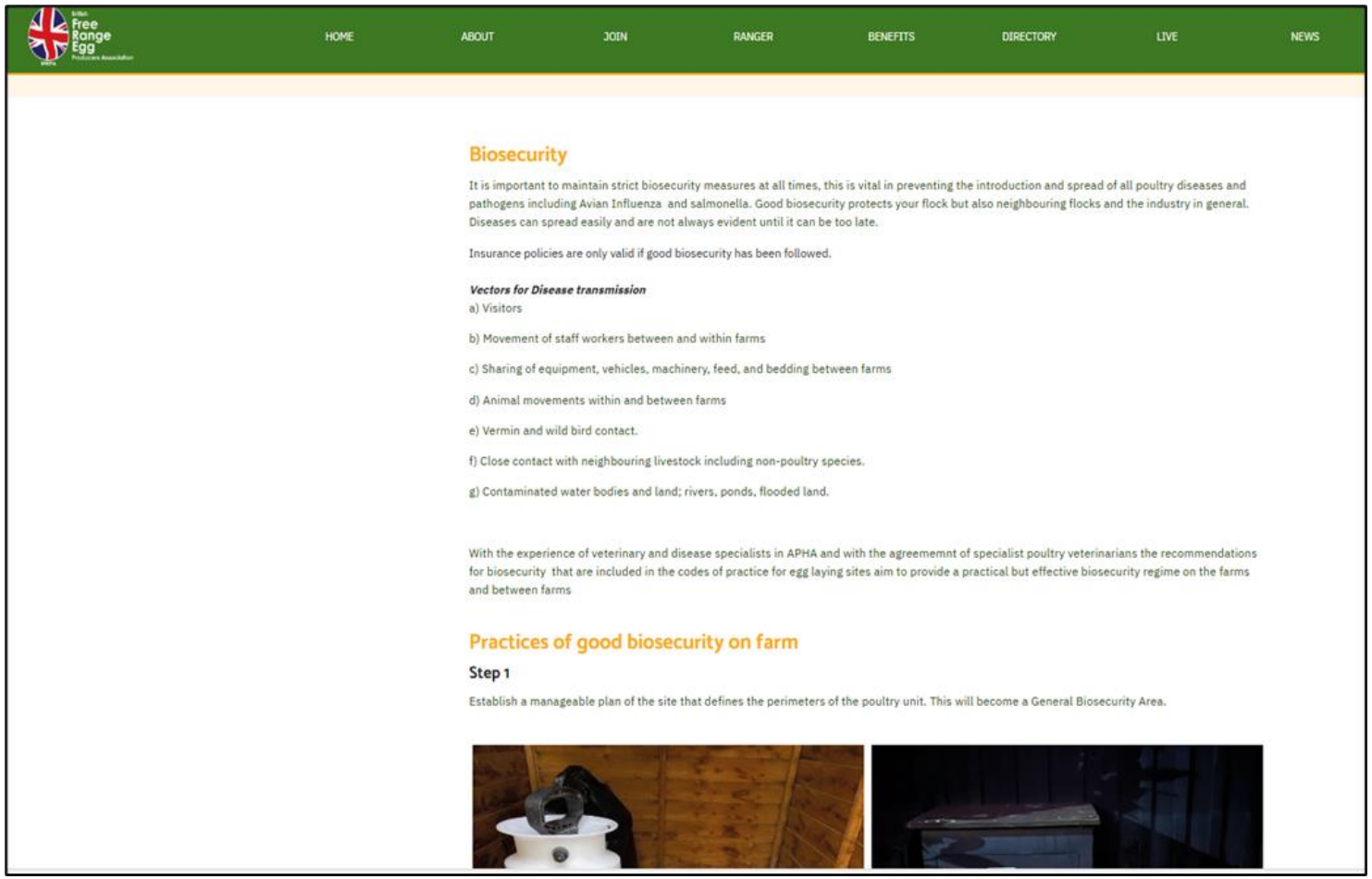


https://www.bfrepa.co.uk/about-bfrepa/biosecurity

AVIAN INFLUENZA BIOSECURITY GUIDE

MAKE A DIFFERENCE TO PROTECT YOUR FARM

Department for Environment Food & Rural Affairs | Animal & Plant Health Agency | British Egg Industry Council | British Free Range Egg Producers Association

Protection of bedding, water and feed from contamination is essential. Close any gaps / ventilation openings with mesh sizes <25mm to prevent wild bird access.

BIOSECURITY

Arrival at the farm:

- Use the vehicle washing facilities provided to cleanse and disinfect wheels and arches and remove any other visible contamination
- Open gate and close behind you
- Park in designated area
- Use the foot dip provided, replacing the lid
- Ideally brushes should be available to remove any gross contamination from footwear before using the foot dip

Prevent the spread of avian influenza

Important whole site considerations:

- **All** staff and guests should have training on farm procedures before starting work
- **Only** clean vehicles with disinfected wheels and wheel arches can enter or exit (or where access is not essential they should be left at site perimeter)
- **Ensure** that any water header tanks are sealed and inaccessible by rodents

Maintain good building integrity

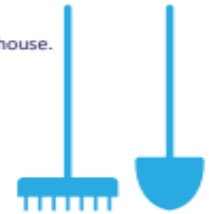
- **Create** and regularly update biosecurity & AI contingency plans
- **Maintain** active rodent controls, including in bedding storage areas
- **No** leaking roofs, overflowing guttering or gaps under doors that could allow contaminated rainwater or floodwater in
- **If** wrapped bedding bales must be stored outdoors, disinfect the individual inner wrappers before taking inside, and discard any bales with damaged wrapping
- **Net** all ventilation inlets
- **Store** bedding undercover in a bird & rodent/vermin proof building

Anything intended for use inside the shed such as bedding and feedstuffs should be safely stored on the outside and not open to the environment including wild birds and their faeces

TOOLS AND EQUIPMENT

Must Haves:

- Dedicated tools for each house.
- **Do** - Disinfect tools and equipment regularly and always before entering the house.
- **Do** - Protect tools from contamination by vermin or wild bird droppings.



All visitors must sign in. Reduce the number of personnel coming on site, and of those that do, restrict access to limit possible contamination.

INTERNAL ZONE — Never cross a step over barrier without following the site rules.

HOUSE ENTRY & EXIT PROCEDURE

Housing is only one biosecurity measure and is only effective if in conjunction with other biosecurity measures

The General Area has everything you need to perform your work without crossing back to the intermediate area. — EXTERNAL ZONE

GENERAL AREA	INTERMEDIATE AREA	SPECIFIC / BIRD AREA	INTERMEDIATE AREA	GENERAL AREA
Approach and enter the General Area with clean outdoor shoes. Use foot dip provided, replacing lid. (DEFRA / DAERA approved disinfectant, recommended concentration). Replenish regularly in accordance with manufacturer's instructions, or immediately if it becomes visibly contaminated with organic matter. Brushes (and ideally a water source) should be available to remove any gross contamination before disinfecting.	Cross the step over barrier. Barrier MUST be 30cm high, and solid. STEP OVER BARRIER	Enter Specific Area (bird space) and close door behind you. STEP OVER BARRIER	Re-enter Intermediate Area area. STEP OVER BARRIER	Cross the step over barrier. Barrier MUST be 30cm high, and solid. STEP OVER BARRIER
Enter and prepare for the next level of biosecurity as per site rules.	Put on designated indoor footwear. Dedicated boots / clogs / sandals should be worn. Disposable boot covers can be easily torn and offer a false sense of security.	Sanitise hands and put on different designated footwear, clothing and PPE. Ideally indoor footwear and clothing / PPE should be a different colour from outdoors so that it is clearly identifiable as such.	Open door to re-enter Intermediate Area.	Before leaving Intermediate Area cross the step over barrier, remove dedicated Intermediate Area footwear.
Remove your outdoor footwear. Sign the visitors / attendance book.		Do not enter Range or re-enter Specific Area from the Range without changing footwear and re-dipping feet. Keep entry / exit doors designated for purpose.	Remove your Specific Area footwear, clothing and PPE. Leave them in the Specific Area and Sanitise hands.	Put on outdoor footwear.
				Exit closing the door behind remembering to use the foot dip.
				Before leaving the General Area, use the foot dip provided, replacing lid. (DEFRA / DAERA Approved disinfectant, recommended concentration). Replenish regularly in accordance with manufacturer's instructions, or immediately if it becomes visibly contaminated with organic matter. Brushes (and ideally a water source) should be available to remove any gross contamination before disinfecting.

REMOVE DEAD STOCK FROM GENERAL BIOSECURITY AREA ON DAY OF COLLECTION

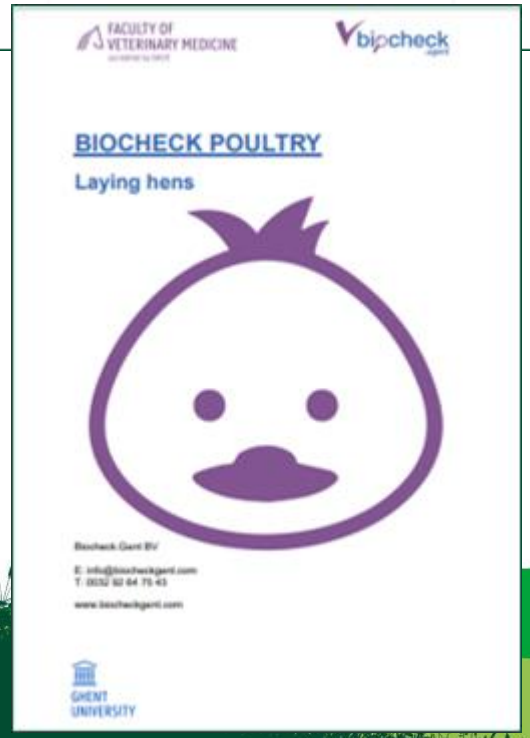
IDEALLY DEAD STOCK BINS SHOULD BE MOVED TO THE PERIMITER OF THE PREMISES ON DAY OF COLLECTION TO AVOID THE NEED FOR THE COLLECTION VEHICLE TO ENTER THE SITE

IN → **OUT**

WILD BIRDS ARE A MAJOR SOURCE OF THE VIRUS - DO NOT ALLOW DIRECT OR INDIRECT CONTACT VIA FAECES AND FEATHERS. PREVENT CONTAMINATING FEED, BEDDING, EQUIPMENT, CLOTHING, AND FOOTWEAR. LIMIT THE ATTRACTIVENESS OF THE SITE TO WILD BIRDS - INCLUDING OPEN WATER, RANGE AREAS, AND SPILT FOOD. SCAN THE QR CODE FOR EXAMPLES!

Link to the poster in the previous slide

https://bfrepa.co.uk/pdf/download/ai-biosecurity-guide-a1-poster-november-2025.pdf



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Thank You