



Department
for Environment
Food & Rural Affairs

Biosecurity and preventing disease in poultry and captive birds within a Prevention Zone

7 December 2016



Llywodraeth Cymru
Welsh Government



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Introduction

This document tells you, as a poultry keeper, about the biosecurity measures you must take to prevent your birds from becoming sick with diseases like avian influenza and Newcastle disease. You must read it if you keep birds for commercial, hobby or other purposes.

This document should be read together with the specific legal requirements in the Avian Influenza Prevention Zones that England, Scotland and Wales declared on 6 December 2016. The purpose of the zones is to help protect poultry and other captive birds within Great Britain from a highly pathogenic strain of avian flu circulating in Europe. The zones will remain in place for 30 days.

Poultry keepers in England, Scotland and Wales are now required to keep chickens, hens, ducks and turkeys housed indoors where practicable, or keep them separate from wild birds. For farmed geese, gamebirds and other captive birds where housing is less practicable, keepers must take steps to keep them separate from wild birds.

In particular, you must:

- **always practice good biosecurity.**
- **keep a close watch on your birds – monitor them frequently.**
- **review and assess the risk of disease to your birds with your vet.**
- **plan how you will manage any free-range birds when there is a need to protect them from wild birds.**
- **feed and water birds indoors, where possible, to reduce mixing between your birds and wild birds.**

What does the law require?

Defra, the Scottish Government and the Welsh Government have carried out risk assessments under relevant legislation¹. The Secretary of State and Scottish and Welsh Ministers have separately declared the whole of England, Scotland and Wales to be Avian Influenza Prevention Zones to reduce the risk of transmission of **highly pathogenic avian influenza**. A range of enhanced biosecurity measures are required within the zones. Any person in charge of poultry (such as chickens, hens, turkeys, and so on) and captive birds must take all appropriate and practicable steps to ensure that:

- a) poultry are housed or otherwise kept separate from wild birds;
- b) other captive birds are kept separate from wild birds;
- c) poultry and other captive birds are provided with feed and water which is not accessible to wild birds.
- d) any person who comes into contact with poultry and other captive birds must take all reasonable precautions to avoid the transfer of contamination between premises, including cleansing and disinfection of equipment, vehicles and footwear;
- e) there are reductions to the movement of people, vehicles or equipment to and from areas where poultry or captive birds are kept to minimise contamination from manure, slurry and other products;
- f) vermin control programmes are implemented effectively, including preventing the entry of wild birds, around buildings where poultry or captive birds are kept;
- g) housing and equipment is thoroughly cleaned and disinfected at the end of a production cycle;
- h) disinfectant, at the right concentration, is kept at all points where people should use it, such as farm entrances and before entering poultry housing or enclosures.

Other actions to consider

Where practical, you should also take the following steps:

¹ In England, under Article 6(1)(a) of The Avian Influenza and Influenza of Avian Origin in Mammals (England) (No 2) Order 2006; In Scotland, under Article 6(1)(a) of The Avian Influenza and Influenza of Avian Origin in Mammals (Scotland) Order 2006; and in Wales, under Article 6(1)(a) of The Avian Influenza and Influenza of Avian Origin in Mammals (Wales) (No.2) Order 2006.

- Consult your private veterinary surgeon about the risks specific to your premises and the practical steps you can take to reduce them.
- Ensure that your biosecurity plan includes an isolation period for all new stock.
- Make sure all your records are accurate and up-to-date to ensure that all movements (birds, people, vehicles, equipment) on and off the premises are fully traceable. This will help investigations into any suspect case of notifiable avian disease.
- If you own, or are responsible for, poultry flocks of 50 or more birds (not necessarily of the same species) and even if your premises is only stocked for part of the year, then you must, within one month of their arrival at your premises, register your flocks. For poultry flocks of fewer than 50 birds, whilst you are not required by law to register them, we still encourage you to do so as this means we can contact you quickly if there is an outbreak of disease. Further information and links to the relevant registration forms are available from www.gov.uk/guidance/poultry-registration.
- If you have staff, give them the information and training they need to maintain good standards of hygiene (an important aspect of biosecurity) at all times. If you allow them to keep their own birds at home, they will need to be extra vigilant for signs of disease and even more careful about biosecurity both at home and on your farm.
- You must consider what measures may be appropriate and practical to protect your birds from contact with wild birds, such as feeding and watering birds indoors or under protection from wild birds and rodents to reduce mixing between your birds and wild birds (see the advice on protecting your birds from wild birds later in this guidance). Talk to your local veterinarian for further advice.
- Review your contingency plans which you should have in place for managing your premises in the event of a suspected or confirmed case of notifiable avian disease, both on your premises or nearby. The types of movement restrictions that could be put in place are set out in the Notifiable Avian Disease Control Strategy. This is available at www.gov.uk/government/publications/notifiable-avian-disease-control-strategy-2015.
- Sign up to the Animal and Plant Health Agency (APHA) Alerts Service to keep up to date with the latest news on exotic notifiable animal disease outbreaks in Great Britain (animalhealth.system-message.co.uk/AH_subscribe_index.php).

Biosecurity

Biosecurity means taking steps to ensure the risk of a disease occurring or spreading within or from your premises is minimised.

You should always follow good biosecurity practices, not just during a disease outbreak. Taking the right measures can help protect your birds, your business, and the industry.

Benefits of biosecurity

Good biosecurity:

- helps keep out poultry diseases such as avian influenza and Newcastle disease;
- limits the occurrence and spread of diseases both on and off your premises;
- improves overall flock health and productivity; and
- cuts the costs of disease treatment and reduces losses, which could improve profitability.

Spread of disease

Disease can be spread through:

- movement of poultry, people, vehicles and equipment between and within farms;
- the introduction of birds of poor or unknown health status;
- contact with other flocks;
- using shared farm equipment and vehicles, which have not been effectively cleansed and disinfected;
- contact with vermin or wild birds;
- birds drinking from contaminated water sources;
- birds eating contaminated feed; and
- unsatisfactory cleansing and disinfection of vehicles, sheds, feeding troughs and other equipment.

How to stop disease

Protecting your birds from wild birds

One way by which notifiable avian disease may spread to poultry is through contact with infected wild birds. Contact may be direct through mingling, or indirect through faecal contamination of anything that may then come into contact with poultry such as feed, water, utensils or clothing.

In addition to maintaining strict biosecurity measures, housing your birds indoors is another way that you can minimise direct contact with wild birds. However, even if you house your birds indoors, you should also take all the other precautions set out in this document where practical to also prevent indirect contact with wild birds. If you can't house all your birds indoors, you must take all appropriate and practicable steps to minimise the risk of contact with wild birds.

Impact of required housing on organic and free-range status

The legal requirement to keep your birds separate from wild birds also applies to free-range and organic poultry producers.

The organic status of poultry flocks is not affected by any legal requirement to house or restrict access to open-air runs, provided that all other requirements of the Organic Standards² continue to be met.

Products of free-range flocks that are required by government to be housed retain their free-range status provided the housed period does not exceed 12 weeks³. The current housing requirements run for 30 days. The usual free-range marketing requirements apply in all other instances³.

If you have longer-term concerns about possible loss of status, for example organic or free-range, you should consult the responsible sector body or organic certification body.

Housing

You must take all appropriate and practicable steps to ensure that your birds are housed, or otherwise separate them from wild birds. Housing your birds is the most effective way to

² Set out at www.gov.uk/guidance/organic-farming-how-to-get-certification-and-apply-for-funding

³ See [Egg Marketing Regulation 589/2008](#) and [Poultrymeat Marketing Regulation 543/2008](#)

minimise direct contact with wild birds, provided that the housing does not have entry points that can be exploited by wild birds.

Ensure that wild birds are prevented from gaining access to your birds by **covering any openings with netting**. This should have sufficiently small holes to exclude wild birds from passing through the openings. If your birds spend time outside you will need to consider alternative arrangements. There are different housing options which you can consider, including:

- Making use of existing buildings (such as barns, farm sheds, outbuildings, garages, garden sheds) adapted for your birds. Ensure that any openings are netted to prevent wild birds gaining access. You should check for and remove hazardous and toxic substances if garages and outbuildings are being used as temporary accommodation.
- Erecting a solid lean-to on the side of existing houses.
- Erecting a new temporary structure with solid walls and roof, or a polytunnel. A polytunnel will be suitable only in cooler weather.

Any proposed building must take into account the welfare requirements of the birds, in particular the importance of adequate ventilation. See the advice on welfare later in this guidance.

Netted structures

Where possible, you should take other steps if the above options are not practical, for example:

- Erecting a net structure to avoid contact with wild birds.
- When using a netted structure, paying special attention to keeping wild birds from perching on the roof and defecating through it - for example you should consider using additional deterrent methods described below.
- Constructing temporary outdoor pens using straw bales and a tarpaulin roof with bird-proof netted gaps for light and ventilation.
- If bad weather is likely to be a problem, it may be necessary to erect a windbreak around your bird-proof structure.

You should, where appropriate, consult commercial suppliers of anti-bird netting for advice and further information on equipment.

Feeding and watering

There are certain species of bird – such as ostrich, captive wildfowl or geese, which are not normally housed – for which the housing steps outlined above may not be practicable. In such cases you should isolate their food and water from wild birds. Available feed and water will attract wild birds; by feeding and watering your birds under cover, the possibility of mingling is reduced. The steps you should take, where practical, include:

- Providing extra protection to feed and water stations to avoid attracting wild birds.
- Rotating feeding times. Many wild birds learn when captive birds are fed and congregate at these times.
- Preventing your birds from accessing open water that may be contaminated. Ensure that your birds receive only mains or treated water, or ensure that reservoirs or storage tanks are covered. Sealed nipple systems can be considered.

Additional deterrents

When designing any protective structure, if you need to use posts, you should think about incorporating spike strips to deter perching. In all cases you should also consider making use of wild bird deterrents such as flutter tape, flashing lights and scarecrows. However, in doing so, you should be careful to avoid any potential impacts on those of your birds who are not screened from such deterrents; particularly flashing lights.

Pheasants, partridges and other game birds

Birds should be housed whenever possible. As a minimum, all feeding should take place under cover. Specialist advice is available from representative organisations and the [Animal and Plant Health Agency \(APHA\)](#).

Geese

Where small numbers of geese are kept, it may be possible to house them. However, if that is not possible, temporary netted structures should be used where practical which can cover large areas. Feeding and watering under cover and using wild bird deterrents will reduce contact with wild birds.

Captive wildfowl and waterfowl

Birds should be housed whenever possible. As a minimum, all feeding and watering should take place under cover or in some form of structure to exclude wild birds as far as possible. Separate your birds from wild birds by netting their enclosures, and make

sensible use of deterrents to reduce their contact with wild birds if practical. You should consider moving your birds away from large bodies of water that attract wildfowl.

Where separation is not possible, for example where there are large numbers of waterfowl, every effort should be made to discourage wild birds and keep feed separate.

Backyard flocks

In addition to the measures described in this guidance, you should also carefully consider alternatives to reduce contact with wild birds. For example, if you keep your birds near your home, consider housing them in alternative accommodation, such as a garden building, a garage or existing redundant building that could be adapted to house your birds temporarily. Remember to check for, and remove, hazardous and toxic substances such as rodenticides (the welfare section that follows contains further advice relevant to temporary accommodation, such as providing perches and a stimulating environment).

Where large numbers of birds are kept, it may not be possible to house them all and you should consider all of the alternative methods described in this guidance.

Zoological and other collections of birds

There may be practical issues in implementing some of these measures for zoological collections and sites with rare birds. Examples include:

- Enclosure design that allows mixing with wild birds.
- Possible contact with members of the public for educational purposes.
- The need to move birds across long distances to other sites for the purposes of breeding programmes and so on.
- Unique welfare and housing difficulties.

The biosecurity guidance in this document applies to such birds only where practicable.

Planning permission for bird housing

Planning permission for bird housing is not always required if the work does not involve building, engineering or similar operations. Permitted Development Rights exist for erecting structures in certain circumstances. Simple structures such as posts and netting might not require permission. It is unlikely, for example, that you would need planning permission if the structure is temporary, mobile, or used for the purposes of agriculture.

However, regulations will differ between commercial and hobby poultry keepers. You should **always check** with your local planning authority in the first instance. You can go to

www.planningportal.gov.uk for contact details in England and Wales, and information on planning authorities in Scotland is available at www.scotland.gov.uk/Topics/Built-Environment/planning/Roles/Planning-Authorities.

General biosecurity measures

- **Wear clean overalls and footwear when entering poultry farms to avoid bringing infection onto your farm, or spreading it around your farm, via your clothes, footwear or hands.** Where possible, you should keep protective clothing and footwear dedicated for use on your premises. These should be removed and cleansed and disinfected, laundered or disposed of after use.
- **Strictly limit and control access to poultry flocks. If possible, the site should be fenced with a controlled entry point.** The number of visitors and their vehicles should be limited and kept as far away as possible from poultry buildings and pastures. You should keep a record of all visitors.
- **Have pressure washers, brushes, hoses, water and fresh supplies of an approved disinfectant** (www.gov.uk/guidance/defra-approved-disinfectant-when-and-how-to-use-it) **available at all points where people should use them.** Make sure they are used by all visitors to clean vehicles, equipment and boots both before entry to, and upon leaving, your farm and poultry housing or enclosures. Visitors should, ideally, only use footwear and outer clothing that is kept on-site.
- **Make sure that disinfectant in boot dips is at the right concentration and that it is changed in accordance with the manufacturer's instructions.** Use a stable disinfectant with good resistance to inactivation by organic matter, at a minimum concentration as required by the disinfectants approved for use in England, Scotland and Wales (disinfectants.defra.gov.uk/DisinfectantsExternal/Default.aspx?Module=ApprovalsList_S1). The level of boot dip should always be at least ankle deep and care should be taken to position the boot dip to allow easy step in/step out procedures to take place. Boot dips should be sited in sheltered locations to prevent disinfectant from being diluted by rain water. Be aware that the effectiveness of the disinfectant can become compromised in the presence of excessive organic material. If this occurs, the disinfectant should be changed. Pre-cleaning boots with water and a brush prior to using the dip is essential to avoid organic overload.
- **Clean and disinfect all vehicles which have been transporting poultry, poultry products or poultry by-products after each journey.**
- **Clean and disinfect all crates, containers and other equipment before and after use.** Do not move any equipment into different poultry buildings without cleaning and disinfecting it first. This also applies to injecting and dosing equipment.

- **Keep farm access routes, parking areas, yards, areas around buildings and storage areas clean and tidy and well maintained, at all times.** This helps avoid wild birds and animals being attracted onto your premises and entering buildings and stores. It will also reduce the risk of vehicles becoming contaminated. You should also prevent the accumulation of standing water and remove any spilled feed that could attract wild birds.
- **Maintain buildings to ensure that wild birds do not nest or roost in them, and cannot access the inside of the building.** (See the advice on protecting your birds from wild birds).
- **Keep wild birds, dogs, cats, rodents and other livestock out of poultry buildings and feed stores.** These can carry infection or infective material onto your farm and spread disease to your flock.
- **Have an active rodent and pest control system in place.** Be vigilant for evidence of vermin. Monitor vermin activity by baiting and trapping. Feed silos and containers must be regularly cleaned, maintained and properly sealed to prevent vermin and wild birds accessing and contaminating feed.
- **Supply only clean fresh drinking water to birds.** Water lines and drinkers must be flushed through and cleaned regularly. The use of water sanitisers could be considered in consultation with your vet. In the case of free-range birds restrict access to possible sources of standing water used by wild birds and restrict access to your drinking systems by wild birds.
- **You should only obtain your feed from a mill or supplier that operates in accordance with relevant Government, Agricultural Industries Confederation or credible assurance scheme standards,** who will normally make available results of salmonella tests on request.
- **Damaged eggs, dead birds, litter and manure may carry disease. Dispose of them promptly and properly.** For further information, see the guidance on fallen stock www.gov.uk/guidance/fallen-stock and on poultry manure www.gov.uk/guidance/how-to-use-store-or-move-manure-guano-and-digestive-tract-content .
- **At depopulation at the end of a cycle, thoroughly clean the building and all equipment, including ducting, drains and fans.** Remove all surplus feed, dead birds and litter. Disinfect the premises and all equipment and carry out rodent and other pest control. Cleaning equipment and protective clothing should also be cleansed and disinfected. Ensure any visiting teams that catch your poultry follow the biosecurity measures described above for entering and leaving your premises, and ideally only wear protective clothing that is dedicated for use on your premises.

Buying new stock

- always make sure you know the health status of any birds you are buying or moving
- incoming stock should be isolated from the rest of the flock – discuss this with your vet and agree a testing and monitoring programme
- only place new stock in facilities which you know have been cleansed and disinfected
- where used, keep isolation buildings as near as possible to the farm entrance and separate from other poultry buildings
- use separate equipment when handling isolated stock. If you have enough staff on your farm, allocate some of them to deal only with isolated stock. If not, make sure you handle isolated stock last. Always wash and change into clean overalls and boots before going back to your main flock buildings.

Taking care of your birds

Welfare surveillance

The welfare of your birds is always an important concern, and particularly so in the case of a disease outbreak. If you house birds that are not used to being housed for a sustained period, this may create welfare and behavioural problems:

- You should seek advice from your vet if there are any potential concerns about welfare.
- You should be vigilant for signs such as injurious feather pecking, cannibalism and any other signs of poor welfare such as loss of condition.
- To prevent boredom amongst housed flocks, which can lead to injurious feather pecking and cannibalism, scratch feeds should be considered.
- Overcrowding may become a problem and you must take steps to ensure that the stocking density within each house will not reach the point at which bird welfare is compromised – a particular risk in hot, cold or wet weather.
- Consider inclusion of thermometers placed at bird level – the maximum temperature in particular should be monitored and action taken if it significantly exceeds 21°C for adult birds. This could prevent losses due to hyperthermia (high temperatures are more difficult for birds to cope with than low temperatures), but they may also give an indirect measure of ventilation rates.

- Consider providing perches as a welfare benefit. There are many advantages, including making use of vertical space so that stocking density is reduced, but the main advantage is allowing submissive birds options to remove themselves from situations where they may otherwise be pecked or cannibalised.
- You should provide fresh litter in all temporary accommodation, and ensure that adequate feed and water, ventilation and lighting are available. You should also consider ways to enrich the birds' environment more generally, such as using straw bales or hanging cabbages.
- Always ensure that your birds have clean water – do not use standing water that may have become contaminated by wild birds.
- You should also ensure that you (or your staff) inspect the birds more often in order to pick up problems before they lead to the deterioration of bird welfare.

Having a contingency plan that can be put into operation will make sure the welfare of your flock remains a priority at a critical time.

Further guidance and information on poultry welfare is available at the following pages:

- England: www.gov.uk/government/publications/poultry-on-farm-welfare, or you can call the Defra Helpline on **03459 33 55 77**.
- Wales: gov.wales/topics/environmentcountryside/ahw/animalwelfare/livestockwelfare/poultry/?lang=en.
- Scotland: www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/AnimalWelfare/farmed.

Maintaining welfare after the release of free-range hens from confinement

After a period of confinement, free-range hens may exhibit increased levels of aggression or feather pecking. The cause of these behavioural changes is not completely understood, but should be treated in a similar manner to any outbreak of these behaviours. You should seek advice from your vet if there are any potential concerns about welfare.

You should inspect livestock more regularly than once a day. This will ensure that any injurious pecking resulting from confinement or post confinement is detected at the earliest opportunity, and enable you to take steps to treat or cull injured birds.

Ideally, hens should be kept inside large naturally-lit veranda-type buildings. If this is not possible, you should maintain light intensity at 10 lux or above in the perching, feeding and

walking areas during the housed period and post confinement unless injurious pecking occurs. You should only decrease light intensities for the period where injurious pecking is a welfare problem.

During confinement and release, resources such as food sources, should be increased in availability to reduce competition.

Space allowances for free-range hens are specified in legislation and codes of recommendations and should be maintained at these levels or more.

Re-introduction to the range should be carried out with minimal disturbance to the birds. You should treat the flock as if it was a young flock and re-introduce birds to the range gradually.

What to do if you find dead wild birds

If you find dead wild waterfowl (swans, geese or ducks) or gulls, or 5 or more dead wild birds of other species in the same location in England, Scotland or Wales, you should report them to the Defra helpline on **03459 33 55 77** or by emailing defra.helpline@defra.gsi.gov.uk.

Be vigilant!

Look out for clinical signs of disease in your flock.

Increased mortality, unusual behaviour, neurological signs, a decrease of feed and/or water intake, falling egg production, eggs with thin or misshapen shells and respiratory distress may all be early signs of a disease problem. Ensure you keep yourself and your staff aware of what signs each disease may cause.

If you suspect disease, ask your vet for advice as soon as possible. Do not wait for more evidence – **some diseases can spread very quickly!**

Where avian influenza (or Newcastle disease) is **not** strongly suspected, but cannot be ruled out, poultry keepers may wish to liaise with their private veterinarian about utilising the Animal and Plant Health Agency (APHA) “**testing to exclude**” regime in GB. This involves submitting samples to a testing service at the APHA’s National Reference Laboratory, Weybridge. This can help detect a notifiable avian disease at the earliest opportunity, for such cases. Further information: ahvla.defra.gov.uk/vet-gateway/tte/index.htm.

Avian influenza and Newcastle disease are notifiable diseases and if you suspect either of these diseases, you **must tell your [local APHA office](#) immediately**, even out-of-hours and at the weekend.

Further help and advice

Always practice good biosecurity, ask your vet for advice if you suspect disease and report any suspicions of avian influenza or Newcastle disease to your [local APHA office](#) without delay.

You can find more information about diseases such as avian influenza and Newcastle disease, including signs to watch out for, at the following pages:

- England: www.gov.uk/guidance/avian-influenza-bird-flu and www.gov.uk/guidance/newcastle-disease, or you can call the Defra Helpline on **03459 33 55 77**.
- Wales: gov.wales/topics/environmentcountryside/ahw/disease/avianflu/?lang=en and gov.wales/topics/environmentcountryside/ahw/disease/newcastle-disease/?lang=en.
- Scotland: www.gov.scot/avianinfluenza and www.gov.scot/newcastledisease.



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Any enquiries regarding this publication should be sent to us at

Animal Health Policy, Exotic Diseases Control
Defra
Area 5B, Nobel House, 17 Smith Square
London SW1P 3JR

PB 11380

Version Control	
Version 1.0	Published 21 December 2014
Version 1.1	Published on 29 November 2016. Minor editorial changes to biosecurity advice and updates to links. Additional information regarding the Animal and Plant Health Agency “testing to exclude” scheme included on page 12 and new paragraphs added on welfare surveillance on page 13.
Version 1.2	Published on 7 December 2016. Document updated to refer to specific biosecurity considerations applicable across Great Britain under Avian Influenza Prevention Zones that were created by Defra, the Scottish Government and the Welsh Government on 6 December 2016.