



Department
for Environment
Food & Rural Affairs

Biosecurity and preventing welfare impacts in poultry and captive birds

Advice for all poultry keepers

31 March 2017



Llywodraeth Cymru
Welsh Government



Scottish
Government
gov.scot

Contents

Introduction	3
Benefits of biosecurity	3
Spread of disease	3
General biosecurity measures	4
Buying new stock	6
Other actions to consider for all poultry keepers.....	6
How to stop disease	7
Protecting your birds from wild birds	7
Housing	8
Netted structures.....	8
Feeding and watering	9
Deterrents for wild birds	9
Pheasants, partridges and other game birds	10
Domestic ducks and geese.....	10
Captive wildfowl and waterfowl.....	10
Backyard flocks.....	10
Zoological collections of birds.....	11
Planning permission for bird housing	11
Effects on organic and free-range status	12
Welfare: taking care of your birds.....	13
Welfare surveillance.....	13
Maintaining welfare after the release of free-range hens from housing.....	16
Further help and advice	16
What to do if you find dead wild birds.....	16
Be vigilant!.....	16
Further help and advice	17

Introduction

This document tells you, as a keeper of poultry or captive birds, about the biosecurity measures you should 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 represents biosecurity guidance that is published in accordance with section 6A of the Animal Health Act 1981. You should read this document together with the specific declarations and legal measures in force at the time, and detailed on [GOV.UK](#), on the [Scottish Government website](#), or on the [Welsh Government website](#). Measures could include Protection Zones, Surveillance Zones, Restricted Zones or an Avian Influenza Prevention Zone.

Benefits of biosecurity

Good biosecurity improves overall flock health and productivity by helping to keep out poultry diseases such as avian influenza and Newcastle disease. In the event of an outbreak, it also limits the spread of disease both on and off your premises and cuts the costs of disease treatment and reduces losses, which could improve profitability.

Spread of disease

Disease can be spread through several pathways, including:

- the introduction of diseased birds
- contact with diseased flocks
- vermin or wild birds
- birds drinking from contaminated water sources
- birds eating contaminated feed
- contamination of vehicles, equipment, clothing and footwear which are moved between and within farms
- using shared farm equipment and vehicles, which have not been effectively cleansed and disinfected
- unsatisfactory cleansing and disinfection of vehicles, sheds, feeding troughs or other equipment

General biosecurity measures

The following biosecurity measures are good practice and you should implement them wherever practical. During outbreaks of notifiable avian disease or where an Avian Influenza Prevention Zone is declared some or all of these measures will become mandatory requirements within relevant disease control zones.

- **Wear clean overalls and footwear when entering poultry farms to avoid bringing infection onto your farm, or spreading it around farms, via your clothes, footwear or hands.** Where possible, you should provide staff and visitors with protective clothing and footwear dedicated for use on your premises. You should remove and cleanse, disinfect, launder or dispose of these after use.
- **Strictly limit and control access to poultry flocks. If possible, the site should be fenced with a controlled entry point.** You should restrict the number of visitors and their vehicles, and keep them 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 houses 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 (<http://disinfectants.defra.gov.uk>). 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. The effectiveness of the disinfectant can become compromised in the presence of excessive organic material. Therefore they should be checked regularly and 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. It is preferable to have specific footwear that is only worn in the bird area, changing footwear on entering and leaving the area accessed by birds.
- **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. You could consider the use of water sanitisers 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 wild bird access to your drinking systems.
- **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. You should also clean and disinfect cleaning equipment and protective clothing. Make sure that 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

- Check whether poultry and/or captive bird gatherings are allowed or not. If they are banned then buying new stock from a gathering will not be possible (although sales that are not at a gathering may still go ahead).
- 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/ranges.
- 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.

Other actions to consider for all poultry keepers

Where practical, you should also take the following steps:

- 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.
- For poultry flocks with fewer than 50 birds, although you are not required by law to register them, we 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 they 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 private veterinarian for further advice.

- Review the 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) Diseases Alerts Service to keep up to date with the latest news on exotic notifiable animal disease outbreaks in Great Britain (<http://animalhealth.system-message.co.uk>).
- Check via the above weblink that APHA have your correct contact details, including email address and mobile phone number. This will enable us to contact you in the event of an outbreak and avoid delays in issuing licences.

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 bird secretions, faeces, feathers etc contaminating anything that may then come into contact with poultry such as feed, water, utensils clothing or vermin).

The best way to minimise direct contact with wild birds is to keep poultry housed – kept in their sheds, or if necessary, moving them into a suitable building. This may be a shed or outbuilding adapted to house them, or a new temporary structure like a lean-to or polytunnel.

However, the risk cannot be eliminated just by keeping your birds housed. The virus can be carried into buildings on people and things.

If you choose not to house all your birds indoors, you should implement as many of the biosecurity steps outlined above as possible to minimise the risk of contact with wild birds. Biosecurity is cumulative, so the more you do, the better protected your birds will be.

Where an Avian Influenza Prevention Zone or other disease control zone such as Protection Zone, Surveillance Zone or Restricted Zone has been declared, the declaration will state the mandatory biosecurity and wild bird separation measures that will apply. **You must follow the disease control measures and any published guidance in force at the time.**

Housing

If you choose to house your birds for biosecurity or commercial reasons, or housing is required by government, you should ensure that wild birds are prevented from gaining access to your birds by **covering any openings or ranges with netting**. This should have a mesh size that is sufficiently small to exclude wild birds from passing through the openings (see the section below for advice on mesh size). Check these structures regularly for damage that may allow wild birds access. If your birds spend time outside, you will need to consider alternative arrangements. Planning permission may be required for some of these options and the section on planning (below) should be consulted. There are a number of different housing options, including:

- Making use of suitable existing buildings (such as barns, farm sheds, outbuildings, garages, garden sheds) adapted for your birds. Ensure that there is adequate ventilation and that any openings or ranges 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 or veranda on the side of existing houses (provided it does not impact on the minimum space requirement for access to outdoor areas for free range birds).
- 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 and light. This is also covered in the advice on welfare later in this guidance.

Netted structures

Although not as effective as permanent or temporary housing, netting of fenced areas can significantly reduce the risk of disease providing wild birds cannot gain access to the enclosed area and steps are taken to make the area unattractive to wild birds.

Total netting may be a requirement in Avian Influenza Prevention Zones and other disease control zones. It may also be an alternative to mandatory housing for birds that cannot easily be housed; for example ducks, geese and game birds may be kept in fully netted areas, even if this means netting a smaller area than they currently occupy¹.

If you choose to totally net outdoor areas, or this is required by government, the following steps should be taken:

¹ The only exception is for certain zoo birds

- Erecting a net structure to avoid contact with wild birds;
- When using a netted structure, pay 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;
- It is generally recommended that netting should have a maximum mesh size of 25mm although for exposed areas or where heavy snow fall can be expected, a larger mesh size of up to 50mm may be appropriate. You should, where appropriate, consult commercial suppliers of anti-bird netting for advice and further information on equipment.

Feeding and watering

Regardless of whether your birds are kept indoors or not, you should always isolate their feed and water from wild birds. Available feed and water will attract wild birds; by feeding and watering your birds under cover, and ensuring feed leaks from silo augers etc are prevented, 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.

Deterrents for wild birds

When designing any protective structure, if you need to use posts, you should think about incorporating spike strips to deter perching by wild birds. In all cases you should also consider making use of deterrents such as flutter tape, flashing lights and scarecrows. However, in doing so, you should be careful to avoid any potential impacts on your birds; particularly flashing lights.

Pheasants, partridges and other game birds

Birds should be housed whenever possible. If this is not possible, they should be kept in fully netted areas. All feeding should take place under cover. Specialist advice is available from representative organisations and the Animal and Plant Health Agency (APHA).

Domestic ducks and geese

Ducks should be housed whenever possible. If this is not possible, they should be kept in fully netted areas. If you keep small numbers of geese, it may be possible to house them. However, if that is not possible, you should use temporary netted structures where practical, these 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. If this is not possible, they should be kept in fully netted areas. 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.

Backyard flocks

Where possible, the best approach may be to keep birds in a suitable building, such as a shed, outbuilding or garage adapted to house birds, or a new temporary structure such as a lean-to or polytunnel. Ensure openings and ranges are netted to prevent wild birds getting in and remove any hazardous substances.

You are responsible for ensuring the welfare of your birds while they are indoors, and for keeping them calm and comfortable:

- Make sure birds have natural light where possible and are not kept permanently in the dark. Any artificial light should ideally follow typical day and night patterns.
- Ensure that there is adequate ventilation – adult birds will tolerate low temperatures but are very susceptible to high temperatures (temperatures should not be allowed to go significantly above 21°C).
- Feather pecking can be a risk when birds are kept indoors. Keep the environment interesting to reduce this risk. Consider adding pecking blocks, fresh bedding, straw bales and objects such as cabbages, scatter feed or whole grain on the floor of the building and add grit to litter so birds can scratch and carry out natural foraging behaviours.

- If feather pecking occurs, you can reduce light levels, although they should still be light enough for you to read a newspaper.
- If you keep several types of birds, house chickens or turkeys in separate enclosures from waterfowl (ducks and geese) unless they are usually housed together.
- Check birds regularly to ensure they are healthy and have enough food, water and dry bedding.
- You may want to consider nutritional supplements in drinking water as these can help keep birds calm.
- Skin parasites such as red mite can be a problem in birds kept indoors and can make birds more irritable. Advice on controlling these parasites can be obtained from your vet.

If an Avian Influenza Prevention Zone is in place requiring birds to be housed or otherwise kept separate from wild birds, specific advice and guidance for backyard producers may be published on [GOV.UK](https://www.gov.uk), or on the [Scottish Government](https://www.scotland.gov.uk), or [Welsh Government](https://www.welsh.gov.uk) websites.

Zoological collections of birds

There may be welfare issues in implementing some of these measures for zoological collections of birds². All zoos should have a contingency plan for responding to disease outbreaks. If it is not possible to meet the basic welfare requirements of particular species by housing or full netting then steps should be taken to implement the good biosecurity practices agreed with APHA and the British and Irish Association of Zoos and Aquariums (BIAZA).

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. Information on planning authorities in Scotland is available at www.scotland.gov.uk/Topics/Built-Environment/planning/Roles/Planning-Authorities.

² A zoo/aquarium licensed under the zoo licensing act.

Steps to take before letting birds outside

Before releasing birds after a period of housing, there are a number of steps you should take to prepare the outside area (the “range”) and reduce the risk of infection. To be effective these steps should be taken as early as possible before birds are allowed back onto the range:

- Inspect your range regularly and remove any obvious contaminants from wild birds (such as faeces or feathers) in a biosecure manner.
- Net ponds and drain waterlogged areas of land. If this isn’t possible, then you can fence them off from your birds so they cannot access it whilst ranging, or use an alternative paddock that doesn’t have access to water.
- Remove any feeders and water stations from the range, or ensure that they are covered to sufficiently restrict access by wild birds.
- Consider using decoy predators or other livestock (such as sheep or cattle) on the range, or allowing dogs to accompany you on foot patrols around the range. You could also consider bird scarers if their use is appropriate for the area (see [NFU Code of Practice](#) on bird scarers).
- Consider daily checks of the range area to monitor any changes in the biosecurity measures in place and to record changes in wild bird activity and discuss with your own vet where these are noted.
- Consider increasing the number of shelters on the range area.

Effects on organic and free-range status

This section applies where government has put in place mandatory housing or separation from wild birds.

- 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 Standards](#) continue to be met.
- Under EU egg marketing regulations, keepers who are required by government to house their birds to protect animal health can retain their free range status during the fixed 12-week grace period. Eggs laid by housed birds after the grace period has expired may no longer be marketed as free-range. Once allowed back outside, laying hens regain their free range status provided all other free range marketing requirements are met.
- Under EU poultrymeat marketing regulations, keepers who are required by government to house their birds can retain their free range status provided birds

have spent a minimum of half their life time with either access to outside areas, or housed during the fixed 12 week grace period. If birds are housed for longer than half their lifetimes outside of the 12 week grace period, they cannot longer be marketed as free range

- “Traditional free-range” and “free range – total freedom” birds ordinarily must have continuous daytime access to open-air runs from a certain age depending on the species. In the case of chickens for “Traditional free range”, it is six weeks of age with a minimum age at slaughter of 81 days. A chicken will lose its ability to acquire “Traditional free-range” status if it is kept housed beyond the 12 week grace period and after the first 6 weeks of its life and will never be able to attain it. For “Free range – total freedom” birds they must have continuous access to open air runs. They will lose their free range status if they continue to be housed after the grace period and will never be able to attain free range – total freedom status.
- For 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.

Welfare: taking care of your birds

Welfare surveillance

You must always look after the welfare of your birds, 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, behaviours associated with redirected foraging and any other signs of poor welfare such as loss of condition.
- You should understand the type of pecking that could occur in your flock. Aggressive pecking, which is not the same as injurious feather pecking, may also be seen when management changes are made. Featherwel, BEIC and AssureWEL have produced practical guidance which describes how to check for early signs of injurious feather pecking in laying hens. AssureWel has also produced a benchmarking tool for feather loss scores for commercial producers. Look on the Assurewel website for:
 - [Guide to reducing the risk of injurious pecking occurring in non-cage laying hens](#)
 - [Benchmarking tool for feather loss scores](#)

- You should consider using scratch feeds to prevent boredom amongst housed flocks, which can lead to injurious feather pecking and cannibalism.
- 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.
- You should consider installing thermometers at bird level – you should monitor the maximum temperature, and take action 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.
- You should consider providing perches as a welfare benefit³. There are many advantages, including making use of vertical space so that stocking density is reduced, but the main advantage is giving submissive birds the chance 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. Consider making use of damp proof membranes for earthen floors to maintain good litter conditions.
- You should also consider ways to enrich the birds' environment more generally, such as using straw bales or hanging cabbages.
- You should maintain a regular lighting pattern with no sudden changes. If an outbreak of injurious feather pecking occurs, you may need to reduce the lighting, as well as adding more environmental enrichment including scratch feeding if feasible.
- 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.
- You should avoid sudden changes to main diet and, where possible, mix old and new diets through any transition period. Mashing feed increases eating time compared to pellets and keeps the birds occupied which reduces the risk of injurious feather pecking. Consumption of whole oats, wheat, corn, alfalfa, maize/barley/pea, silage and carrots can reduce injurious feather pecking, plumage damage and death.

³ In Scotland, for species other than waterfowl, it is a requirement that all Scottish registered laying flocks are provided with aerial perching.

- You should maintain effective levels of disease control. High levels of red mite infection and worm burdens are associated with increased risk of injurious feather pecking.
- You should provide pullets with rearing conditions that are similar to those during laying. If pullets are normally given access to a range during their rearing phase and are then confined, this can increase the risk of injurious feather pecking. Pullet suppliers should make any unexpected confinement history available to those taking delivery of these birds to help reduce the risk of injurious feather pecking at onset of lay and during the laying period.

Specific measures for ducks

- You may wish to provide an alternative source of water for housed ducks. Open water sources such as troughs, filled water buckets and showers enable them to immerse their heads in or under water and preen effectively, keeping eyes, nostrils, beaks and plumage in a healthy condition. However, it is essential that they are not given access to water which may be contaminated by wild birds. You should ensure that litter quality does not deteriorate with excess water spillage. Wet bedding can increase the spread and severity of pododermatitis (contact dermatitis on the feet) and an increased susceptibility to other infectious diseases.
- Consider making use of raised, perforated plastic floors or equivalents to place water sources on to assist maintaining litter/straw quality.
- You should ensure that ventilation and temperature controls are appropriate for ducks. They drink and produce more water in their droppings than other poultry, and humidity and ammonia levels can increase rapidly. Adult ducks prefer lower temperatures (around 13°C) to other poultry.

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 on the following pages:

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

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

When released after a period of housing, 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 occurrence of these behaviours. If you are worried about their welfare, seek advice from your vet.

You should continue to inspect livestock more regularly than once a day. This will ensure that you detect any injurious pecking resulting from housing 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 afterwards unless injurious pecking occurs. You should only decrease light intensities for the period where injurious pecking is a welfare problem.

During housing and afterwards, resources such as food and water sources, should be made more widely available 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 over a period of 7-10 days in order for them to re-adjust to temperature changes, light conditions and additional external influences.

Further help and advice

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 such as shaking or incoordination, a decreased eating or drinking, falling egg production, eggs with thin or misshapen shells and breathing difficulties 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: <http://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**.
- Scotland: www.gov.scot/avianinfluenza and www.gov.scot/newcastledisease
- Wales: <http://gov.wales/topics/environmentcountryside/ahw/disease/avianflu/?lang=en> and <http://gov.wales/topics/environmentcountryside/ahw/disease/newcastle-disease/?lang=en>

Version Control	Date
Version 1.0	Published 21 December 2014
Version 1.1 Version 1.2	<p>Published on 29 November 2016.</p> <p>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.</p> <p>Published on 7 December 2016.</p> <p>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.</p>
Version 1.3	<p>Published on 18 January 2017</p> <p>Document updated to reflect the extension to the Prevention Zones to 28 February 2017, also includes extra guidance for those with backyard flocks.</p>
Version 1.4	<p>Published on 31 March 2017</p> <p>Document updated to remove specific references to any current Prevention Zones which may be in force, and to include extra guidance on welfare.</p>



You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or email PSI@nationalarchives.gsi.gov.uk

This publication is available at www.gov.uk/government/publications

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