
Biosecurity and preventing disease in captive birds

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Introduction

This guidance provides information on biosecurity measures you can take to prevent your birds from becoming sick with diseases like avian influenza and Newcastle Disease. While the guidance focuses on biosecurity measures in commercial poultry premises, you should also read it if you keep birds for hobby or other purposes.

In particular, you should:

- **always practice good biosecurity;**
- **be vigilant and monitor your birds frequently;**
- **review and assess the risk of disease to your birds with your vet;**
- **plan how you will manage any free range birds if 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 is biosecurity?

Biosecurity means taking steps to ensure good hygiene practices are in place so that the risk of a disease occurring or spreading within or from your premises is minimised.

Good biosecurity should be practised at all times, not just during a disease outbreak. Taking the right measures can help protect your birds, your business, and the industry.

What are the benefits?

Good biosecurity:

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

How does disease spread?

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.

Actions now and planning ahead

Even if you already practice good biosecurity, you are encouraged to 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.
- 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.
- You must register your birds (unless kept in your home as pets), within one month of their arrival at your premises. Further information and a link to the registration form are available from www.daera-ni.gov.uk/publications/bird-registration-form
- If you have staff, give them the information and training they need to maintain good standards of hygiene and biosecurity at all times. If they are allowed 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.

Feed and water free range birds indoors where possible to reduce mixing between your birds and wild birds. You should also consider which other measures may be appropriate to protect your birds from wild birds (see guidance “Preparing for Avian influenza - Separating Domestic Birds from Wild Birds” available at www.daera-ni.gov.uk/publications/preparing-ai-separating-domestic-birds-wild-birds)

- Consult your vet to consider what contingency plans 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 Notifiable Epizootic Avian Disease Control Strategy for Northern Ireland details the types of movement restrictions that could be put in place. This is available at www.daera-ni.gov.uk/publications/notifiable-epizootic-avian-disease-control-strategy
- If you farm free range birds you should plan how you will manage them if there is a need to protect them from wild birds.

How to stop disease

General biosecurity measures

- **Don't bring infection onto your farm, or spread it around your farm, via your clothes, footwear or hands.** Clean overalls and footwear must be worn when entering poultry farms. 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.
- **Have pressure washers, brushes, hoses, water and an approved disinfectant** (www.daera-ni.gov.uk/publications/approved-disinfectants) **available.** Make sure they are used by all visitors to clean vehicles, equipment and boots both before entry and upon leaving. Visitors should, ideally, only use footwear and outer clothing that is kept on-site.
- Disinfectant in boot dips should be changed in accordance with the manufacturer's instructions. Use a stable disinfectant with good resistance to inactivation by organic matter, at a minimum of DAERA General Order

concentration (see above link). 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 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.** This helps avoid wild birds and animals being attracted onto the site and entering buildings and stores; and reduces the risk of vehicles becoming contaminated.
- **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.
- **Minimise contact between poultry and wild birds.** Wild birds can carry poultry diseases. Prevent accumulation of standing water and remove 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 guidance “Preparing for Avian influenza - Separating Domestic Birds from Wild Birds” available at: www.daera-ni.gov.uk/publications/preparing-ai-separating-domestic-birds-wild-birds.)
- **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.
- **Feed bins, hoppers and feeding equipment must be cleaned and maintained regularly.** Feed silos and containers must be sealed to prevent

vermin and wild birds accessing and contaminating feed.

- **Feed should only be obtained from a mill or supplier that operates in accordance with relevant Codes of Practice**, 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 guidance on fallen stock: www.daera-ni.gov.uk/articles/animal-products-general-guidance.
- **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 it 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 that you know have been cleansed and disinfected.
- 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.

What to do if you find dead wild birds

If you find one or more gulls, waders, ducks, geese and swans (webbed feet, long legs or long neck) or five or more of any species in the same location in Northern

Ireland you should report them to the DAERA Helpline on **0300 200 7840**.

Be vigilant

Look out for signs of disease in your flock.

Increased mortality, a decrease of feed and/or water intake, falling egg production 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!**

Avian influenza and Newcastle Disease are notifiable diseases and if you suspect either of these diseases, you **must tell your local Divisional Veterinary Office (DVO) immediately**, even out-of-hours and at the weekend.

You can find more information about diseases such as avian influenza and Newcastle Disease, including signs to watch out for, on the DAERA website at www.daera-ni.gov.uk or by contacting your local Divisional Veterinary Office.

Taking care of your birds

The welfare of your birds is always an important concern, and particularly so in the case of a disease outbreak. Movement restrictions can have a negative impact on poultry, with confinement potentially leading to health and behavioural problems. Having a contingency plan in place will make sure the welfare of your flock remains a priority at a critical time.

For guidance and information on poultry welfare, contact your local Divisional Veterinary Office.

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 Divisional Veterinary Office without delay.

You can find more information about diseases such as avian influenza and Newcastle disease, including signs to watch out for, on the DAERA website at: www.daera-ni.gov.uk/articles/introduction-disease-control-and-prevention or by contacting your local Divisional Veterinary Office.