

Practical Biosecurity for Pig Farmers, Smallholders and Pet Pig Keepers in Scotland





SRUC, Scotland's Rural College, Leading the way in Agriculture and Rural Research, Education and Consulting

Practical Biosecurity

Introduction

Outbreaks of disease can have a severe impact on the livestock industry. They can cause economic hardship, lead to animals suffering, and have a major impact on other sectors, such as food processing and tourism. This leaflet outlines the general principles of biosecurity intended for pig farmers and smallholders. These biosecurity measures will help prevent incursions of notifiable diseases, such as foot and mouth disease, African swine fever and classical swine fever. Adopting good biosecurity will also help to prevent introduction of other diseases on the unit, thereby protecting the herd from the risks of new infections.

Biosecurity: What is it and why is it important?

Biosecurity is a set of practical measures designed to reduce the risk of the introduction, establishment and spread of animal diseases, infections or infestations to, from and within an animal population. Put simply, it means keeping disease out. There is no "one size fits all" solution – biosecurity should be adapted to present risks. You should always get professional advice from your private vet as part of health planning procedures.

Infections can be introduced by infected animals, vehicles that have been in contact with pigs, pig products, people, bedding/slurry or contaminated equipment. Carrier pigs can look normal and healthy, but can spread disease directly or indirectly. Many types of infection can survive for considerable periods outside a pig which can increase the risk of spread from place to place. Therefore, maintaining a high standard of biosecurity is important to keep diseases out. Some viruses spread easily in the air to other farms, so neighbours should work together to maintain the health status of pigs in the area.

Biosecurity measures that can be implemented and practised include:

1. Report suspicion of disease immediately

Prompt reporting of suspicion of notifiable disease is a legal requirement. For non-notifiable disease, keepers should contact their private vet as soon as they suspect ill health in their animals. This is crucial in preventing disease spreading further within their stock or to other holdings. Descriptions of notifiable diseases can be found at:

http://www.gov.scot/notifiable-diseases Report suspicion to the relevant authority promptly.



2. Minimise movement of animals, people, equipment and vehicles on and off the premises

2 (i) Live Pigs

Live pigs (e.g. replacement stock) pose the most significant risk of an incursion of infection or disease and can compromise biosecurity.

- Maintain a closed herd if you can.
- Obtain replacements from a reputable source.
- If applicable, ask to see a completed QMS Health Declaration form www.qmscotland.co.uk. Regular suppliers only need to complete declarations on subsequent occasions if their health status changes.
- Be aware of the disease risks when considering importing live pigs or pig products, and adhere to all import regulations.
- Use a known and approved source of semen for artificial insemination.
- All movements of pigs onto or off the premises must be registered with ScotEID. For information about registering with ScotEID see: www.gov.scot/pigs
- Quarantine incoming pigs and house them in isolation away from the main herd. Any
 diseases they may be carrying or incubating can be detected either clinically (by the signs
 shown) or serologically (by blood testing). Under no circumstances should animals be
 introduced directly into the main herd. Introduction of animals directly into the herd is always
 a very high risk and a significant cause of herd health breakdown.

Effective quarantine procedures require:

- A good location, ideally well away from the main herd.
- That the pigs spend sufficient time in quarantine; ideally this should be 6 8 weeks, but 4 weeks can be considered as a minimum on commercial farms.
- Separate staff and equipment for the isolation facility to prevent any indirect contact with the main herd. If this is not possible, it is essential to change clothing and observe strict hygiene before returning to the main herd. It is helpful to have a dedicated changing area for your staff, including hot showers, cleansing and disinfection facilities to ensure compliance. The quarantine area should have its own loading bay, slurry system and waste disposal.
- Daily routines and practices to be written into a health plan and adhered to.
- Effective quarantine procedures require pigs to be tested for freedom from specific diseases while in quarantine if extra assurance is required.
- That there is a legal standstill period when animals move onto a holding when other stock (including pigs) cannot be moved off the farm. Guidance on the requirements can be found at: www.gov.scot/Diseases/MovementRestrictions/SeparationAgreements



2 (ii) People

- Avoid using the same staff across premises, even within the same business. If staff must
 move between premises, strict biosecurity protocols should be implemented, i.e. boots
 and clothes should be changed between each of the premises, hair should be protected
 with a clean head covering and hands should be washed between premises.
- Avoid unnecessary visitors entering your premises. If this is not possible, ensure visitors change into clean clothes and boots provided and follow biosecurity procedures. Do not assume visitors will know what these measures are.
- · Personnel must not take any pork products onto the pig unit.

2 (iii) Equipment

- Avoid sharing equipment between premises, even within the same business. If this is not
 possible, equipment should be thoroughly cleansed and disinfected between premises.
- Any equipment moving onto or from premises must be thoroughly cleansed and disinfected. This includes veterinary equipment, slurry spreaders etc.

2 (iv) Vehicles

Vehicles can become contaminated and can carry disease. Viruses such as Porcine Epidemic Diarrhoea virus can be shed in the faeces of infected animals at extremely high rates and can spread easily and quickly via contaminated vehicles.

- Any vehicle used to transport a pig must be cleansed and disinfected to a strict standard before and after each use. This is a legal requirement throughout GB. Guidance on the requirements can be found in Schedule 2 at: https://www.legislation.gov.uk/ssi/2005/653/schedule/2
- Unauthorised vehicles should not be allowed onto the premises. At times of heightened risk, well-maintained disinfectant wheel dips should be used upon entering and leaving the premises. Disinfection equipment should be provided for vehicles that have to enter and leave the premises (washers and disinfectant sprays). Use a General Orders Government approved disinfectant at the recommended dilution rate. For advice on approved disinfectants see:

http://disinfectants.defra.gov.uk/DisinfectantsExternal/Default.aspx?Module=ApprovalsList SI

- Drivers should change their footwear for use on farm and driving the vehicle. Footwear should be cleansed and disinfected when entering the premises and again before getting into the vehicle.
- Any vehicles entering or leaving the parts of the premises where pigs are kept should follow the principle of "clean on, clean off". Vehicles should be free from any visible contamination and then have their wheels and wheel arches cleansed and disinfected. Foot wells should be clean and floor mats cleansed and disinfected regularly. This applies to commercial hauliers as well as to farm vehicles.
- Minimise the risk of cross-contamination between "dirty" on-site vehicles and those entering/leaving the premises.
- Where possible, vehicles should not enter any part of the site where the pigs are kept.
- Feed and other supplies should be delivered from outside the perimeter fence. If unloading bulk feed or other materials by blowing, the hose used should belong to the

premises, to avoid indirect contact with other farms.



- The loading bay must also be on the perimeter of the premises. Pig transporters must not enter the premises, especially if carrying pigs from premises with lower health status. 'No Entry' signs with a contact phone number should be clearly visible at gates and the loading bay.
- 3. Animal identification
- Pig identification and traceability is an essential part of disease control in Scotland.
- In the event of a disease outbreak, it is important that pig movements can be easily traced.
- Each pig keeper must register the land they keep pigs on with the Scottish Government Rural Payments and Inspections Division (RPID). RPID will issue a unique identifier for the land known as a County Parish Holding (CPH) number. The CPH number must be used to report moves off or on the land.
- Each pig keeper must also register with the Animal and Plant Health Agency (APHA) as a pig keeper. APHA will issue a unique herd mark, which must be used to identify pigs born on the holding.
- Further information on pig identification and traceability requirements can be found at: www.gov.scot/pigs
- 4. Keepers should check their pigs regularly
- Pigs must be checked at least once a day to detect illness and prevent any avoidable suffering.
- Any pigs that appear to be ill or injured must be cared for appropriately.
- If the pigs do not respond, veterinary assistance must be sought as soon as possible.
- Inspection involves moving among the pigs, encouraging them to rise and move, and looking at them closely for signs of problems, such as injuries or ill health.
- Follow the Codes of Practice for the Welfare of Pigs: http://www.gov.scot/Resource/0039/00391633.pdf
- 5. Food, Water and Bedding
- Feed brought onto the premises should be of high quality and from reputable sources. Ensure that feed storage is sealed and rodent proof.
- It is illegal to feed pigs with kitchen or catering waste. This practice is prohibited under Animal By-Products legislation, guidance is available from: www.gov.scot/Animal-welfare/AnimalByProducts
- Water, if not from the mains, should be checked for bacteriological quality from time to time and disinfection systems used if it fails to meet minimum standards. Flow rates and availability must be adequate for the age of pigs and the stage of the production cycle.
- Bedding material must not be purchased from other premises with pigs and should be stored carefully to prevent contamination with wildlifefaeces.
- 6. Pests and wildlife
- Rodents, birds, flies and a wide variety of wildlife are capable of transmitting diseases to pigs.
- Netting and bait traps are recommended to prevent rodents and flies entering buildings.



- Feeders should be covered to reduce attraction of birds and rodents.
- Feral pigs represent a serious health risk to pig holdings and must be kept out. Ensure that housing
 and boundary fencing is secure to prevent straying and contact with neighbouring livestock or feral
 pigs.
- Such risks underline the need for a secure perimeter fence with a minimum height of 1.5m and buried to a depth of 30cm, in the case of outdoor premises, double fencing in order to prevent direct contact with wildlife. If there are feral pigs in the area, an electric strand outside the perimeter fence at a height of 50cm would help to maintain separation

7. Deadstock

- The carcass disposal collection point must be located outside the main perimeter of the premises. Farm based incinerators must be properly maintained and carcass held securely pending incineration.
- · Access to dead stock by domestic or wild animals must be prevented.
- Fallen stock must be disposed of in accordance with Animal By-Products legislation and go to an approved knacker. You can do this either by private arrangement or under the National Fallen Stock Scheme. For more information, can contact the NFSCo helpline on: Tel 0845 054 8888.

Sources of Further Information

- · Your veterinary practice
- Scotland's Rural College www.sruc.ac.uk
 Search for technical notes to find out more information on biosecurity, animal welfare and keeping animals.
- National Fallen Stock Company www.nfsco.co.uk

Awareness of Clinical Signs

For details on notifiable diseases:

www.gov.scot/notifiable-diseases

www.gov.scot/africanswinefever

To report a notifiable disease see the 'Scotland: APHA Field Services' section at https://www.gov.uk/guidance/contact_cha#scotland-apha-field-services

See enclosed pinup for biosecurity advice for keeping disease out and what to do if disease is confirmed in the area.



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