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# **CLASSICAL SWINE FEVER CONTROL STRATEGY FOR NORTHERN IRELAND**

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Department of  
**Agriculture, Environment  
and Rural Affairs**

[www.daera-ni.gov.uk](http://www.daera-ni.gov.uk)

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# 1 Background

## 1.1 Purpose of document

This document describes how an outbreak of Classical Swine Fever (CSF) in Northern Ireland (NI) would be managed. The primary purpose of this document is to set out the measures applied in the event of an outbreak of CSF and it summarises the wider framework aimed at preventing and limiting an incursion of CSF.

The strategy aims to provide information on the policies to be applied so that all parties affected during an outbreak of CSF will be better placed to respond quickly and effectively to control the outbreak. Furthermore, this strategy will enable affected parties to prepare to mitigate the likely impact of these control measures during a CSF outbreak.

## 1.2 Approach

Northern Ireland is recognised as a separate epidemiological unit from the rest of the United Kingdom (UK) and would liaise with the Republic of Ireland (RoI) during an outbreak of CSF in either or both jurisdictions. It is recognised by the Department of Agriculture, Environment and Rural Affairs (DAERA) and the Department of Agriculture, Food and Marine (DAFM) that sustained co-operation between both administrations would be essential to reduce the further spread of CSF.

The strategy reflects existing legislation, setting out control measures to be put in place from the point of suspicion of CSF through to NI/UK regaining disease freedom. The strategy is intended to be a living document. DAERA seeks to ensure that policies and its preparedness to deliver them are regularly reviewed to ensure they remain fit for purpose.

## 1.3 Strategic fit

The strategy is consistent with broad animal health policy principles, namely:

- prevention is better than cure;
- sharing responsibility and cost, requiring close working between government and industry in developing disease control measures;
- complying with the World Organisation for Animal Health (OIE – Office International des Epizooties) disease control chapters;
- implementing European Union (EU) law and international obligations to trading partners;
- mitigating the risk of spread of disease to and from other member states (MSs) or third countries;
- ensuring the welfare of animals;
- being consistent with wildlife management policies;
- applying disease response plans as set out in the [Contingency Plan for Epizootic Disease](#).

## 1.4 Classical Swine Fever

The CSF virus is not known to have any health impact for people, thus the measures in this strategy are concerned only with animal health.

CSF is classified as a notifiable disease by the OIE. This means any suspicion or occurrence of CSF must be notified to the authorities. The last outbreak of CSF in Northern Ireland occurred in 1958. However the last UK outbreak occurred in 2000 when 16 farms were affected and around 75,000 pigs culled for disease control purposes.

CSF can be spread through:

- direct contact with infected pigs, faeces, genetic material or body fluids;
- indirect contact via fomites, such as equipment, vehicles or people who work with pigs moving between pig farms with ineffective biosecurity; and
- pigs eating infected pig meat or meat products. CSF virus can survive in meat and pig products for several years.

Aerosol routes are not thought to be a major mechanism of spread for CSF, although these have been shown to occur experimentally.

It is possible that CSF can be spread over short distances via mechanical vectors.

Offspring of CSF infected sows can become infected in the uterus and can shed the virus for months after birth.

When CSF first enters a herd, it can spread very rapidly. A high proportion of pigs may become ill with a high fever, and many of them may die.

The clinical signs of CSF are very similar to African Swine Fever (ASF) and the diseases can only be differentiated by diagnostic tests.

Information on the disease and its history is readily available from many sources and some useful links include:

- [www.daera-ni.gov.uk/articles/classical-swine-fever](http://www.daera-ni.gov.uk/articles/classical-swine-fever)
- [www.oie.int/fileadmin/Home/eng/Health\\_standards/tahm/2.08.03\\_CSF.pdf](http://www.oie.int/fileadmin/Home/eng/Health_standards/tahm/2.08.03_CSF.pdf)

## 2 Strategic control framework

### 2.1 Disease management principles

Managing epizootic diseases is primarily about managing risk. By definition epizootic diseases are those not normally present in the country and therefore risks can be managed in two main ways:

- reducing the likelihood of an outbreak of CSF by putting in place measures to prevent an incursion of CSF, which includes our Portal controls and to detect it if it should occur; and
- being prepared to reduce the impact of an incursion of CSF.

Section 3 overviews the measures currently adopted to reduce the likelihood of an incursion of CSF into NI. This has been included to provide context for the primary purpose of this disease control strategy which is concerned with minimising the impact of any CSF incursion.

This section sets out the disease control principles and provides an overview of the key measures that will be taken. The remainder of the document sets out the control policies in more detail.

Whilst most elements of a control strategy will only come into force should CSF be detected, readiness to operate these measures and to minimise the consequential impacts of these measures need to be prepared in advance. One aim of this document is to assist all parties in their contingency planning and preparation by clearly setting out the principles of disease control.

### 2.2 Disease control objective

The Department's primary objective in tackling any outbreak of CSF will be to contain (through early detection) and eradicate any incursion of disease as quickly as possible and regain disease free status. In doing so, DAERA will act swiftly and decisively, in partnership with its operational partners and stakeholders to:

- minimise the overall cost of the outbreak and the burden on the taxpayer and public as well as the economic burden of the outbreak on the food, farming and tourism industries and the wider economy; and
- protect the health and safety of the public and those directly involved in controlling the outbreak.

In delivering these objectives the disease control measures aim to:

- minimise the number of premises affected;
- minimise the number of pigs slaughtered;
- protect the welfare of healthy pigs;
- minimise any impact on pig producers, meat processors and other related industries and to domestic and international trade in pigs and pig products;
- minimise the impact on tourism, the environment and rural and wider economies;
- support sustainability within industry;
- minimise the burden on taxpayers; and
- comply with international obligations to control an outbreak of CSF.

## 2.3 Approach to disease control

The approach to disease control is:

- early detection and rapid reporting and diagnosis to limit the extent of disease spread that can occur before disease controls are brought into force, thereby reducing the initial size of the outbreak and simplifying disease control;
- contain disease at premises where it is detected, and eradicate it swiftly and effectively such that it cannot be re-introduced;
- limit risk of any further spread of disease from premises connected with or in the vicinity of the infected premises;
- undertake risk assessments based on an epidemiological assessment before easing restrictions and undertaking surveillance for signs of further disease before lifting restrictions;
- comply with European Union law and international trade obligations under the OIE disease control codes

## 2.4 Outbreak dynamics and veterinary response

- a) If CSF enters NI and is not detected at the point of entry (detection in live pigs is unlikely as only healthy animals should be exported) there will be a period between entry and when CSF is detected. During this phase the silent spread of CSF is a significant factor in the eventual size of an outbreak. This risk is minimised by post import checks on imported pigs following a veterinary risk assessment.
- b) Adopting good practice at all times will limit the extent of spread in this period. Measures include: careful sourcing of pigs; adopting effective movement standstills; quarantine; herd-health vigilance; good record keeping and high standards of biosecurity. It is particularly important to comply with rules prohibiting the feeding of swill, catering waste or other animal products to pigs. Taking these steps greatly reduces the likelihood of a large outbreak.
- c) Anyone who suspects CSF is required to notify their local Divisional Veterinary Office (DVO). Initial suspicion will primarily rely upon the vigilance of pig keepers and correct veterinary diagnosis against other similar diseases. Given the potential similarity of CSF symptoms to other endemic diseases of pigs there is concern a mild form of CSF could go unnoticed for some months. It is therefore important that pig keepers and vets consider whether CSF is a potential diagnosis.
- d) Once notified, DAERA will investigate and as necessary take samples for laboratory analysis; test results are normally available within 24-28 hours. Whilst under investigation, suspect premises are placed under restrictions to prevent the further spread of swine fever. DAERA may also impose a temporary control zone around the suspect premises. The investigation will either negate the presence of CSF or will lead to the Chief Veterinary Officer (CVO) confirming CSF.
- e) The consequential impact of declaring the first new case of CSF in NI is significant. The UK international trade status in pigs and pig products is affected and restrictions will be placed on some or all domestic pig businesses. DAERA and industry incur costs both to respond to the outbreak and in terms of indirect disruption to normal business operation. The process to confirm the first new case of CSF will be in line with the requirements of the relevant EU diagnostic manual<sup>1</sup>. Of course, delay in

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<sup>1</sup> [Commission Decision 2002/106/EC](#)

formally confirming disease can lead to further disease spread and therefore during the suspicion stage the need for temporary restrictions is regularly reviewed.

- f) On confirmation of CSF, the infected Premises (IP) will remain under restrictions and action taken to eradicate disease by killing pigs and completing full cleansing and disinfection to destroy any remaining virus. In order to reduce the risk of swine fever spreading from farms that may have been infected locally, area restrictions (protection and surveillance zones) will be put in place. Also DAERA veterinarians will trace any potential movements of disease on or off the IP to the source / destination (contact) premises which will be placed under restrictions and investigated for signs of disease.
- g) At the time CSF is first confirmed little is likely to be known about the source of infection, how long it has been present, how it was introduced and where else it might be present. Information for CSF outbreaks in other countries would suggest it may have been present for a minimum of four weeks prior to disclosure. It is likely other infected premises will subsequently be identified. With such uncertainty, the main focus of controls is to prevent the risk of further disease spread whilst epidemiological leads are followed up and the disease situation emerges in that area. Therefore in the early stages of an outbreak, including when CSF is detected in new areas, strict controls will apply on the movement of pigs and things liable to spread disease and whilst there is uncertainty on the extent of disease spread it is unlikely movements will be licensed.
- h) After a period (generally at least a few weeks from when the last new cases in the area were confirmed) confidence increases that disease has been contained. Factors affecting confidence include whether tracings of things liable to have spread disease from the IP have been completed, the incubation period of disease, and the type of diseases (mild or virulent strain for instance). During this phase, restrictions in the area may be eased incrementally, taking account of veterinary risk assessments (VRAs), allowing limited but controlled activity to recommence. However, each time a new case is identified, especially if there is no clear link to existing cases, DAERA will consider whether it needs to re-impose the stricter controls.
- i) Once there are no new cases in the area and pigs on the infected premises have been killed out and the premises adequately cleansed and disinfected, DAERA will start considering lifting of the area restrictions. Surveillance of all premises with pigs in the area under restriction will be undertaken to ensure there are no undetected pockets of CSF; this cannot commence before certain legal minimum time periods have passed. Once satisfied the zones are free of CSF, and taking into account of the wider disease situation, the zones will be lifted removing the area restrictions.
- j) Once all the zones and infected premises in NI have been cleared and restrictions lifted, the case is able to be put to the EU and OIE to re-establish recognition of CSF freedom. Whether or not feral pigs were implicated (although none have been recorded in NI), or vaccination was used will impact the actions and timescale for obtaining freedom.
- k) Even after this there can be a considerable amount of work:
  - to re-establish third country markets;
  - to publish an epidemiology report into the outbreak;



- to consider what lessons can be learned;
  - to respond to EC missions, other reports and enquiries; and
  - for operational partners and industry to recover to their pre-outbreak position.
- l) Whilst the primary control is to cull out affected farms and populations, vaccination against CSF may be authorised by the Department following an epidemiological assessment, where it is beneficial in controlling CSF.
- m) Subsequent sections of this strategy reflect this summary of how disease outbreaks develop and the controls available.

## **2.5 Decision Making – roles and organisational structures**

This document sets-out the strategy and controls to deal with an outbreak of CSF. The related management and decision-making processes are explained in DAERA's Contingency Plan for Epizootic Disease.

## 3 Maintaining Disease Freedom and Surveillance

### 3.1 Introduction

CSF is not present in the UK or the Republic of Ireland. In order to keep CSF out it is important to understand the routes of disease incursion and, as appropriate, to put in place countermeasures to reduce the likelihood of incursion. Resources are targeted at the countermeasures that are considered most cost effective in reducing the risk of introduction.

This section summarises current measures to:

- prevent incursions of CSF into UK/NI;
- minimise the likelihood of spread of CSF within NI prior to its detection; and
- detect an incursion early and activate disease contingency plans.

### 3.2 International Surveillance

With regards to outbreaks of CSF in other countries, the Department for Environment, Food and Rural Affairs (DEFRA) monitors the international disease situation and prepares and provides this information to DAERA. For outbreaks of CSF in an EU Member State (MS), a country bordering the EU or a trading partner, more in-depth VRAs may be carried out by DEFRA and provided to DAERA. These are designed to give a balanced account of the threat of the disease to UK at present and in the future. Both assessments and if necessary a VRA carried out by DAERA Veterinary Service (VS) are used to inform DAERA's decision on the risk level of CSF in NI and inform the consideration of preventative controls.

Any changes to the level of risk of the introduction of CSF into NI must be underpinned by risk assessment as set out above. Stakeholders will be updated on such changes.

### 3.3 Trade / imports

Various measures are put in place to ensure that imported animals and products of animal origin do not present unacceptable risks to the health of other animals or to people and thus maintain our animal and public health status. Further information on imports can be found at:

[www.daera-ni.gov.uk/articles/introduction-importing-animals-and-animal-products](http://www.daera-ni.gov.uk/articles/introduction-importing-animals-and-animal-products)

### 3.4 Trade within the European Union or third countries

EU member states are able to import and export animals and animal products to / from other EU member states and third countries. Animal and animal products imported into the UK, or passing through it, must meet the conditions and pass veterinary checks under import and export regulations<sup>2</sup> for EU and third country trade. These include documentary, identity and physical examinations. Samples are taken from live pigs for laboratory analysis.

Where a member state or region is affected by CSF the European Commission imposes additional controls on what may be exported from the region to other member states.

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<sup>2</sup> <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare/exporting-animals-animal-products-and-products>

These additional controls reduce the risk of moving disease from member state to other member states or to third countries. These measures therefore serve to reduce the risk to the UK from CSF affected regions. Similar trade principles reduce the risk of CSF entering the EU from third countries affected by swine fever. The restrictions will depend on the nature of the outbreak and whether it affects domestic pigs or pigs living in the wild. These restrictions may apply to the export from CSF-affected regions of pigs, pig semen, ova or embryos, pig products including pig meat or uncooked pig meat products and can extend to requiring pork products to be treated.

The UK implements enhanced import controls to protect against pigs, pork or pork products being illegally imported from affected regions, although there remains a threat from such activity.

### **3.5 Imports to Northern Ireland from Great Britain**

Import licences are used to control imports from GB. These licences state the conditions which must be complied with so that animals can be imported. Livestock imports can only be imported in accordance with a Specific Import Licence, which is issued to a particular importer for a particular consignment. This licence usually remains valid for 21 days but can only be used for a single consignment. The importer must apply in writing for a licence prior to importing the animals. Upon landing in Northern Ireland, the person responsible for the consignment at the time of importation must report to a DAERA portal inspector at the port of entry. These import licences for CSF susceptible animals and products are suspended immediately if there is an outbreak of CSF in GB.

### **3.6 Control of CSF pathogens**

Movement of samples containing (or which might contain) CSF to laboratories is regulated and controlled under the Specified Animal Pathogens Order (Northern Ireland) 2008 (as amended) (SAPO) and Import of Animals Pathogens Order (Northern Ireland) 1999 (IAPO).

The use of CSF vaccine in NI is prohibited. This prohibition reduces the risk of introducing swine fever through the use of live vaccines, as well as simplifying the detection and control of disease.

### **3.7 Controls to stop disease entering the domestic pig population**

If CSF enters the pig population in NI it may take some time before the signs of disease are suspected. Minimising the period when disease is present but undetected is an important factor in minimising the eventual size of an outbreak. During this period there is a risk of rapid and uncontrolled spread within the domestic pig population or into pigs living in the wild. Thus measures when CSF is not known to be present in NI are critical to minimising the impact of an outbreak.

The application of good farming practice is a simple and effective way of reducing the likelihood of introducing disease to a farm and of minimising the rate of spread of undetected disease; these practices have benefit in minimising the spread of endemic disease.

Routes of undetected spread and relevant mitigating controls include:

- Spread through movement of infected pigs: the restrictions and movement controls put in place limit the rate at which disease moves from farm to farm.
- Contamination of places where infected pigs are kept: this requires the cleansing and disinfection of pig pens and farms when they are depopulated (good practice) and animal gatherings (slaughterhouses, markets and shows) where pigs from different farms mix<sup>3</sup>.
- Infection through infected pig products: if pigs are killed which are infected with CSF virus, the food product, whilst not being harmful to humans, can cause pigs to become infected if eaten by them. This risk is mitigated by observing the ban on feeding swill to pigs<sup>4</sup>. This also prohibits the use of pig products in pig feed. It is therefore also important to source feed from reputable suppliers and to store it in such a way to avoid contamination.
- Infection through artificial insemination (AI): pigs can be infected with CSF through the use of semen from infected pigs. The risk is minimised by using semen from approved artificial insemination centres<sup>5</sup> where controls on production of pig semen are in place which reduce the likelihood of CSF entering the unit. Adopting similar good practice with non-approved commercial semen centres reduces risks of disease incursion to these units and thus onward spread.
- Introduction of (infected) pigs: sourcing pigs from known and reliable sources will reduce the risk of introducing infected pigs to the herd. Particular care is needed when sourcing from areas outside the UK where CSF is known to be, or may be present. This can be further mitigated by isolating pigs and testing before mixing with the herd. Animals originating outside the UK are subject to pre-export certification and testing where appropriate.
- Fomite spread: contaminated vehicles and other things used to move infected pigs could spread disease and therefore vehicles and other equipment used in the movement of pigs must be cleansed and disinfected. Pig keepers implementing and operating good biosecurity practices at all times reduces the likelihood of disease entering premises or spreading rapidly within separate epidemiological units within the premises. This can include changing clothes and footwear, staff adopting good personal hygiene, prohibiting the eating of pork products on farm, cleansing and disinfecting at control points (such as entry to the farm and / or between sheds), restricting the movement of vehicles on / off farm, and controlling the disposal and collection of fallen stock and other waste.

### 3.8 Pigs living in the wild

There are no known populations of feral pigs or wild boar in Northern Ireland although small pockets of wild boar have been reported in the Republic of Ireland

### 3.9 Disease suspicion and reporting

CSF is a notifiable disease. This means if anyone suspects CSF in a pig or pig carcass they must report it to their local DVO.

Monitoring the health of pig herds and being vigilant for signs of disease is an important element in speeding up detection of disease and thereby minimising the size of outbreaks.

<sup>3</sup> The Sales, Markets and Lairs Order (Northern Ireland) 1975 (as amended)

<sup>4</sup> The [Animal By-Products \(Enforcement\) Regulations \(Northern Ireland\) 2015](#)

<sup>5</sup> [EU Directive 90/429/EC](#) – Animal health requirements applicable to intra-Community trade in and imports of semen of domestic animals of the porcine species

The primary method for detecting disease incursions onto farms early is through best practice animal husbandry, through pig-keepers' observation of behaviours and signs in the herd, and as part of herd-health plan. Farmers are expected to consult their veterinary surgeon where they see clinical signs or changes in behaviour or other health indicators; veterinarians will consider whether CSF should be considered as a potential diagnosis. Mild forms of CSF do exist which may not cause obvious clinical signs. There are several endemic diseases affecting pigs which have similar signs and symptoms to CSF and this has the potential to lead to CSF not initially being considered, thus delaying reporting.

### **3.10 Surveillance**

Further surveillance for CSF is carried out to provide assurance of continued disease freedom in NI. This surveillance includes:

- Official investigation of reports of suspicion of CSF in pigs including submission and testing of samples as necessary. This is supported by a number of other scanning surveillance activities, including:
  - Veterinary assessment and diagnostic investigations into outbreaks of clinical disease by trained veterinary investigators on samples and carcasses submitted to veterinary laboratories;
  - Ante-mortem and post-mortem inspections of animals / carcasses in abattoirs for signs of disease by Food Standards Agency official veterinarians
- Assistance of private veterinary practitioners attending pig farms during their clinical and routine visits advising on pig health issues and as part of farm assurance schemes sero-surveillance of boars entering EU-approved Artificial Insemination (AI) Centres licensed for export of semen<sup>6</sup>
- Serological testing of certain pigs for export
- Samples from pigs submitted for laboratory post-mortem are regularly checked for the presence of CSF virus although such submissions are small in number.

### **3.11 Raising stakeholder awareness**

Biosecurity advice is made available to pig keepers by DAERA including information on typical clinical signs of CSF

There is continuing publicity on the risk of illegally feeding waste food to pigs.

Private veterinary surgeons are also an important source of advice to pig keepers.

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<sup>6</sup> [Directive 90/429/EEC](#) - Animal health requirements applicable to intra- Community trade in and imports of semen of domestic animals of the porcine species

## **4 Stages of an outbreak: Suspicion phase**

### **4.1 Suspicion of CSF – requirement to notify**

CSF is a notifiable disease and anyone who suspects CSF in a pig or pig carcass must report it to their local DVO. Additionally, any person who examines a sample taken from a pig or carcass and who suspects the pig/carcass is infected with CSF virus or who detects antibodies to, or antigens of, that virus must immediately notify their local DVO. If unsure whether to notify disease they may seek a consultation with a DAERA Veterinary Officer (VO)

The VO will discuss the clinical signs and health status of the suspect animal with the person reporting the suspicion. The report will be forwarded to the Epizootics DVO and based on these discussions the Epizootics DVO will assess the information and will either rule out CSF or instruct a VO to attend the premises to undertake a full disease investigation.

### **4.2 Actions at premises where disease is suspected**

Upon notification that there is a suspect CSF case, the DAERA VO will inform the person reporting the suspect animal/ carcass that further investigation is necessary. This person will also be told that no pigs, carcasses or anything suspected of being infected or contaminated with CSF virus should be moved off the premises in order to minimise the risk of disease spread.

On arriving at the premises and carrying out the initial investigation, if the VO determines, that the presence of CSF on the premises is not suspected (i.e. disease can be negated on clinical grounds), these restrictions placed on the premises will be removed.

If the VO is unable to rule out disease, this will be reported to the Epizootics DVO. The Epizootics DVO may be able to make an initial assessment of the level of suspicion at this stage. At this point a restriction notice will be served if this has not already been done. Samples will also be taken and submitted for laboratory analysis.

The CVO will take the final decision to declare an official CSF suspect.

This restriction notice will set out the legal requirements that will remain in place until either disease has been ruled out or disease is confirmed. No pigs, carcasses or anything suspected of being infected or contaminated with CSF will be allowed to move off the premises. However, the restrictions may in some cases be modified such that the movement on and off the premises of people, vehicles, equipment, or other animals (not pigs) or things that might spread disease may be licensed.

The welfare of pigs must be ensured during any period of restriction.

Whilst results are awaited, epidemiological investigations will continue to establish how long disease may have been present, the likely source and whether disease originated at these premises.

In anticipation that CSF might be confirmed, the VO will also consider plans to deal with culling in case disease is confirmed. They will liaise with the DAERA head quarters to start preparing the necessary logistics for handling a cull.

The investigation may also identify animals, vehicles and other things that may have already taken disease out of the premises (or brought it into the premises) so that these can be traced (see section 4.3 below on contact premises).

DAERA will receive and analyse the test results and the CVO will decide that either:

- CSF is negated: all restrictions will be removed immediately; or
- CSF is confirmed: the infected premises will remain under restrictions whilst the actions in section 5 are completed.

Whilst under investigation, suspect premises must keep a record of further instances of disease, deaths or changes in the livestock and make this information available to officials in order to assess the requirement and regularity of further visits and re-testing.

### 4.3 Contact premises

Contact premises are places which have a link to a suspect or infected premises which a VO considers may have resulted in the spread of CSF into or out of the suspect premises.

The epidemiological situation and proximity of the premises to an infected premise may lead a VO to conclude that disease may have spread to the premises. The principle of lateral spread of CSF is supported by evidence from previous outbreaks of CSF in England<sup>7</sup> and worldwide<sup>8</sup> which show that outbreaks may be prolonged as a result of spread of disease from an infected premise to pig farms in close proximity, typically 1km to 3km.

The extent of the investigation on the contact premises will be assessed using a risk-based approach. The following actions may be taken:

- the contact premises will be placed under restrictions (similar to a suspect premises) and monitored for a specified period of time;
- traced pigs will be clinically examined (and others inspected or examined);
- samples from traced pigs will be submitted for CSF testing;
- the clinical and movement records of the traced animals will be reviewed;
- subsequent re-testing should take place if epidemiological evidence suggests that this is appropriate;

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<sup>7</sup> Sharpe K, Gibbens J, Morris H & Drew T (2001) Epidemiology of the 2000 CSF outbreak in East Anglia: preliminary findings. *Veterinary Record* 148(3), 91

<sup>8</sup> Elbers ARW et al. (1999) The classical swine fever epidemic 1997-1998 in the Netherlands: descriptive epidemiology. *Preventive Veterinary Medicine* 42, 157-184

- movement restrictions will be put in place although movement of things on or off the premises may be licensed by a VO subject to an assessment of the risk of disease spread; and
- semen, ova and embryos that have been moved during the period when disease may have been present will be traced (and may be destroyed as appropriate).

If considered to be a high risk of disease spread, the pigs at the premises may be culled (as described in section 4.4)

#### **4.4 Killing of pigs at suspect and dangerous contact premises**

Ordinarily the CVO would wait for full laboratory results and confirmation of disease before killing pigs for disease control purposes. In some circumstances the CVO may however conclude that to delay killing pigs at a suspect or contact premises presents a serious risk of the spread of swine fever. Scenarios where it is likely the CVO will decide pigs should be killed ahead of formally confirming disease include:

- when disease is not already present in the country or region of the country but there is a strong indication that CSF is present (such as interim laboratory results combined with a serious or deteriorating clinical picture at a suspect premises) and to delay culling risks the spread of disease (such as in a pig dense area);
- at a suspect premises within an existing control zone where there is a serious or deteriorating clinical picture;
- at a contact premises where there are clinical signs of swine fever;
- at a contact premises where epidemiological evidence is highly indicative that disease will be present and to delay culling risks the spread of disease.

This early cull has the advantage of minimising the level of virus build up and thus reduces likelihood of further accidental spread whilst results are awaited.

Whenever pigs are killed ahead of formal confirmation of disease, sufficient samples will be taken to establish the extent of disease (if any) that was present.

If following laboratory analysis of samples disease is confirmed, the premises will be re-designated as an infected premise (IP).

If, after killing pigs and testing samples from them, test results are negative and disease is not confirmed:

- at a contact premises, preliminary and secondary cleansing and disinfection will always be required as it is possible low levels of virus were present due to the contact with an IP but not detectable. Restocking controls (in line with section 6.9) will also apply, before restrictions can be lifted;
- at a suspect premises with no epidemiological link to an IP, restrictions will usually be lifted immediately with no requirement for full cleansing and disinfection as disease is not present.

#### **4.5 Diagnostic investigation**

Northern Ireland does not have the facilities to confirm suspect CSF samples. DAERA's Veterinary Service has an arrangement with AFBI for samples to be packaged and transported to the national Reference Laboratory for confirmation. A series of virological and serological tests are undertaken at the National Reference Laboratory for



CSF. Samples are sent concurrently to the Animal and Plant Health Agency (APHA) Laboratory in Weybridge to undertake tests for CSF virus and to the Pirbright institute to test for the ASF virus. Interim tests results are usually available within 24 hours of receipt of samples, but some tests take several days to complete. Additional tests can be undertaken when a virus is isolated and these may help identify the origin of the virus.

On occasions an investigation may start as a result of an unexpected result in pre-export testing or pre-entry testing of boars at Artificial Insemination centres. DAERA will investigate these in exactly the same way as they would for a clinical suspect case.

Laboratories finding evidence of the use of vaccine against CSF following analysis of samples must immediately notify DAERA.

#### **4.6 Epidemiological assessment**

A VO will undertake an epidemiological assessment to try to begin to determine the:

- possible origin of the infection;
- period during which CSF may have been present on the premises;
- movement of potentially infected animals, carcasses or items from the premises; and
- other premises that might, possibly, be infected.

The VO will continue this inquiry until these facts have been established so far as is possible or the possibility of disease has been discounted. This information may involve use of one of the specialist epizootic vets.

#### **4.7 Temporary Control Zone**

If premises are placed under restriction due to suspect CSF and pending the outcome of tests, DAERA will consider whether further restrictions on nearby premises are necessary. This may result in the declaration of a temporary control zone (TCZ). The location and size of the TCZ will be determined by DAERA. This is a precautionary measure designed to minimise the risk of the spread of undetected disease.

In a TCZ the movement of pigs off premises in the zone is restricted. The main purpose of this measure is to prevent the movement of pigs out of the area (and thus the potential to spread CSF) prior to any future protection zone or surveillance zone (see Section 7) being declared if disease is confirmed. DAERA is unlikely to impose further restrictions within the zone but, if these are considered necessary by the CVO, there is flexibility under current domestic legislation for DAERA to apply further restrictions within the TCZ.

A TCZ may be considered where there are no confirmed cases of CSF in NI and if:

- a decision is taken to kill pigs at the suspect premises ahead of confirming disease; or
- evidence suggests that pigs are deliberately being moved out of the area to avoid any future Protection Zone (PZ) or Surveillance Zone (SZ).

In addition to the two scenarios above, a TCZ may also be considered when CSF has already been confirmed in NI or RoI and if:

- there are clinical signs leading to strong suspicion of disease on a contact premises and a decision is taken to kill the pigs;
- the suspect premises is in a pig dense area where there is a high risk of lateral spread if disease is subsequently found to be present. This may include when the suspect premises is close to the edge of a SZ.
- the suspect premises is not within a PZ/SZ and the VO's assessment of the situation at the suspect premises warrants wider controls.

The size of the zone is likely to be the size of a SZ (as a minimum 10km), although account will be taken of the specific circumstances.

DAERA will lift the TCZ when disease is negated at the suspect premises or the TCZ will be replaced by a PZ / SZ if disease is confirmed (see section 7).

#### **4.8 Outcome of investigation**

There are two possible outcomes:

- Disease is confirmed by the CVO on the basis of laboratory tests and this would be expected within 24 to 48 hours of laboratory samples being received (see next section);
- CSF is negated. If the decision is based solely on a clinical assessment this will be very quick. If the decision is dependent on the results of laboratory tests this can take up to a week for all tests to be completed to verify that CSF virus was not present.

DAERA will be making an assessment of other notifiable diseases of pigs at the same time and if necessary samples will be submitted for those diseases too, in particular ASF which is clinically indistinguishable from CSF.

If suspicion of disease is strong and its presence cannot be ruled out on clinical grounds an Amber Teleconference may be held. Its purpose is to appraise the relevant government bodies and functions including the other GB administrations of the situation and risk assessment, and to plan future action and communication accordingly. For further detail please refer to the DAERA Contingency Plan for Epizootic Disease ([www.daera-ni.gov.uk/articles/contingency-planning-epizootic-diseases](http://www.daera-ni.gov.uk/articles/contingency-planning-epizootic-diseases)) which summarises DAERA's arrangements for controlling and eradicating epizootic disease in Northern Ireland.

If CSF is negated, DAERA will notify the premises' occupier and the restrictions for CSF will be lifted, although other measures may continue at the premises to deal with any other disease found or suspected. Subsequent sections describe actions if CSF is confirmed.

#### **4.9 Communication**

Since the time from initial report to confirming disease is usually quite short (normally within 48 hours) the policy is not to publicise the investigation. Many investigations prove negative and unnecessary publicity can prove disruptive to the premises and could potentially affect trade.

Therefore, it is not usual practice to make public statements about premises that are under investigation for suspect disease. However, general communications to

stakeholders may be necessary in certain circumstances. For instance, to raise awareness about the international disease situation, the general disease status and the need for increased vigilance and biosecurity. These communications will be made using existing and appropriate DAERA and industry channels. General advice on biosecurity including information on typical signs of disease is already in the public domain.

Minimal communication with other local premises is undertaken as necessary during suspicion stages to manage the disease risk. As the likely epidemiology of the disease emerges, other premises in the vicinity, or identified as potential contact premises, may be contacted or the surrounding area could be placed under restrictions (see Temporary Control Zones, paragraph 4.7) if considered necessary to prevent disease spread. Notices and signs may be required at the suspect premises (or wider area if a TCZ is declared).

## **5 Stages of an outbreak: Confirmation**

### **5.1 Confirming CSF**

The CVO is responsible for taking the decision to confirm disease in Northern Ireland. A decision is taken in consultation with the CVOs for the rest of the UK, normally at or following an Amber teleconference. Confirmation of CSF will be consistent with the requirements of the relevant EU diagnostic manual<sup>9</sup>.

On confirming the first case of CSF, DAERA takes action to prepare a legal base to control the outbreak, to mobilise resources and to comply with international obligations. The main actions on confirmation of the first case of CSF are summarised in this section.

DAERA will invoke the relevant contingency plans and the DAERA Central Epizootic Disease Control Centre (CEDCC) and Local Epizootic Disease Control Centre (LEDCC) will be set up in line with these plans.

### **5.2 International notification obligations**

The CVO notifies the CVO in DEFRA and the CVO in DAFM. The CVO in DEFRA will notify the European Commission and the OIE of the presence of disease within 24hrs of confirming CSF.

The OIE, Commission and EU member states must be kept informed of further outbreaks and be updated with progress on the outbreak by the submission of regular reports.

### **5.3 Trade and safeguard measures**

Export health certificates for pig and pig by-products will be withdrawn and importing countries will be notified.

On confirming CSF outbreak the UK may seek, or be subject to, an EU safeguard measure. This may impose additional controls on the export to the EU of live animals, or other related products from certain areas and may place additional restrictions on areas of NI and GB which are outside of existing control zones (see 7.1). The specific measures and areas affected will depend on the precise disease situation and these will be modified as the disease outbreak is brought under control.

### **5.4 Disease control measures**

Please see Section 6 for details of the control measures taken at infected premises. Section 7 describes the control measures placed over wider areas, in particular the protection and surveillance zones which will be declared around the infected premises in line with EC obligations and to limit the risk of local spread. The size of these zones and control measures in the zones are described in Section 7.2.

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<sup>9</sup> [Commission Decision 2002/106/EC](#)

## **5.5 Controls outside protection and surveillance zones**

Legislation does not require any specific controls outside of the declared control zones. Multiple zones may be declared or extended as necessary. The measures and procedures to lift these zones are prescribed in EU law. Where there is great uncertainty about the extent of disease, or where there are signs of rapid spread over a wider area a decision may be taken to apply controls to areas outside the standard control zones. These controls are more flexible than those prescribed in EU law and so are favoured where there is considerable disease uncertainty and it is expected the measures will be more short term than the prescribed EU zones. These wider movement controls are described in section 7.1.

It is likely that the confirmation of CSF in NI will lead to increased awareness and as a consequence will lead to an increase in the number of disease notifications. There are no plans for increased random or targeted surveillance beyond that required in protection and surveillance zones to provide evidence of disease freedom and to follow-up tracings from infected premises.

## **5.6 Confirmation of CSF in the RoI**

Where disease has been confirmed in the RoI and the IP is located near the border with Northern Ireland, the Department will declare zones as applicable. These zones (whether protection or surveillance) will extend from the border to the required distance and size as measured from the IP.

## **5.7 Communications and raising stakeholder awareness**

During an outbreak, information must be provided for all pig keepers, veterinary practitioners and other stakeholders, particularly within the protection and surveillance zones. The information provided will vary during the course of the outbreak, but will include:

- clinical signs of CSF;
- action to take if the disease is suspected;
- the current disease situation;
- current control measures; and
- legislative and licensing procedures.

Livestock owners must be made aware of their responsibilities and the requirements to supply information from premises within zones, for example, recording existing animals, illness, deaths and births.

Owners must be made aware of the results of CSF tests performed on their pigs and any restrictions imposed as a consequence.

Livestock owners outside zones also have responsibilities. General and targeted publicity will keep them apprised of the disease situation and help them understand how restrictions may impact on their business and the type of biosecurity precautions, vigilance and other practices they might adopt to minimise the risk of exposure to or further spread of CSF.

An outbreak of CSF should not have a direct impact on the general public but general publicity will keep them informed about the disease, the outbreak and the control measures being taken. The main message is that CSF does not have any public health implications. This information will be disseminated in partnership with the [Department of Health](#). Advice about food safety should be delivered by the Food Standards Agency for Northern Ireland (FSANI).

## **6 Controls at infected premises**

### **6.1 Definition of an infected premises**

For disease control purposes premises means any place. An infected premises (IP) is a place where disease has been confirmed and a “Disease confirmed - notice of restriction” served.

The Restriction Notice will make it clear what constitutes the IP and will take account of factors such as the presence of highways which may divide the holding. Even if the premises are in the same ownership or part of the same holding, separate notices will be served on each premise.

If disease is confirmed on common land, the common would be treated as an IP and the same restrictions would be applied. This may extend to restrictions on in-by land.

### **6.2 Movement and access controls at IP**

Where CSF is confirmed, pigs, carcasses or anything suspected of being infected with CSF must not be moved.

Once assessed by a DAERA VO, the movement of people, vehicles, equipment or other animals (excluding pigs) on and off the premises may be licensed by the VO subject to an assessment of the risk of spread of CSF. The VO will assess the threat any public footpath poses to the IP and as necessary DAERA will work with the appropriate local Council to see closure of footpaths on the IP which presents a risk. It is anticipated that footpaths will not need to be closed over a wide area although in some limited circumstances, where the risk of spread of CSF is high, it may be necessary to seek the closure of footpaths close to an IP.

Upon entry and prior to leaving the premises any vehicles permitted on/off under licence will require cleansing and disinfection.

### **6.3 Killing of pigs at an IP**

All pigs on an IP will be culled as soon as practicable, whether or not they currently show signs of disease. Culling is usually undertaken by licensed slaughtermen under the supervision of a VO. Carcasses will be destroyed under official supervision.

Rendering is the preferred disposal method; incineration could also be an option with other disposal routes available, subject to public health, environmental and land use/planning considerations,

### **6.4 Destruction of semen, ova and embryos**

Semen, ova and embryos of pigs collected from pigs at the IP during the period between the probable introduction of disease to the premises and the implementation of official measures will be traced and destroyed under official supervision in such a way as to avoid the risk of spread of virus.

## **6.5 Cleansing and disinfection (C&D)**

The IP, vehicles, equipment and anything likely to have been contaminated with CSF virus will be cleansed and disinfected under the supervision of a VO. Disinfection must be carried out with a disinfectant approved for use in NI<sup>10</sup>.

Vehicles on the premises will need to be unloaded and cleansed and disinfected under the supervision of a VO. Vehicles on the premises will remain there until they have completed full C&D and been licensed to move off the premises by DAERA.

Any equipment, bedding etc from the IP will either be destroyed or treated under official supervision. Parts of the premises that cannot be cleansed and disinfected will remain under restriction for an extended period, until notified by the VO that they are satisfied there is no longer a risk of swine fever virus being present.

There will be some items that cannot be cleansed or disinfected for example contaminated feed, farm waste products and slurry. In such cases the items will have to be destroyed, treated to inactivate any virus or disposed of appropriately. For instance, manure and used bedding should be stacked, sprayed with disinfectant and left for at least 42 days or destroyed by burning or burying. Slurry from an IP should be stored for at least 42 days after the last addition of infective material. A shorter storage period may be permitted if a VO has given instructions to treat the slurry in some way prior to storage. Slurry from an IP should not be used for spreading until it has completed the storage period.

DAERA will undertake and fund preliminary disinfection: this is the surface application (normally by spraying) of an approved disinfectant (diluted to the manufacturer's instructions) to those areas of the premises which have had direct contact with animals (note, this would generally not include fields / pastures etc). The application of the disinfectant is to damp down the levels of virus, to prevent local spread. Final cleansing and disinfection must be carried out under instruction from DAERA. After cleansing and disinfection has been completed, an inspector will carry out an inspection of the premises and if satisfied that cleansing and disinfection has been completed, will provide a certificate of completion.

## **6.6 Tracing of meat from animals slaughtered in risk period**

The CSF virus can remain active for months in pig meat products and can be a significant source of spread in pigs. Pigs moved from the IP to slaughter in the period after CSF may have been introduced but before disease restrictions were imposed may have been infected by CSF. Therefore, the meat from these pigs may be affected by CSF and will be traced, withdrawn and disposed of. Animal products potentially infected with CSF will be disposed of as category 2 animal by-products as defined in the Animal By-Products Regulations<sup>11</sup>.

The food business operator (FBO) will be notified by DAERA that the slaughterhouse has received pigs from an IP and the products from these pigs must be withdrawn and disposed of. The FBO is responsible for disposing of the carcase/meat. If the product has already left the establishment the FBO is responsible for notifying the recipient they have similar responsibilities to dispose of the meat or notify other premises if the meat

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<sup>10</sup> [Diseases of Animals \(Approval of Disinfectants\) Order \(NI\) 2008](#)

<sup>11</sup> [The Animal By-Products \(Enforcement\) Regulations \(Northern Ireland\) 2015](#)



has been moved. Records must be retained for inspection. Current guidance is that meat must be withdrawn as far as retail shelves but not from end consumers.

Compensation is not payable for products withdrawn under these animal products legislation<sup>12</sup>.

## **6.7 Compensation**

Compensation provision for pigs culled for disease control purposes are set out in the Diseases of Animals (Northern Ireland) Order 1981. This provides that:

- where the animal slaughtered was affected with swine-fever, be one-half of its value immediately before it became so affected; and
- in every other case, be the value of the animal immediately before it was slaughtered.

Compensation will be paid for anything that has to be seized and destroyed by DAERA because it poses a risk of transmitting disease and cannot be cleansed and disinfected. This will be at the value of the item at the time of seizure (that is in its contaminated state, which often means the item has no value).

Compensation is not available for consequential losses. Compensation is not payable for meat disposed of under The Products of Animal Origin (Disease Control) Regulations (Northern Ireland) 2008.

## **6.8 Repopulation of premises**

Pigs may be reintroduced on to premises no sooner than 30 days after the satisfactory completion of secondary C&D.

For open air holdings, the reintroduction of pigs will start with sentinel pigs that should have tested negative for CSF antibodies (or come from premises not subjected to restrictions because of CSF) and be re-tested (serology tested) at a defined period (depending on circumstances) after being placed on the premises. If the second tests prove negative for CSF antibodies restrictions will be lifted and full repopulation may commence.

For holdings where the pigs are kept indoors, the reintroduction should start with sentinel pigs or total repopulation can take place, provided that:

- all pigs arrive within 20 days (and come from holdings not subjected to any restrictions related to CSF)
- pigs are serology tested for CSF at least 40 days after the last pigs arrived

If more than six months have elapsed since the completion of necessary C&D, and epidemiological evidence supports it, the premises may be repopulated without testing, subject to authorisation. However, since disease freedom requires full C&D of a pig premises (see Section 11.1 for further details) it is unlikely any premises will be authorised to repopulate without completing C&D due to the countrywide implications for trade.

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<sup>12</sup> [The Products of Animal Origin \(Disease Control\) Regulations \(Northern Ireland\) 2008](#)

## **6.9 Communications**

Once disease is confirmed, steps are taken locally to ensure that everyone in and around an infected premises is made aware of the restrictions and requirements in force there. This may include displaying notices and signs as necessary.

Information will be made available to pig keepers explaining what happens if disease is confirmed on their holding.

## **7 Measures in Disease Control Zones**

### **7.1 Disease control zone definitions – temporary control zone**

See section 4.7 for an explanation of the use of temporary control zones declared where necessary on suspicion of CSF in domestic pigs

### **7.2 Disease control zone definitions – protection and surveillance zone**

Where disease is confirmed at an IP, there is an increased risk of disease spreading to pig premises in the vicinity. Therefore, protection and surveillance zones (PZ & SZ) are declared around the IP in line with EU obligations. The aim of these zones is to reduce the likelihood of lateral and onward spread of disease.

The PZ will be a minimum radius of 3km around the IP and the SZ will be a minimum radius of 10km from the IP.

A decision to make zones larger will be taken based on epidemiological advice, the local structure and density of the industry and the wider disease control benefits weighed against consideration of the practical implications and costs of managing larger zones.

Where new IPs are confirmed within an existing PZ/ SZ, the zones will be reshaped and extended as necessary to comply with the minimum size requirements as set out in legislation. Technically this may be achieved by declaring an overlapping zone. They may be sized larger than the minimum size where this improves disease control or improves practical control on the ground.

If an IP is detected in a geographically distinct area a new PZ/SZ will be declared.

### **7.3 Disease control zone definitions – Infected Area**

DAERA, in discussion with industry bodies may conclude that further control measures are required over a wider area to supplement the PZ and SZ already declared. In reaching a decision on whether a wider zone is required, DAERA will consider whether:

- The PZ/SZ are insufficient to halt spread of disease with a rapid increase in the number of cases detected over a wider area;
- There is a high level of uncertainty about the outbreak source, the linkages between cases, and the underlying degree of undetected swine fever;
- There are a large number of potentially high risk tracings;
- The strain of the virus is believed to be a mild strain which may not present strong clinical signs or a strain which has slow onset of clinical signs;
- The European Commission intends to impose further safeguard measures.

The European Commission may discuss with the UK government the need for additional safeguards to protect wider EU trade. Such measures may specify an area larger than the PZ and SZ in which:

- Movements of pigs from within the area to outside the area are prohibited unless under licence;
- Exports of pigs and / or pig products are prohibited.

The same effect could be achieved by extending the surveillance zone to apply to a much wider area. However, EU law is prescriptive of when and how this zone can be lifted (or shrunk) including the requirement to complete surveillance of all premises in the extended zone.

The preferred approach is to use legal powers to control pig movements over a wider area under Article 8 of the Movement of Animals (Restrictions) Order (Northern Ireland) 2004. For ease of reference in this document such a zone has been termed an “infected area”

In declaring the infected area, all pig movements of pigs could be prohibited with certain types of movement being allowed under licence. Alternatively the declaration may only apply to certain types of pig movement or premises. The optimum approach will be determined on a case-by-case basis. The optimum balance between the disease benefits of restrictions and the negative impact on the day-to-day operations of business is complex to assess. Risks may be reduced by restricting the type of movements that may be allowed and the biosecurity and stand-still requirements necessary to limit the risk of further spread of undetected CSF. Thus disease risks and economic assessments will be used to help determine the type of zone that is likely to give the maximum overall benefit.

The infected area would remain in place until a veterinary risk assessment determines that it is no longer required and revoked by a further declaration, which declares the area free from disease.

#### **7.4 Impact of multiple control zones**

It may arise that a premises is situated in multiple zones. In this case, the following rules apply based on the general principle that the purpose of the zones is to prevent the spread of disease:

- If a premises is within 2 or more zones the stricter rules apply. Where an activity is permitted in one zone but prohibited in the other the prohibition takes precedent and the activity remains prohibited. Where an activity can be licensed in one zone but not the other (or is not currently being licensed) the activity cannot be licensed.
- Where one zone is lifted but the other remains in force, the rules for the zone that has not been lifted remain in force.

#### **7.5 Disease control zone definitions – Feral pig zones**

Please refer to section 10 for an explanation of the zones declared to control suspected and confirmed disease in feral pigs.

#### **7.6 Disease control zone definitions – vaccination zone**

Please refer to section 11 for an explanation of the zones declared where vaccination against CSF is deployed as a disease control measure.

#### **7.7 Movement prohibitions and derogations in control zones**

The focus of the remainder of section 7 is on controls in the PZ and SZ. The Classical Swine Fever Order (Northern Ireland) 2003 imposes controls on the movement of

livestock, genetic material or fomites (any object which may transmit disease) in CSF PZ and SZ. The aim of these movement restrictions is to prevent the spread of infection.

It is important to understand that even where legislation makes provision to allow something under licence which is otherwise prohibited it does not mean that DAERA will authorise this activity. In considering whether to authorise activity DAERA will need to assess the risk the activity might present to the control of the outbreak. DAERA will consider the phase of the outbreak, the local situation, the risk of disease spread arising from the activity and whether such risks can be mitigated.

During the early phase of an outbreak very tight controls are necessary to prevent spread of, as yet undetected disease. Generally no derogations from these controls will be allowed in this phase. Whilst new infected premises continue to be identified in the area (and potentially elsewhere in the country) the disease situation will remain uncertain. Thus the risk of spreading undetected disease by authorising movements is likely to be high.

Over time the disease situation stabilises and confidence in the situation in that area increases, although there will remain some uncertainty about the disease situation. In this phase DAERA will start to consider requests for movements. It will assess the level of risk presented by each type of movement requested and what conditions can be set to mitigate any remaining risk of disease spread. Decisions will take account of the epidemiological situation in the local area as well as in the rest of the country, the degree of success in follow-up tracings from IPs. DAERA will coordinate decisions on the principles of what restrictions may be eased through licensing. Decisions are constrained by the EC Directive, which is quite restrictive in what movements may be allowed and the earliest time at which restrictions may be eased.

Derogations from the movement restrictions will be made available either via a Specific Licence which is issued in respect of a specific movement request (normally issued via the local epizootic disease control centre (LEDCC) following central agreement to the principle of licensing), or a General Licence allowing all movements of a certain type. Licences will include conditions with which the licensee must comply.

However, further outbreaks of CSF or other information about the nature of the outbreak may require a return to the more restrictive phase.

For many of these derogations, EU law sets out minimum periods for allowing movements (for example, see section 7.8)

The following paragraphs consider the prohibitions that apply to various scenarios and include comment on the derogations that may become available.

Section 12.1 describes what conditions need to be met in order to lift the control zones

## **7.8 Movement restrictions and licences – live pigs**

Pigs cannot be moved off or onto premises in the PZ or SZ. Pigs may be moved within premises so long as they do not cross a public or private road.

Derogations are unlikely to be available in the period following declaration of the zone. However, after a few weeks have passed since the last confirmed case in the area,

DAERA may start to consider the case to allow limited movement of pigs off premises in the PZ or SZ:

- for immediate slaughter;
- to another premises within the same zone, if welfare problems cannot be alleviated by management or husbandry practices at the premises;
- for culling and movement of the carcasses to a rendering plant for processing;
- pigs may be licensed from outside the control zones onto premises within zones. However, any increase in the numbers of the susceptible pigs in a control zone is undesirable and would only be authorised in very exceptional circumstances

In addition to the above factors, derogations will not be available unless:

- 30 days have elapsed since cleansing and disinfection at the infected premises (21 days if premises is located in the SZ);
- a premises has been in a PZ or SZ for more than 30 days because of further outbreaks in the zone, and welfare problems at the premises cannot be alleviated by management or husbandry practices;
- a serious welfare situation has arisen at premises as a result of a situation that could not be reasonably anticipated (force majeure), such as serious flooding then in exceptional circumstances a special licensed movement may be granted prior to these time periods.

Movements of pigs across roads are prohibited, even where the land belongs to the same pig holding. However, it is recognised this will present practical difficulties to some pig holdings, particularly outdoor pig farms. Therefore, before the above time periods have elapsed, and taking account of the local disease situation (and as necessary following a risk assessment by official vets) DAERA may consider a derogation to allow the movement of pigs directly across a public or private road that divides two contiguous pieces of land that belong to the same pig holding. Such movements will require a licence which will be subject to conditions and in all instances pigs must be transported by vehicle and effective biosecurity practices adopted, especially minimising the risk of contaminating a highway with CSF virus.

### **7.9 Movement restrictions and licences – other (non-porcine) animals**

Non-porcine animals are prohibited from leaving premises in the PZ/SZ where pigs are also kept. Movements may be licensed during all phases of the outbreak but will be subjected to conditions to ensure the movement does not spread CSF.

### **7.10 Movement restrictions and licences – genetic material**

Movement of semen, ova or embryos off premises in the PZ or SZ is prohibited. There are no powers to license such movements.

There are no prohibitions on the movement of genetic material onto a pig premises in the zone.

### **7.11 Movement restrictions and licences – carcasses, pig products and waste**

Movement of dead stock off pig premises in a PZ/SZ is prohibited but may be licensed, most likely when the disease situation is stable and subject to biosecurity conditions.

Manure and slurry and other pig waste cannot be moved off a pig premises but may be licensed for transport for disposal. The transport vehicle must be leak proof and the destination must be approved for handling the waste.

Spreading of pig manure or slurry will be prohibited. It may be licensed, but not until the disease situation is stable and following a veterinary risk assessment and following the storage requirements in 6.5.

### **7.12 Movement restrictions and licences – vehicles**

Trucks and vehicles that have carried live pigs are prohibited from leaving premises in the PZ/SZ unless they have undergone cleansing and disinfection (C&D). In the PZ, C&D must be inspected and authorised by a VO.

Such vehicles can continue to be used within the premises.

### **7.13 Movement restrictions and licences – feed**

Feed should not be moved off a pig holding.

Transportation of feed in the PZ/SZ is not prohibited but deliveries should avoid entry to pig premises. Best practice C&D should be employed both on entry and exit. Deliveries should be scheduled to high health status premises before other premises.

### **7.14 Biosecurity at pig premises**

The movement control measures on pigs, vehicles and other material likely to spread CSF significantly reduce the risk of disease entering or leaving premises in the zones. Pig keepers should continue to employ good practice within the premises, including good personal biosecurity such as washing hands and using clean, uncontaminated clothing.

Outdoor pigs are at greater risk of exposure to disease incursion from wildlife (including feral), public access and other fomites. Whilst pigs infected with CSF do not produce an aerial plume of virus, infected outdoor pigs would still pose a risk of onward transmission of disease in the same way disease may get in. During an outbreak of disease, owners of outdoor units are encouraged to upgrade their biosecurity and access controls and to seek to separate their pigs from wildlife threats.

### **7.15 Surveillance and epidemiological investigations**

Within the PZ and SZ, surveillance will be undertaken to assess the extent of lateral spread from the IP. The methodology will be determined taking into account consideration of existing epidemiological evidence available. If surveillance identifies further suspect premises confirmed they will be handled as described in Section 4.

Surveillance will be assisted by use of data from various sources on the location of registered pig keepers. However, this will be supplemented by foot patrols to identify any other pig keepers in the area.

Similarly, data on feral pig populations will be considered and as necessary supplemented by visits by feral pig experts.

Virological and serological surveillance may be carried out for epidemiological purposes and to support declaring previously infected areas free from disease.

Veterinary visits of all premises with pigs in the area will take place, to provide advice, to check for disease, and after a certain period to ensure the premises has remained disease free prior to lifting of control zones.

Such data will also be of value to disease modellers and experts to provide advice to veterinary and policy teams. The DAERA Veterinary Epidemiology Unit consists of veterinarians who maintain a high level of expertise in the epidemiology of listed disease by the OIE including CSF. Also the Epizootic team are a group of veterinary officers trained specifically in epizootic diseases. In the event of a CSF outbreak, these teams will form the core of an expert group and will co-opt any additional expertise as required. They will use the evidence obtained from all sources to assess:

- the possible origin of the infection;
- the period during which CSF may have been present on the premises prior to detection;
- the risk of disease dispersal through movement of pigs, personnel, vehicles, carcasses, meat or any other material which may have transported virus from the premises; and
- the risk of other premises that might be infected.

The role of this expert group will also include:

- liaise with the UK National Experts Group and other groups and the Chief Veterinary Officer to inform decisions on disease control and prevention measures including vaccination and surveillance;
- to deliver epidemiological modelling; and
- to design surveillance plans and analysis of these surveillance outcomes.

### **7.16 Communications**

A communication programme will be delivered to inform keepers/owners of susceptible animals, veterinarians and other stakeholders of:

- the disease situation
- measures being implemented
- advice on clinical signs of disease

### **7.17 Impact of controls**

The restrictions set out in this will impact on day-to-day farm business operations. These measures are necessary to reduce the risk of disease spread and therefore reduce the overall size and duration of an outbreak. These controls are set out here to allow DAERA, delivery agents, pig producers and processors and related sectors to prepare contingency plans in advance of any outbreak of CSF. Such action can help alleviate the overall impact on businesses and will help manage expectations.

It is recognised that, due to the nature and structure of pig production systems in NI, movement restrictions will have different impacts depending on the structure and set-up of different operations. Controls may affect the businesses' ability to move pigs in and



out of farrowing, to move weaned pigs to growing accommodation or to move finished pigs to slaughter.

This strategy is not intended to directly address such impacts. However, DAERA and industry are committed to working through mitigating and contingency actions that might alleviate some of the pressures during an outbreak. Pig producers and processors are encouraged to put in place appropriate contingency plans. DAERA will be working with its delivery agents to ensure they are adequately prepared to respond effectively.

## **8 Special cases – establishments and animal gatherings**

### **8.1 Disease at establishments, animal gatherings and during transport**

There are some possible scenarios in which CSF is suspected in pigs at a place where the pigs are not usually resident. Examples include establishments (such as abattoirs) or animal gatherings (such as markets or shows). In these special cases, it is likely (but not certain) that the pigs suspected of being affected by CSF will have arrived at the location already infected. Thus, special procedures apply where CSF is suspected or confirmed in these cases, as explained further below. Specific rules also apply to establishments and animal gatherings in control zones.

### **8.2 Suspicion of CSF in pigs at an establishment**

The term establishments is intended to include abattoirs (also known as slaughterhouses where animals are slaughtered with the intention of the animal product entering the human food chain), and knackers' yards (where animals are killed but not for the human food chain).

When DAERA is notified of suspicion of disease in pigs at an establishment, the establishment will be placed under restrictions and further movements of animals onto the premises prohibited whilst investigations take place. The killing of pigs will be halted until the DAERA VO arrives and assesses the situation. The VO will wish to inspect the pigs prior to slaughter to assist with the assessment. No pig products should leave the establishment until the VO authorises such movement.

Investigations will initially focus on establishing whether CSF should be suspected and whether samples need to be taken. If CSF can be negated based on the clinical picture then restrictions can be lifted and normal business resumed. All meat that had been detained is released for sale subject to it continuing to comply with food hygiene requirements.

If samples need to be taken to confirm or negate the presence of CSF then restrictions will remain in force for 24-48 hours; this will prevent further animals being brought into the abattoir for slaughter. The VO will assess which pigs in the lairage may be infected and take the necessary samples.

The VO will also seek to identify the source of the suspect pigs, including their route to the abattoir. Restrictions will be served by DAERA on the source premises and any premises visited on route to the abattoir. These will be investigated by DAERA as contact premises.

Once the VO has completed the initial assessment (including consideration of the chillers and any requirement to cleanse) the VO will give instructions to the Food Business Operator (FBO) on how the remaining pigs may be killed and the carcasses and pig by-products stored whilst investigations are undertaken. The intention of this is to minimise the risk of cross-contamination of potentially affected pigs and pig carcasses with those that might be free of CSF.

Meat that has come from the suspect pig/s, or may have come into contact with such meat, will be detained pending the outcome of the investigation. If swine fever is confirmed this meat will be disposed of as by-product. The FBO is advised to maintain the meat in suitable conditions to ensure that the meat remains fit for human consumption if CSF is negated and the meat is released for sale.

### **8.3 Confirmation of CSF at an establishment**

Where CSF is confirmed in a pig or pig carcass at a slaughterhouse or knackers' yard, special measures will apply. The establishment is not treated as an IP as it is likely pigs will have arrived already infected with swine fever, although this may have been transmitted to others in the lairage or carcasses contaminated with swine fever virus.

Any remaining pigs will be killed without delay and the meat detained and kept separate from other meat. All meat at the premises will temporarily be detained until the VO has assessed the risk of the meat being infected or contaminated with CSF virus. Where there is no risk of CSF infection or contamination, meat may be released otherwise it will be detained pending test results.

Where CSF is confirmed the FBO will be required to dispose of the affected meat as category 2 animal by-products. The VO will direct what actions are needed, including C&D of the establishment.

Unless the establishment turned out to be the disease source it is likely restrictions will be lifted quickly and the establishment will be allowed to recommence operations. However, restrictions cannot be lifted until at least 24 hours after C&D is completed to the satisfaction of the VO.

Control zones are not ordinarily declared around infected establishments.

### **8.4 Suspicion of CSF at an animal gathering**

Types of animal gatherings include licensed markets, shows, collection centres and approved export collection centres. Special procedures apply where CSF is suspected. Animals can remain at gatherings for some time, possibly in excess of 48 hours, and unlike establishments are intended to leave the gathering alive.

When suspicion of CSF at a gathering is notified, the gathering will be restricted and further movements of animal on or off will be prohibited whilst initial investigations take place. Investigations will initially focus on establishing whether CSF should be suspected and whether samples need to be taken. If disease can be negated based on the clinical picture then restrictions can be lifted and normal business resumed.

If samples need to be taken to confirm or negate the presence of CSF then restrictions will remain in force for 24-48 hours. Only in exceptional circumstances will it be possible to move further animals into or out of the gathering.

Since the gathering is unlikely to be the source of swine fever, the DAERA VO will seek to identify the source of the suspect pigs. Work will also be undertaken to identify any animals or vehicles which have already left which could potentially be carrying infected pigs or have been contaminated with swine fever. Restrictions will be served at source, destination and other contact premises as the DAERA VO considers necessary.

DAERA will treat the gathering in much the same way as any other suspect premises; there are no special provisions available in law. Given the temporary nature of a gathering, effort will also focus on how to minimise the impact of animal welfare whilst results are awaited.

Subject to appropriate measures to minimise the risk of spread of CSF, DAERA will be able to license the movement of other animal species off the gathering. Conditions for this movement will include appropriate C&D of vehicles including the wheels and wheel arches prior to departure and DAERA may also place restrictions on the destination premises especially where other pigs are present.

If disease is negated all restrictions are removed immediately.

### **8.5 Confirmation of CSF at an animal gathering**

If CSF is confirmed, disease will be controlled at the gathering premises in much the same way as any other infected premises (see section 6). The premises will be placed under restrictions. If the premises are assessed to be suitable, culling of all pigs will take place at the gathering. Otherwise arrangements will be made to move the pigs to a suitable place for killing.

Non-swine species may be licensed off the premises by a VO, subject to appropriate biosecurity protocols, including C&D of vehicles on unloading at the destination premises. If pigs are present or kept at the destination premises a VO may decide that the destination premises should be placed under restrictions for a period to ensure disease has not been introduced.

### **8.6 Suspicion and confirmation of CSF during transportation**

If CSF is suspected in transit (such as a roadside inspection of a livestock vehicle) a VO will assess the pigs and if CSF cannot be negated on clinical grounds and samples need to be taken a formal notice will be served restricting the vehicle and pigs. Whilst this suspicion of CSF in transit is unlikely, this is treated as a special case since the vehicle is unlikely to be the source of CSF. The vehicle's route(s) will therefore be traced and DAERA will place the source and any other contact premises under restriction as necessary.

The vehicle and pigs will be moved to an appropriate location to be determined by the VO where they will (if appropriate) be detained and the destination premises placed under restrictions until test results are received. If disease is negated all restrictions are immediately lifted.

If disease is confirmed, the vehicle will be cleansed and disinfected as directed by a VO. Although the receiving premises may not be the origin of infection it will have been contaminated and there may have been lateral spread of swine fever from it whilst the outcome of tests was awaited, thus it will be declared as an infected premises (see section 6).

### **8.7 Communications when suspicion of CSF at an establishment or gathering**

It is not usual practice to make public statements about premises that are under investigation for suspect disease. However, where CSF is suspected at an establishment or animal gathering it is necessary to inform farmers who may intend to bring animals to or collect them from such places. Such communication is undertaken primarily by the operator. However, this will lead to media and other enquiries and some limited communication will be undertaken by DAERA when CSF is suspected at

these types of premises. These communications will be limited to the basic facts and it is not normal practice to publicise further details until the outcome of the investigation is known.

### **8.8 Control of establishments in protection and surveillance zones**

To operate a slaughterhouse in certain zones or for them to receive pigs from certain zones they must be “designated”<sup>13</sup>.

Pigs originating outside the PZ/SZ and slaughtered at a slaughterhouse outside the PZ/SZ will not be subject to any additional controls, save any imposed in wider movement restriction or other control zones. There is no requirement for the slaughterhouse to be designated or for the meat to be controlled or (heat) treated. The practice of allowing C&D of vehicles away from the slaughterhouse may be suspended if the disease situation requires.

The movement of pigs from outside the PZ/SZ to a slaughterhouse located within the zones may be licensed from early in the outbreak as the movement is from a low disease risk area to a slaughterhouse for immediate slaughter. Slaughterhouses operating within a control zone must be designated, and if located within the PZ DAERA will need to seek approval from the EC Standing Veterinary Committee. There are no controls on the meat produced from pigs originating from outside the zones. The practice of allowing C&D of vehicles away from the slaughterhouse will be suspended in these circumstances and they must fully C&D prior to leaving the slaughterhouse.

It will be a condition of the movement licence for pigs coming from outside the zones for slaughter at a slaughterhouse in the zone that the slaughterhouse must be designated to receive such animals. There is no requirement to control meat plants or other places receiving carcasses or meat from animals originating outside the PZ/SZ but slaughtered within the PZ/SZ.

Once pigs originating from within the PZ/SZ can be licensed to slaughter they must go to a slaughterhouse designated to slaughter animals from the PZ/SZ. Ideally the slaughterhouse will be located within the PZ/SZ, but regardless of location it must be designated.

Meat produced from pigs originating from the PZ/SZ (regardless of where they were slaughtered) is termed “Restricted Meat”. Such meat receives a special mark (a crossed through oval health mark) and cannot be sold fresh. It must be treated at a designated treatment centre and prior to treatment only handled at designated premises.

Once the PZ/SZ are lifted, live pigs from those areas become free to be slaughtered in the same way as any other pig from outside a PZ/SZ and meat from pigs slaughtered after zones are lifted can be traded freely. However, meat from animals slaughtered from the PZ/SZ prior to the zones lifting remains restricted and must continue to be handled at designated premises and must be (heat) treated.

Note, in some circumstances the European Commission may take additional safeguard measures that apply to pigs, pork and pork products produced within the NI/UK. Should

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<sup>13</sup> [The Products of Animal Origin \(Disease Control\) Regulations \(Northern Ireland\) 2008](#)

this happen, additional measures, such as special marking and trade restrictions may be imposed. Where a special stamp is proposed to indicate meat is restricted to the domestic market, it is likely a round stamp will be adopted.

### **8.9 Control of animal gatherings in protection and surveillance zones**

No animal gatherings in the PZ or SZ will be allowed to have pigs present. Gatherings of other species may be allowed subject to appropriate biosecurity and being separated from any pig premises such that there is no risk of disease spread.

If at the time a PZ/SZ is declared, a market, show or other gathering has pigs present, movements on and off that premises will be prohibited. During this time the gathering is treated like any other premises.

Non-swine animals at the gathering will be allowed to leave the gathering as soon as is practically possible, subject to appropriate C&D measures. If the animals return to a farm where pigs are present, a VO may decide that the destination premises should be placed under restrictions for a period to ensure disease has not been introduced.

Approximately 48 hours is needed to allow a preliminary assessment of the disease situation. Subject to veterinary risk considerations and licensing by a VO, pigs may then be licensed to leave the gathering and move to the farm of origin, farm of a new owner, or to slaughter as requested by the pig keeper/owner. A VO may decide that the destination premises should be placed under restrictions for a period to ensure disease has not been introduced.

## 9 Breeds at risk and other specialist pigs

### 9.1 Defining breeds at risk and other specialist pigs

CSF disease controls could have a direct impact on the survival of various pig breeds at risk (i.e. numerically rare pigs). Diverse genetic resources are important for maintaining an efficient and sustainable farming industry, and they allow the development of breeds to cope with new demands e.g. climate change. In addition, the UK government has international obligations to conserve agricultural diversity. Pigs bred for scientific, research, display or educational purposes (such as zoos or wildlife parks) are similarly important resources. For ease of reference, these pigs will be referred to as “breeds at risk or other specialist pigs”.

Pig breeds at risk have been defined in DAERA’s Northern Ireland Breeds at Risk Register (NIBARR) at [www.daera-ni.gov.uk/articles/ni-breeds-risk-register](http://www.daera-ni.gov.uk/articles/ni-breeds-risk-register). This list of breeds at risk has been determined from the expert advice of the UK Farm Animal Genetic Resources Committee. This is not a closed list, and if evidence can be provided to support the criteria, the UK Farm Animal Genetic Resources committee will consider further submissions to include additional breeds on the list. Equally, a breed can be removed from the list if it no longer fulfils all criteria.

### 9.2 Responsibilities when CSF is not present

It is essential that the keepers of breeds at risk or other specialist pigs adopt effective biosecurity and hygiene at all times in order to minimise the risk of incursion of any animal disease (be it endemic or exotic).

### 9.3 General measures during a CSF outbreak

EC law allows Member States to consider derogating from culling of breeds at risk and the other categories of specialist pigs defined in section 9.1 provided that disease control is not jeopardised. As detailed below, such exemptions will be considered in exceptional circumstances on a case-by-case basis and will place obligations on the pig keeper to put in place specified mitigating measures to minimise any disease risks the exemption creates.

It is the responsibility of the pig keeper to notify the DAERA VO if breeds at risk (or other specialist animals) are present on a suspect or contact premises.

*Keepers in NI can also register with DAERA that they have breeds at risk pigs on their premises in advance of a disease outbreak. Information of how to do this is at [www.daera-ni.gov.uk/articles/ni-breeds-risk-register](http://www.daera-ni.gov.uk/articles/ni-breeds-risk-register).*

*The registration does not guarantee that breeds at risk animals on the premises will be spared but it will help give advance information to DAERA officials that can be used during an outbreak.*

It is important to note that any exemption from culling applies only to pigs eligible for special measures on the premises, which for breeds at risk pigs includes registration with the relevant breed society; other pigs on the same premises would not be exempt from culling.

#### **9.4 Premises in control zones**

The movement controls described in Section 7 will apply to breeds at risk and other specialist pigs (no special measures apply). It is therefore important for owners of such pigs to develop appropriate contingency plans, in particular to avoid welfare issues arising.

#### **9.5 Dangerous contact premises**

Section 4 describes how some premises may be identified as dangerous contacts due to epidemiological links (i.e. tracings of pig movements or proximity to an infected premise). Where the risk of exposure of pigs to CSF is considered to be high, pigs may be pre-emptively culled in order to limit the risk of further disease spread.

Breeds at risk and other specialist pigs may be exempted from the cull of animals on such dangerous contact premises where it does not undermine disease control aims. However, suitable isolation facilities must be available on farm to house pigs spared from any cull, and strict biosecurity protocols must be followed to ensure that disease control is not jeopardised. The measures put in place need to be appropriate to prevent any spread of CSF virus (either entering or leaving the isolation facilities).

The decision to spare any pig from culling would be taken by the CVO, informed by veterinary risk assessment and other expert advice.

When a decision is taken to spare animals on a premises, the VO will serve a notice on the occupier of the premises on which they are kept detailing the biosecurity arrangements that the occupier must follow to minimise the risk of spread of disease. Any non-compliance with conditions could lead to an immediate withdrawal of the exemption and the culling of pigs.

The spared pigs will be required to be regularly inspected and tested for CSF before, during and after completion of the isolation period to determine the disease status of the pigs through-out.

Measures will be lifted following veterinary risk assessment on a case-by-case basis. If at any stage CSF is confirmed at the premises, it will become an IP. The procedures in section 6 will apply unless exemptions in section 9.7 are agreed.

#### **9.6 Suspicion of CSF**

If CSF is already confirmed in the country, and the clinical signs are such that disease is highly likely at the suspect premises, the CVO may decide that pigs on the premises should be slaughtered on suspicion of CSF instead of waiting for disease to be confirmed. Where the CVO is made aware of the presence of breeds at risk or other specialist animals at such a premises it is likely these pigs will be spared from being slaughtered on suspicion of CSF but the premises would remain under strict biosecurity restrictions whilst laboratory results are awaited.



## **9.7 Confirmation of CSF**

EU law requires pigs at an IP to be culled quickly. However, in exceptional circumstances, breeds at risk or other specialist pigs may be exempted from such culling, provided disease control is not jeopardised. Isolation facilities will need to be available on farm to house pigs spared from any cull, and strict biosecurity protocols must be followed to ensure that disease control is not jeopardised.

The decision to spare a pig from culling on an IP would be taken by the CVO. The decision will take into account a variety of factors including a veterinary risk assessment, expert advice (e.g. on farm animal genetic resources) and wider risks and impacts such as trade impacts and the need to extend the time that disease control measures remain in place and delays to lifting control zones. The Commission would be immediately notified of such a decision and would review the situation with the EC Standing Veterinary Committee. The Commission may impose additional safeguards on UK or just NI. A decision to spare pigs at an IP will therefore only be taken in exceptional circumstances. To date no circumstances have been identified that would justify exempting infected pigs from culling.

Pigs spared from the cull will be required to be regularly inspected and tested before, during and after completion of the period of isolation to determine the disease status of the pigs throughout.

## 10 Pigs living in the wild

### 10.1 General points on CSF and feral pigs

Wild boar and other feral pigs are susceptible to CSF and therefore could potentially have a role in disease spread. Once CSF is in feral pigs there is a risk of dispersal of disease over wider areas and introduction from feral pigs into other domestic pig premises. Under EU law, the UK is obliged to eradicate any incursion of CSF into feral pigs and until this is complete there are likely to be trade implications. Once CSF has entered feral pigs, demonstrating disease freedom in these wild populations is inherently more difficult than at a closed pig premises.

**There are currently no known populations of feral pigs or wild boar in Northern Ireland. This section is only included in the event that a population of feral pigs becomes known to the authorities or becomes established in Northern Ireland.**

### 10.2 Presence of feral pigs in protection or surveillance zones

Regardless of whether or not disease is suspected in feral pigs, whenever there is an incursion of CSF into domestic pigs, epidemiologists will quickly require information on the presence or otherwise of feral pigs in and around protection and surveillance zones to assess their potential role in the specific incursion and/ or to model potential spread.

The veterinary officer's inspection of the IP will include an assessment of whether there is any sign of feral pigs being involved in the disease incursion.

Relevant bodies (e.g. Northern Ireland Environment Agency) will be immediately consulted to advise if wild boar population data indicate that feral pigs are present within the protection and surveillance zones. A field inspection may also be undertaken to provide additional evidence on the presence / absence of wild boar in domestic pig control zones.

If feral pigs are determined to be present within the protection or surveillance zones, DAERA would consult with relevant bodies in order to:

- agree necessary actions to improve information on the wild boar population numbers, density and distribution
- to start to consider the likely size of a Feral Pig Investigation Zone in case CSF were to be suspected in feral pigs

Passive surveillance of feral pigs (i.e. testing of feral pigs found dead or shot) and other monitoring as necessary will be carried out in domestic pig protection and surveillance zones.

Ordinarily the size of the domestic pig protection or surveillance zones would not be defined by the presence of feral pig populations. However, if further infected premises are identified in the area with no clear link and epidemiologists cannot rule out feral pigs involvement in spread, expert advice will be sought on whether the shape or size of the protection and surveillance zones should be changed to take account of the feral pig population.

Experts advise that the indiscriminate killing or taking of feral pigs without appropriate controls will risk both the dispersal of feral pigs (risking the spread of undetected

disease) and carcasses not being presented for examination. Therefore the killing or taking of wild boar would be prohibited in surveillance and protection zones but allowed under licence on pig farm premises to prevent an incursion by feral pigs.

### 10.3 Detecting CSF in feral pigs

Under the current surveillance programmes for wildlife, any unusual mortality or disease observed in feral pigs would be investigated.

### 10.4 Suspicion of CSF in feral pigs

The following scenarios are considered:

- a. CSF is not present in domestic pigs in NI but unusual mortality or signs of disease are observed in feral pigs;
- b. CSF is present in domestic pigs in NI.

Scenario a) - CSF is not present in domestic pigs in NI but unusual mortality or signs of disease are observed in feral pigs. Unusual mortality or disease was observed in feral pigs, would be investigated. However, the most likely route of introduction of CSF into feral pigs is considered to be via domestic pigs and therefore vigilance in domestic populations is considered the most appropriate route to identify the first case of CSF in NI.

Scenario b) - CSF is present in domestic pigs in NI. CSF would be suspected in feral pigs in or around a protection or surveillance zone if:

- Unusual mortality or signs of disease are observed in feral pigs;
- feral pigs or fresh evidence of feral pigs were seen on an infected premises during the period a veterinary inspector suspects disease may have been present or introduced; or
- there was other strong epidemiological evidence.

### 10.5 A Feral Pig Investigation Zone

Following initial investigations DAERA may conclude that it officially suspects CSF may be present in feral pigs and further action is needed to confirm or negate the suspicion. DAERA may then declare, a Feral Pig Investigation Zone (FPIZ).

The size of a FPIZ has to be considered on a case-by-case basis and will be determined through expert advice. Key factors in determining the size and boundaries of a FPIZ will be the feral pig population size and distribution as well as the surrounding habitat and geographical barriers.

All feral pigs shot or found dead within the FPIZ must be presented for testing.

It is unlikely sufficient carcasses will be found naturally to confirm whether disease is present or absent. Therefore, in order to move more rapidly from this uncertain stage, feral pigs will be tracked and killed by experts employed by Government delivery agents and then carcasses tested for CSF in order to collect evidence of disease presence / absence and to prevent any potential spread of undetected disease.

However, the taking or killing of feral pigs would otherwise be prohibited, except under licence on pig farm premises to prevent an incursion onto the premises by feral pigs

(which could risk the introduction of disease). All feral pig carcasses must be presented for testing.

In certain circumstances, it may be considered proportionate to introduce similar controls on premises in a FPIZ as in a Feral Pig Infected Area (see paragraph 9.7 for full details of these controls) to reduce the risk of disease spreading to domestic pigs. Such a decision would depend on the epidemiological situation and would be based on expert advice.

The FPIZ will not be lifted until disease has been confirmed or negated in feral pigs. Disease will be negated based on epidemiological and expert advice taking into account the size of the feral population and its local structure, and the number of samples taken.

### **10.6 Confirmation of CSF in feral pigs**

The CVO will confirm disease in feral pigs after laboratory confirmation of the presence of CSF virus and following a teleconference between UK CVOs. On confirming disease in feral pigs a Feral Pig Infected Area (FPIA) will be declared. The size of a FPIA will need to be determined based on expert advice and the local circumstances.

A disease eradication plan will be developed. This may require further investigation on the ground and contribution from experts. However, it will be drawn up quickly with the intention of submitting it to the EC within the EC requirement of 90 days from confirmation of the first case of CSF.

Disease eradication policy is to, as far as practical avoid dispersing disease beyond its current location. In order to eradicate disease and in-line with policy on domestic pig holdings, the policy is to cull feral pigs to eliminate disease using expert trappers/hunters employed by DAERA delivery agents. Experts will advise on the most appropriate disease eradication methods for the particular location and feral population. However, vaccination will not lead to rapid eradication and given the long term trade impacts vaccination is not a method of choice.

The risk of incursion from feral to domestic pigs should be minimised. All premises with domestic pigs will be required to take full and appropriate precautions to prevent incursion of disease into the premises.

In order to reduce the risk of disease dispersal via feral pigs, the taking or killing of feral pigs would be prohibited except on farm premises to protect stock from a feral pig incursion or killing by expert trappers/hunters. Each carcass should be examined and tested for notifiable diseases by trained personnel (under veterinary supervision) and also retained whilst testing is undertaken so infected carcasses are not released. Infected carcasses will be rendered.

The meat from feral pigs from a FPIA that are confirmed free of CSF by testing, would be controlled, specially marked and treated (heat treated) prior to being allowed to enter the food chain.

### **10.7 Control Measures in a Feral Pig Infected Area**

The following measures should be applied to premises in a FPIA to prevent disease incursion or spread in domestic pigs:

- Prevention of contact between feral and domestic pigs. All the pigs on the premises should be restricted to their living quarters or to some other part of the premises where they can be isolated from feral pigs and feral pigs should be prevented from gaining access to any material that might come into contact with the pigs on the premises.
- Restriction of pig movements - pigs should not be moved on to or off a premises unless this is licensed by a VO;
- Appropriate means of disinfection should be provided and used at the entrances and exits of those parts of the holding in which pigs are being kept and of the holding itself.
- No carcass or any part of a feral pig should be brought on to a premises in the FPIA.
- No material or equipment which could have been in contact with a feral pig in the infected area should be brought on to a premises.
- The occupier of a premises must ensure that a census of pigs on the holding is kept up-to-date and provided when requested by a VO (the first census may be based on an estimate for outdoor pig holdings).

Other controls in a FPIA will be:

- No pig, semen, ovum or embryo should be moved from the infected area except under licence. These must not be exported to other Member States.
- Any person who comes into contact with a feral pig in the infected area should take steps to ensure that he/she does not spread the disease.
- Any person who finds the carcass of a feral pig should immediately inform officials so that the carcass can be sampled and tested for CSF.

The FPIA would be lifted after disease eradication is completed but in line with EU law, monitoring will continue in the area for at least 12 months commencing no earlier than 12 months after the last case of CSF in feral pigs in order to support disease freedom (see Section 12.4).

## 11 Vaccination

### 11.1 Availability of vaccines

The only CSF vaccine considered viable for use in NI is a live attenuated C-strain vaccine. This is highly effective in domestic pigs, providing rapid immunity from a single vaccine dose. It has also been used effectively in mainland Europe through the use of baits to control CSF in feral pigs. Laboratory testing of pigs cannot differentiate between pigs vaccinated with this vaccine and those pigs which have been affected by a field strain of the virus, thus the strict controls outlined in this section apply to minimise the risk of disease spread.

It is possible other vaccines will become available. A key factor in deciding whether they are of value will be how quickly they provide immunity against CSF, whether they can differentiate between infected and vaccinated and whether it is effective and reliable.

The general principles of this strategy are unlikely to change fundamentally unless a sufficiently effective marker vaccine became available. This type of vaccine allows tests to be performed to confirm whether a pig has been vaccinated against CSF or whether it has been affected by a field strain of live CSF virus. Such a vaccine, coupled with an appropriate testing strategy, spot checks on the implementation of the vaccination campaign and changes to the trade agreements might allow some of the above restrictions to be eased, in particular around the controls on meat from vaccinated pigs. This would be subject to agreement with the European Commission.

### 11.2 Use of vaccination to control swine fever

Vaccination of pigs against swine fever provides an additional method of controlling the spread of CSF. However, decisions to vaccinate are complex. Vaccination is not a cure for CSF but can prevent pigs from becoming infected. It might therefore be a useful tool in stopping CSF spread to currently unaffected regions by vaccinating groups of pig farms in or surrounding an affected area to reduce the risk of disease leaving, or in a currently unaffected region to prevent entry. It can also be used within an individually infected or suspect farm to reduce the build-up of virus whilst culling takes place. These measures can therefore reduce the number of premises that eventually become infected with CSF and need to be culled out. Nevertheless, movement restrictions and effective biosecurity may be considered as better tools, as air borne transmission is not thought to be a major issue with CSF.

In addition, in many circumstances vaccination will not be an effective control method:

- vaccination is expensive both to purchase the vaccine and to deploy requiring the use of qualified people, normally by veterinarians, to vaccinate pigs;
- a vaccination campaign distracts vets from the primary task of identifying and controlling swine fever. Depending on the vaccine it can take several doses to give immunity and the vaccine can need topping-up regularly (although the C-strain is an effective single dose vaccine);
- the vaccine takes a period of time to provide immunity. During this time the pigs remain vulnerable to infection. Vaccine can suppress the signs of infection leading to apparently healthy pigs shedding virus;

- international trade restrictions apply once any pigs are vaccinated and these will take longer to ease than disease control without vaccination. Indeed the presence of vaccinated pigs in the national herd could make it difficult or impossible to re-establish trade although this will in part depend on the type of vaccine available.

**Policy in NI is not to use vaccination as a routine control measure.** Vaccination is unlikely to be considered as an appropriate control measure in the initial stages, or during a controlled CSF outbreak.

The use of vaccination may be considered during a prolonged epidemic, where there is a dramatic increase in the number of premises where disease is being confirmed each day, or in areas of very high pig density. Its most likely application is to reduce the risk of infection and spread prior to culling of pigs.

The decision to use a programme of vaccination will be taken by the CVO in consultation with DAERA's Epidemiology SVO and team.

It is unlikely vaccination would be an appropriate control method to control CSF in a feral pig population. However, in the exceptional circumstances that the policy set out in section 10 is unsuccessful in controlling disease in pigs living in the wild (feral pigs), vaccination may be considered. It is likely in such circumstances that vaccine would be applied through baiting and experience on the continent suggests that several periods of baiting are needed to provide immunity in the feral population.

We will consider whether there is a case for vaccinating breeds at risk on a case-by-case basis but only as part of an emergency CSF vaccination plan.

CSF vaccine, if required, will be sourced from the EU bank.

### **11.3 Legal obligations**

The use of vaccination against CSF is ordinarily prohibited<sup>14</sup>. However, vaccination may be used to control disease where epidemiological data suggests CSF is likely to spread, if an emergency vaccination plan is submitted to, and agreed by, the European Commission. Thus within NI, a person may only administer CSF vaccine to a pig if authorised to do so by the Department.

Before initiating a CSF vaccination campaign, DAERA must submit a CSF vaccination plan via DEFRA to the European Commission for approval, setting out how the campaign will operate and the controls that will apply. Whilst there are generic controls it is likely the content of a plan will be determined by the specific circumstances of an outbreak.

### **11.4 Controls if vaccination is used**

Vaccination zones would be put in place and some restrictions would apply primarily to control the application of CSF vaccine and the movement of pigs out of the zone and to slaughter. Export restrictions would also apply to vaccinated pigs.

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<sup>14</sup> [Article 15 in the Classical Swine Fever Order \(Northern Ireland\) 2003](#)

Restrictions will remain in force for at least 6 months after the last pig in the vaccination zone is vaccinated, or earlier if all pigs in the holdings where vaccination has been used have been killed. The detailed controls will be determined according to the circumstances of an outbreak. However, it is expected they will include:

- ban on all pigs leaving the vaccination zone, except where a VO licenses their movement to a designated slaughterhouse;
- ban on seropositive pigs from leaving their holding except to slaughter;
- ban on collection of semen, ova and embryo from seropositive pigs;
- restrictions on the movement of piglets of seropositive sows;
- meat from vaccinated pigs must be treated (cooked) prior to sale. Note this is an animal health measure and subject to the usual food hygiene controls is safe to eat; and
- control on reintroduction of pigs

Note, a seropositive pig is a pig that on serological laboratory testing gives positive test results, indicating that it was at some stage affected by the CSF virus. In a vaccination zone this will normally be as a result of vaccination, but it is possible a pig has also been infected with a live field strain before it developed full immunity therefore a seropositive pig might have been infected. Only certain marker-type vaccines would allow this fact to be established.

If decided that it is necessary to vaccinate feral pigs to control and eradicate CSF, a plan will be submitted to the European Commission, including the measures taken to avoid the spread of disease to domestic pigs. We anticipate this will require pig holdings in the affected area to:

- maintain effective barriers to the entry of feral pigs onto the holding;
- to report any feral pigs found dead;
- a ban on shooting unless licensed by a veterinary inspector to protect domestic pigs;
- it is likely the holdings will already be in a “feral pig control zone” and such restrictions will already apply.



## 12 Gaining disease freedom

### 12.1 Removal of the zones

Zones will remain in place until they are amended or repealed by further declaration by DAERA.

Protection zones will not be lifted until:

- all necessary cleansing and disinfection (C&D) has been carried out at all infected premises in the zone to the satisfaction of a VO;
- pigs on all holdings have undergone clinical and laboratory examinations carried out in accordance with the diagnostic manual in order to detect the possible presence of CSF virus; and
- examinations in a protection zone should not take place until at least 30 days after the satisfactory completion of preliminary C&D on infected premises to which the zone relates.

Surveillance zones will not be lifted until:

- all necessary C&D has been carried out at all infected premises in the zone to the satisfaction of a VO;
- pigs on all holdings have undergone clinical and, where the VO considers it necessary, laboratory examinations carried out in accordance with the diagnostic manual in order to detect the possible presence of CSF virus; and
- examinations in the surveillance zone should not take place until at least 20 days after the satisfactory completion of preliminary C&D on infected premises to which the zone relates.

It is likely zones will remain in place for at least 2 months even for the smallest outbreaks and considerably longer if ongoing sporadic cases continue to appear in the area.

### 12.2 Trade with the EU

Trade within the EU is regulated and the restrictions only apply to pigs or pig products which come from the areas under restrictions. These restrictions lapse when the area restrictions are withdrawn subject to compliance with EU law.

Where the EC has imposed safeguard measures, which is likely, evidence will be provided to the Commission to seek removal of these safeguards once the area restrictions have been lifted.

### 12.3 Trade with Third countries

To be recognised as officially free of CSF by the OIE, the UK must submit evidence to the OIE to maintain or regain its CSF free status. This evidence must conform to the surveillance requirements contained in Chapter 15.2 of the OIE Animal Health Terrestrial Code and must be submitted to and accepted by the OIE before disease free status can be obtained. This requires the collection of relevant surveillance and epidemiological information which may also need to be presented to the EU to remove safeguard measures.

Notwithstanding OIE recognition of freedom, trade with third countries may be negotiated ahead of official freedom. Some third countries may require additional assurances before they will trade, regardless of OIE status. Thus bilateral negotiations between governments and industry are important aspects of re-establishing trade with third countries.

#### **12.4 Pigs living in the wild**

If disease is found in pigs living in the wild, then special measures and monitoring must continue for at least 24 months after the last case of CSF in feral pigs in order to support disease freedom. Until this monitoring is complete, EC safeguard measures will remain in place, with the possibility of reduced controls over a reduced area as evidence of disease freedom is gathered.

The detailed arrangements for lifting zones and of continuing measures will be set out in an eradication plan submitted to and agreed by the Commission at the time of outbreak. If any populations of feral pigs are too small to achieve the required level of testing, an alternative approach will be agreed via the EC Standing Committee on Plants, Animals, Food and Feed (SCOPAFF) to gain disease freedom. The taking and killing of feral pigs may continue to be controlled for the duration of this surveillance to ensure that the remaining population does not move from the area and to ensure that all carcasses are submitted for testing.

If there is no evidence of pigs living in the wild around the infected premises or suspicion of them being implicated in the disease outbreak, there should be no requirement to demonstrate wildlife freedom.

### 13 Glossary of terms

AI	Artificial insemination
AFBI	Agri-Food and Biosciences Institute
ASF	African Swine Fever
C&D	Cleansing and disinfection
CEDEC	Central Epizootic Disease Control Centre
CSF	Classical Swine Fever
CVO	Chief Veterinary Officer. Head of DAERA Veterinary Service Animal Health and is responsible for veterinary advice to Minister and policy colleagues on all aspects of animal health and welfare.
DAERA	Department of Agriculture, Environment and Rural Affairs
DAFM	Department of Agriculture, Food and Marine (RoI)
DEFRA	Department of Environment, Food and Rural Affairs
Designated (e.g. slaughterhouse)	During an outbreak, such premises can be designated by DAERA only if they meet high standards of biosecurity and traceability. If the relevant movements are licensed by DAERA, premises in disease control zones may only send animals / products to a designated place (e.g. slaughterhouse)
DVO	Divisional veterinary Office
EC	European Commission. An executive of the European Union with responsibilities including proposing legislation and implementing decisions
EU	European Union
FBO	Food Business Operator
Feral pigs	Free-ranging wild boar, feral domestic pigs or feral hybrid pigs
Fomites	Any object or material capable of carrying infectious agents such as CSF virus. For example, vehicles, equipment, feed stuffs, clothing, footwear etc. May also include scavenging animals, vermin etc.
FPIA	Feral pig infected area – legally an Infected Area declared as a result of disease in feral pigs
FPIZ	Feral pig investigation zone – declared where disease is suspected in feral pigs
GB	Great Britain
IAPO	Import of Animals Pathogens Order (Northern Ireland) 1999
IP	Infected premises. Premises where CSF virus has been confirmed
LEDCC	Local Epizootic Disease Control Centre
MS	Member States
NI	Northern Ireland
OIE	Office International des Epizooties (World Organisation for Animal Health)
Primary case	The case that introduces the disease into the population described
PZ	Protection Zone
RoI	Republic of Ireland
SAPO	Specified Animal Pathogens Order (Northern Ireland) 2008 (as amended)
Sentinel	An individual or part of a population potentially susceptible to infection that is monitored for the appearance or recurrence of the causative pathogen.
Slaughterhouse	An establishment used for slaughtering animals, the meat of which is intended for human consumption.

SZ	Surveillance zone
TCZ	Temporary Control Zone
UK	United Kingdom
VO	Veterinary officer – a member of the RCVS appointed by the Department. Most VOs will also be veterinary inspectors
VRA	Veterinary Risk Assessment
VS	Veterinary Service