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Llywodraeth Cymru Welsh Government

## Disease control strategy for African and Classical Swine Fever in Great Britain

August 2014

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### 1 Background

#### **1.1 Purpose of document**

- 1.1.1 This document describes how government and others would manage an outbreak of either African swine fever (ASF) or Classical swine fever (CSF) in Great Britain (GB). In this document, reference to ASF or CSF is intended to refer to the specific disease. Where the collective term "swine fever" is used it is intended to refer to both ASF and CSF.
- 1.1.2 Swine fever can spread throughout GB and will not be halted by a simple administrative boundary. Therefore, in managing a swine fever outbreak the strategy seeks complementary, consistent and coordinated measures in all regions of GB. This strategy is endorsed by Defra, Scottish Government and the Welsh Government (hereafter referred to as government), although responsibility for management of an outbreak in respective regions falls to the respective governments.
- 1.1.3 This strategy was prepared in consultation with delivery agents, veterinary experts and organisations representing pig producers and processors. This document is intended to provide a context to the prevention of swine fever outbreaks and a clear explanation of how the law<sup>1</sup> will be applied in the event that swine fever is suspected or confirmed in GB.
- 1.1.4 The strategy will therefore help all parties that might be affected by an outbreak of swine fever to consider how they can be better prepared to respond quickly to an outbreak of swine fever and to identify the measures they might take to mitigate the potential impact of these control measures.
- 1.1.5 The document structure is:
  - Section 2 explains the broad disease control framework
  - Section 3 gives an overview of the measures currently adopted to reduce the likelihood of swine fever entering GB
  - The main focus of this document (sections 4 to 11) is on the disease control measures to be taken once disease is detected
  - Section 12 outlines the action taken to allow normal business operation to be re-established once an outbreak has been controlled and swine fever eradicated

#### **1.2 Strategic fit**

- 1.2.1 The strategy is consistent with broad animal health policies including:
  - prevention is better than cure

<sup>&</sup>lt;sup>1</sup> The Diseases of Swine Regulations 2014

http://www.legislation.gov.uk/uksi/2014/1894/contents/made

- sharing responsibility and cost, requiring close working between government and industry in developing and delivering disease controls
- complying with the World Health Organisation for Animal Health (OIE Office International des Epizooties) disease control chapters<sup>2</sup>
- implementing European Union (EU) law and international obligations to trading partners
- mitigating the risk of spread of disease to other member states (MSs) or third countries
- ensuring the welfare of animals
- being consistent with wildlife management policies
- applying disease response plans set out in the GB governments' exotic disease contingency plans (Defra's Contingency Plan for Exotic Animal Diseases; the Welsh Government Contingency Plan for Exotic Animal Diseases; Scotland's Exotic Animal Disease Contingency Framework Plan and the Great Britain and Northern Ireland Contingency Plan for Exotic Notifiable Diseases of Animals)

## **1.3 African Swine Fever (ASF) and Classical Swine Fever (CSF)**

- 1.3.1 African swine fever virus (ASFV) is a DNA virus and is the causative agent of African swine fever (ASF). Classical swine fever virus (CSFV) is a positive-sense single-stranded RNA virus (ssRNA(+)) and is the causative agent of classical swine fever (CSF).
- 1.3.2. Both CSFV and ASFV exclusively affect pigs (Suidae) (including domestic pigs and wild boar) and are collectively referred to as the 'swine fevers' in this document. All pigs are susceptible to CSFV and ASFV regardless of whether they are kept or feral, however the risk of infection and control measures applied to kept and feral pig populations do vary. Hence, throughout this document the following definition of kept pigs and feral pigs are utilised where distinction between the two populations are required:
  - Kept pigs all Suidae including domestic pigs, wild boar and hybrids of, which are kept as farmed animals or pets.
  - Feral Pigs all Suidae including domestic pigs and wild boar and hybrids of, which are living in the wild.
- 1.3.3 Neither CSFV nor ASFV are known to have any health impact for people, thus the measures in this strategy are concerned only with animal health. These viruses produce similar clinical signs and impact on pig health. They are, however, caused by different viruses with different incubation periods and different underlying science. The steps to control both diseases are very similar.
- 1.3.4 ASFV has never been detected in the United Kingdom (UK). CSFV was eradicated from GB in 1966, with occasional outbreaks subsequently being

<sup>&</sup>lt;sup>2</sup> OIE Terrestrial Health Code <u>https://www.oie.int/standard-setting/terrestrial-code/access-online/</u>

contained and eradicated. The last UK outbreak occurred in 2000 when 16 farms were affected and around 75,000 pigs culled for disease control purposes with compensation of around £4.4 million paid for animals slaughtered.

- 1.3.5 ASFV and CSFV 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
  - Pigs eating infected pig meat or pig products. Both ASFV and CSFV can survive in meat and pig products including frozen and cured products for several years
- 1.3.6 Aerosol routes are not thought to be a major mechanism of spread for ASFV or CSFV although these have been shown to occur experimentally.
- 1.3.7 It is possible that ASFV or CSFV can be spread over short distances via mechanical vectors (an animal, for example, a large biting fly or scavengers that can carry a pathogen from one host to another without being infected itself).
- 1.3.8 In addition, ASFV can be spread by biological vectors (an animal which becomes infected in whose body the pathogenic organism develops and multiplies before being transmitted to the next host), in particular soft ticks of the genus *Ornithodoros.* Current evidence suggests there are no known competent vectors for ASFV in the UK.
- 1.3.9 Offspring of CSFV-infected sows can become infected in the uterus and can shed the virus for months after birth.
- 1.3.10 Both ASF and CSF can occur in acute, chronic and mild forms. The acute form can cause severe disease from which the majority of affected pigs die.
- 1.3.11 The clinical signs of CSF are very similar to ASF and the two diseases can only be differentiated by diagnostic tests.

### **2** Strategic control framework

#### 2.1 Disease management principles

- 2.1.1 Managing exotic diseases is primarily concerned with managing risk. By definition exotic diseases are not normally present in GB and therefore we can manage the risks in two ways:
  - taking day-to-day measures to reduce the likelihood of an outbreak of swine fever in GB by implementing practices to prevent its entry and to detect it quickly if swine fever should enter GB
  - being prepared to act quickly to reduce the impact of an incursion of swine fever once it is detected in GB

#### 2.2 Disease control objectives

2.2.1 If swine fever is detected in GB the key objectives are to:

- contain and eradicate any incursion into domestic or feral pigs; and
- prevent the exchange of swine fever virus between kept and feral pigs.
- re-establish disease free status
- 2.2.3 It is inevitable that the controls necessary to stop spread and eradicate swine fever will have an impact on day-to-day business practices. However, these disease control measures seek to:
  - minimise the number and duration of premises affected
  - minimise the number of pigs culled
  - 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
  - comply with international obligations to control an outbreak of ASF or CSF

#### 2.3 Approach to disease control

2.3.1 The approach to disease control is to:

- detect clinical signs suggestive of swine fever early and to report rapidly, to enable diagnosis as soon as possible after swine fever enters GB. This will limit the extent of spread of swine fever that can occur before disease controls are brought into force, thereby reducing the initial size of the outbreak
- contain swine fever 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 swine fever from premises connected with or in the vicinity of the infected premises

- undertake risk assessments 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 World Organisation for Animal Health (the OIE) disease control codes

#### 2.4 Outbreak dynamics and veterinary response

- 2.4.1 If swine fever virus enters GB 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 swine fever is detected. During this phase the silent spread of swine fever is a significant factor in the eventual size of an outbreak.
- 2.4.2 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.
- 2.4.3 Anyone who suspects swine fever is required to notify the Animal and Plant Health Agency (APHA). Initial suspicion will primarily rely upon the vigilance of pig keepers and correct veterinary diagnosis against other similar diseases. The biology of the specific swine fever virus and type of pigs involved will affect the degree of clinical signs displayed. Given the potential similarity of swine fever symptoms to other endemic diseases of pigs there is concern a mild form of swine fever could go unnoticed for some months. It is therefore important that pig keepers and vets consider swine fever as a potential diagnosis.
- 2.4.4 Once notified, APHA will investigate and as necessary take samples for laboratory analysis; test results usually are available within 24-48 hours. Whilst under investigation the premises is placed under restrictions to prevent the further spread of swine fever. Government may also impose a temporary control zone around the suspect premises. The investigation will either negate the presence of swine fever or will lead to the Chief Veterinary Officer (CVO) confirming either CSF or ASF.
- 2.4.5 The consequential impact of declaring the first case of swine fever disease in GB 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. Government 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 case of swine fever will be in line with the requirements of the relevant EU diagnostic manual<sup>3</sup>. Of course, delay in formally confirming disease can lead to further disease spread and therefore during the suspicion stage the need for temporary restrictions is regularly reviewed.

<sup>&</sup>lt;sup>3</sup> Commission Decision 2002/106/EC for CSF and Commission Decision 2003/422/EC for ASF

- 2.4.6 On confirmation of swine fever, 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 government 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.
- 2.4.7 At the time swine fever is first confirmed little is likely to be known about the source of the infection, how long it has been present in GB, how it was introduced or where else it may be present. It is likely other infected premises will subsequently be identified. With such uncertainty, the main focus of government controls is to prevent the risk of further 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 swine fever is detected in new areas, strict controls will apply on the movement of pigs and things liable to spread infectious virus and whilst there is uncertainty on the extent of disease spread it is unlikely movements will be licensed.
- 2.4.8 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 people, livestock and other items liable to have spread disease from the IP have been completed, the incubation period of the virus, and the clinical presentation of the relevant strain of swine fever (such as mild or virulent). During this phase, government may ease some restrictions in the areas around the infected premises 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, government will consider whether it needs to re-impose the stricter controls.
- 2.4.9 Once there are no new cases in the area and the pigs on the infected premises have been killed out and the premises adequately cleansed and disinfected, government 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 swine fever; this cannot commence before certain legal minimum time periods have passed. Once satisfied the zones are free of swine fever, and taking account of the wider disease situation, the zones will be lifted removing the area restrictions.
- 2.4.10 Once all the zones and infected premises in GB have been cleared and restrictions lifted government is able to put a case to the EU and the OIE to reestablish recognition of swine fever freedom. Whether or not feral pigs were implicated or vaccination (with regard to CSFV (see section 11.2)) was used will impact the actions and timescale for claiming freedom.

2.4.11 Despite the above mitigation and control measures following an outbreak of ASF and/or CSF there can be considerable further work required:

• to re-establish third country markets

- to publish an epidemiology report of the outbreak
- to consider what lessons can be learned
- to respond to EC missions, other reports and enquiries
- for operational partners and industry to recover to their pre-outbreak position
- 2.4.12 If disease is suspected in feral pigs action will be taken to confirm or negate swine fever. If swine fever is confirmed, action will be taken to eradicate it from the feral pig population. Additional controls will apply in the area (for information on regaining disease free status see section 12).
- 2.4.13 Whilst the primary control at infected premises and for swine fever in feral pigs is to cull out affected farms and populations, vaccination against CSFV (only) may be authorised in limited circumstances, where it is beneficial in controlling CSFV. No vaccine is currently available for ASFV.
- 2.4.14 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

2.5.1 This document sets out the strategy and controls to deal with an outbreak of swine fever. The related management and decision-making processes are explained in governments' exotic disease contingency plans (see section 1.2.1).

# 3 Maintaining Disease Freedom and Surveillance

#### 3.1 Introduction

- 3.1.1 ASF and CSF are not normally found in the UK. In order to keep swine fever 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.
- 3.1.2 This section summarises current measures to:
  - prevent incursions of swine fever into UK/GB
  - minimise the likelihood of spread of swine fever within GB prior to its detection
  - detect an incursion of swine fever early and activate disease contingency plans

#### 3.2 International Surveillance

3.2.1 Defra monitors the international disease situation and publishes qualitative risk assessments and preliminary outbreak assessments<sup>4</sup> as appropriate. These

<sup>&</sup>lt;sup>4</sup> at https://www.gov.uk/government/collections/animal-diseases-international-monitoring

assessments are used by government to inform policy-making and measures to prevent incursion to the UK.

3.2.2 When disease is not present in the country, controls need to be proportionate to the risk. By monitoring the international situation the option to vary preventative controls is considered against changing threats. Government works closely with other agencies to deliver proportionate controls at borders.

#### 3.3 Trade / imports

- 3.3.1 Government targets surveillance at the highest risk routes of incursion to check for continued freedom from swine fever.
- 3.3.2 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 UK, or passing through it, must meet the conditions and pass veterinary checks under import and export regulations<sup>5</sup> for EU and third country trade. These include documentary, identity and physical examinations. Limited samples may be taken from live pigs for laboratory analysis.
- 3.3.3 Where a member state or region is affected by swine fever the European Commission imposes additional controls on what may be exported from the region to other member states<sup>6</sup>. 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 swine fever affected regions. Similar trade principles reduce the risk of swine fever entering the EU from third countries affected by swine fever. The restrictions will depend on the nature of the outbreak and whether it affects kept pigs or feral pigs. These restrictions may apply to the export from swine fever-affected regions of pigs, porcine germplasms (semen, ova and embryos), all products of porcine origin whether farmed or from feral populations including meat or uncooked products and can extend to requiring pork products to be treated.
- 3.3.4 The UK implements enhanced import controls to protect against products of porcine origin being illegally imported from affected regions, although there remains a threat from such activity.

#### 3.4 Control of ASFV and CSFV pathogens

- 3.4.1 Movement of samples containing (or which might contain) ASFV or CSFV to laboratories is regulated and controlled under the Specified Animal Pathogens Order (SAPO) and Import of Animals Pathogens Order (IAPO).
- 3.4.2 The use of swine fever vaccine in the UK is prohibited, (although vaccination against CSFV is possible as an emergency control option in certain circumstances (Section 11)). This prohibition reduces the risk of introducing

<sup>&</sup>lt;sup>5</sup> http://www.defra.gov.uk/animal-trade/

<sup>&</sup>lt;sup>6</sup> for example for ASF see: EC Implementing Decisions 2014/709: <u>https://eur-lex.europa.eu/legal-</u> <u>content/EN/TXT/?qid=1565774893811&uri=CELEX:32014D0709</u>

swine fever through the use of live vaccines, as well as simplifying the detection and control of disease.

### 3.5 Controls to stop disease entering and spreading in the domestic pig population

- 3.5.1 If swine fever enters the pig population in GB 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 feral pigs (see below). Thus measures when swine fever is not known to be present in GB are critical to minimising the impact of an outbreak.
- 3.5.2 The application of good farming practice and biosecurity 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.

3.5.3 Routes of potential spread and relevant mitigating controls include:

- Spread through movement of infected pigs: the movement and stand-still controls<sup>7</sup> 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 all areas used to hold pigs, or that pigs may have come in contact with, on farms when they are depopulated (good practice), and animal gatherings (slaughterhouses, markets, and shows) where pigs from different farms mix (legal requirement<sup>8</sup>)
- Infection through infected pig products: if pigs are killed which are infected with the swine fever virus, product derived from such pigs, whilst not being harmful to humans, can cause pigs to become infected if eaten. This risk is mitigated by observing the ban on feeding swill to pigs<sup>9</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. There is also a risk from contaminated meat and other products of porcine origin from affected regions entering GB (such as in passenger luggage, as personal imports or via postal routes) and being accidently or deliberately fed to kept or feral pigs. It is illegal to bring these to GB as personal imports from third countries. Any meat or other products of porcine origin bought from within the

<sup>&</sup>lt;sup>7</sup> <u>The Pigs (Records, Identification and Movement) Order 2011 (as amended); The Pigs (Records, Identification and Movement) (Scotland) Order 2011 (as amended); The Pigs (Records, Identification and Movement) (Wales) Order 2011 (as amended) & <u>The Disease Control (England) Order 2003 (as amended)</u>, <u>The Disease Control (Interim Measures) (Scotland) Order 2002 (as amended)</u>, <u>The Disease Control (Wales) Order 2003 (as amended)</u></u>

<sup>&</sup>lt;sup>8</sup> <u>Animal Gatherings Order 2010</u>, <u>Animal Gatherings (Wales) Order 2010</u>, <u>The Disease Control</u> (<u>Interim Measures</u>) (<u>Scotland</u>) <u>Order 2002</u> (<u>as amended</u>) and The Markets, Sales and Lairs Order 1925 (as amended)

<sup>&</sup>lt;sup>9</sup> <u>The Animal By-Products (Enforcement)(England) Regulations 2013 (as amended); The Animal By-Products (Enforcement) (Scotland) Regulations 2013 (as amended)</u> and <u>The Animal By-Products</u> (Enforcement) (Wales) Regulations 2014

EU should be disposed of securely to ensure that pigs both kept and feral cannot access them.

- Infection through artificial insemination (AI): pigs can be infected with swine fever virus through the use of semen from infected pigs. The risk of this is minimised by using semen from approved AI centres<sup>10</sup> where controls on production of pig semen are in place which reduce the likelihood of swine fever entering the unit. Adopting similar good practice within 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 swine fever 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 equipment 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 practicing 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. Particular care should be paid when returning from areas known to be affected with swine fever. Contact with pigs should be avoided until you are confident that all vehicles, clothing and equipment are free from contamination.

#### 3.6 Feral Pigs

- 3.6.1 All pigs (Suidae), including wild boar, are susceptible to swine fever regardless of whether they are kept domestically or living in the wild (feral). When swine fever is absent from the UK, current government policy is that, as with other wildlife, landowners are responsible for the management of feral pigs on their land. Where practical, government will support communities and landowners to manage feral pig populations through the provision of guidance.
- 3.6.2 In order to be ready for any outbreak of swine fever government collates information on the location of feral pig populations.
- 3.6.3 There are various potential routes for swine fever to be introduced into feral pigs, including the consumption of infected pig products which are fed illegally or scavenged from waste bins or other sources from contact with infected kept pigs. The risk of swine fever being introduced to feral pigs is mitigated by maintaining general policies for management of wildlife, enforcing rules on

<sup>&</sup>lt;sup>10</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

feeding of animal by-products and as far as practicable minimising the scope for contact between kept and feral pigs.

#### 3.7 Disease suspicion and reporting

- 3.7.1 ASF and CSF are notifiable diseases. This means if anyone suspects swine fever in a kept or feral pig or pig carcase they must legally report it immediately. In England, contact the Defra Rural Services Helpline on 03000 200 301. In Wales, contact 0300 303 8268. In Scotland, contact your local <u>Field Services Office</u>. Failure to do so is an offence.
- 3.7.2 Monitoring the health of pig herds and being vigilant for signs of disease is an essential element in speeding up the detection of disease and thereby minimising the size of outbreaks.
- 3.7.3 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 the herd-health plan. Farmers are expected to consult their private veterinary surgeon (PVS) where they see clinical signs or changes in behaviour or other health indicators; the PVS must consider whether swine fever should be considered as a potential diagnosis. There are several endemic diseases affecting pigs which have similar signs and symptoms to swine fever and this has the potential to lead to swine fever not initially being considered, thus delaying reporting.

#### 3.8 Surveillance

- 3.8.1 Further surveillance for swine fever is carried out to provide assurance of continued disease freedom in GB. This surveillance includes:
  - Official investigation of reports of suspicion of swine fever in pigs (kept and feral) 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 carcases submitted to veterinary laboratories
    - ante-mortem and post-mortem inspections of animals/carcases in abattoirs and game handling establishments for signs of disease by Food Standards Agency (FSA) and Food Standards Scotland (FSS) official veterinarians (OV)
  - assistance of PVSs attending pig farms during their clinical and routine visits advising on pig health issues and as part of farm assurance schemes and sero-surveillance of boars for CSF (not ASF) entering and resident at EUapproved AI Centres licensed for export of semen<sup>11</sup>
  - serological testing for CSFV of certain pigs for pre-export

<sup>&</sup>lt;sup>11</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

#### 3.9 Raising stakeholder awareness

- 3.9.1 Biosecurity advice is made available to pig keepers by GB Governments including information on typical clinical signs of ASF and CSF.
- 3.9.2 There is continuing publicity on the risk of illegally feeding waste food to pigs. There is publicity whenever the risk status of ASF or CSF is raised and when significant events during the year (eg Halloween) increase the risk of waste food being fed. This includes including increasing public awareness of the risks and providing advice on practical measures that can be taken to avoid introducing and spreading disease.
- 3.9.3 The PVS and other veterinary practitioners are an important source of advice to pig keepers.

#### 4 Suspicion of disease in GB

#### 4.1 Suspicion of swine fever – requirement to notify

- 4.1.1 ASF and CSF are notifiable diseases. This means if anyone suspects swine fever in a pig or pig carcase they must report it to APHA. Any person who examines a sample taken from a pig or carcase and who suspects the pig/carcase is infected with swine fever virus or who detects antibodies to, or antigens of, that virus must immediately notify the APHA. If unsure whether to notify disease they may seek a consultation with an APHA vet.
- 4.1.2 The duty vet at APHA will liaise with APHA vets with responsibility for notifiable disease reporting and, if disease cannot be negated remotely, will arrange for an APHA Veterinary Inspector (VI) to visit the premises. Information about the case is shared with relevant government units via a Notifiable Disease Incident (NDI) report form; this report is updated as further information becomes available, until swine fever is either confirmed or negated.

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

- 4.2.1 Where APHA decide that a VI must visit the premises, APHA will orally inform the person reporting the suspect pig/ carcase and/ or the person at the premises responsible for the pigs that:
  - further investigation is necessary
  - no pigs or pig carcases or any other animal or object which might be infected or contaminated with swine fever virus should be moved off the premises. This is to minimise the risk of further disease spread.
- 4.2.2 On arrival at the premises, the VI will serve the occupier with a written restriction notice (EXD1) designating the premises as a "suspect premises" and formalising the restrictions served orally. Premises where disease is suspected are termed "Suspect Premises".
- 4.2.3 The VI will undertake a thorough investigation to determine whether suspicion of swine fever can be negated on clinical grounds. If swine fever is negated the VI will immediately remove the premises restrictions.

- 4.2.4 If the VI cannot rule out the suspicion of swine fever, or other notifiable disease, they will take samples and submit these for laboratory analysis.
- 4.2.5 The restrictions will remain in force until the presence of swine fever can be confirmed or negated. In some cases the restrictions may be modified or an activity licensed. This might be to allow a specific activity such as the movement on or off the premises of people, vehicles, equipment, other animals (except pigs) or things that might spread disease where the VI considers the risk of spreading disease can be mitigated.
- 4.2.6 The welfare of pigs must be ensured during any period of restriction and this remains the responsibility of the keeper.
- 4.2.7 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.
- 4.2.8 In anticipation that swine fever might be confirmed, the VI will start to prepare plans to deal with culling of pigs so that action can be taken quickly if disease is confirmed. This will include liaising with APHA on logistics.
- 4.2.9 The investigation may also identify animals, vehicles and other things that may have already taken infectious or potential infectious material out of the premises (or brought it into the premises) so that these can be traced (see section 4.3 below on contact premises).
- 4.2.10 Government will receive and analyse the test results and the government's CVO will decide that either:
  - swine fever is negated: all restrictions will be removed immediately; or
  - swine fever is confirmed: the infected premises will remain under restrictions whilst the actions in section 5 are completed
- 4.2.11 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

- 4.3.1 Contact premises are places which have a link to a suspect or infected premises which a VI considers may have resulted in the spread of swine fever into or out of the contact premises.
- 4.3.2 The epidemiological situation and proximity of the premises to an infected premises may lead a VI in conjunction with the findings of a veterinary risk assessment (VRA) to conclude that disease may have spread to the premises. The principle of lateral spread of swine fever is supported by

evidence from previous outbreaks of CSF in England<sup>12</sup> and worldwide<sup>13</sup> which show that outbreaks may be prolonged as a result of spread of infectious material from an infected premises to pig farms in close proximity, typically 1km to 3km. Similar principles apply for ASF.

- 4.3.3 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 swine fever 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
  - movement restrictions will be put in place although movement of things on or off the premises may be licenced by a VI subject to an assessment of the risk of disease spread
  - 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)
- 4.3.4 If considered to be a high risk of disease spread, the pigs at the contact premises may be culled (as described in section 4.4).

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

- 4.4.1 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 swine fever 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

<sup>&</sup>lt;sup>12</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>&</sup>lt;sup>13</sup> Elbers ARW et al. (1999) The classical swine fever epidemic 1997-1998 in the Netherlands: descriptive epidemiology. *Preventative Veterinary Medicine* 42, 157-184

- at a contact premises where epidemiological evidence is highly indicative that disease will be present and to delay culling risks the spread of disease
- 4.4.2 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.
- 4.4.3 Whenever pigs are killed ahead of formal confirmation of disease, sufficient samples will be taken to establish the extent of viral infection (if any) that was present.
- 4.4.4 If following laboratory analysis of samples disease is confirmed, the premises will be re-designated as an infected premises (IP).
- 4.4.5 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

- 4.5.1 A series of virological and serological tests are undertaken at the National Reference Laboratories for swine fever. Samples are sent concurrently to the APHA Weybridge to test for the CSFV and to The Pirbright Institute to test for the ASFV. Interim test results are usually available within 24 hours but some tests take several days to complete. Additional tests can be undertaken when a virus is isolated and these tests may help identify the origin of the virus.
- 4.5.2 On occasions an investigation may start as a result of an unexpected result in pre-export testing or pre-entry testing of boars at AI centres. The APHA will investigate these in exactly the same way as they would for a clinical suspect case.
- 4.5.3 Laboratories finding evidence of the use of vaccine against CSF following analysis of samples must immediately notify their local APHA office.

#### 4.6 Epidemiological assessment

- 4.6.1 A VI will undertake an epidemiological assessment to try to begin to determine the:
  - possible origin of the infection
  - period during which swine fever may have been present at the premises
  - movement of potentially infected animals, carcases or items from the premises
  - other premises that may be infected
  - possibility that feral pigs may have been involved in the spread of the virus

4.6.2 The VI will continue this enquiry until these facts have been established so far as is possible or the possibility of disease has been discounted.

### 4.7 Optional controls in the area around a suspect premises

- 4.7.1 Where swine fever is suspected at a premises and it is placed under restrictions, government will consider whether restrictions on other pig premises in the area are needed pending the outcome of tests. Such a temporary control zone (TCZ) is a precautionary measure designed to minimise the risk of the spread of undetected disease.
- 4.7.2 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 swine fever) prior to any future protection zone or surveillance zone (see Section 7) being declared if disease is confirmed. Government 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 government to apply further restrictions within the TCZ.
- 4.7.3 A TCZ may be considered where there are no confirmed cases of swine fever in GB and if:
  - a decision is taken to kill pigs at the suspect premises ahead of confirming disease
  - evidence suggests that pigs are deliberately being moved out of the area to avoid any future PZ/SZ (Protection and Surveillance Zones)
- 4.7.4 In addition to the two scenarios above, a TCZ may also be considered when swine fever has already been confirmed in GB 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
  - if the suspect premises is not within a PZ/SZ and the VI's assessment of the situation at the suspect premises warrants wider controls
- 4.7.5 The size of the zone is likely to be the size of an SZ (as a minimum 10 km), although account will be taken of the specific circumstances.
- 4.7.6 Government 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 Suspicion of swine fever in feral pigs

4.8.1 See section 10.4 for information on when swine fever would be suspected in feral pigs and information on what control measures would be taken.

#### 4.9 Outcome of investigation

- 4.9.1 There are two possible outcomes:
  - i. The CVO confirms CSF or ASF on the basis of laboratory tests and this would usually be expected within 24 to 48 hours of laboratory samples being received (see next section); or
  - ii. Swine fever 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 swine fever virus was not present.
- 4.9.2 If suspicion of disease is strong and APHA cannot rule out its presence on clinical grounds, government may hold an Amber teleconference. Its purpose is to appraise the relevant government bodies and functions of the situation and risk assessment, and to plan further action and communication accordingly. Please refer to GB governments' exotic disease contingency plans (see 1.2.1) which detail the mobilisation of teams, the disease control policy groups that will be set up and the communications taking place at this time.
- 4.9.3 If swine fever is negated, APHA will notify the premises' occupier and the restrictions 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 swine fever is confirmed.

#### 4.10Communication

- 4.10.1 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.
- 4.10.2 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 government and industry channels. General advice on biosecurity including information on typical signs of disease is already in the public domain.
- 4.10.3 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, section 4.7) if considered necessary to prevent disease spread. Notices and signs may be required at the suspect premises or in a wider area if a TCZ is declared.

### **5** Confirmation of ASF or CSF in GB

#### 5.1 Confirming a case of swine fever

- 5.1.1 The CVO for the part of GB which is investigating the suspect swine fever is responsible for taking the decision to confirm disease in their territory. A decision is taken in consultation with the CVOs for the rest of the UK, normally at or following an Amber teleconference. Confirmation of swine fever will be consistent with the requirements of the relevant EU diagnostic manual<sup>14</sup>.
- 5.1.2 On confirming the first case of swine fever Government 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 swine fever are summarised in this section.
- 5.1.3 Government will invoke the relevant contingency plans and set up the National Disease Control Centre (NDCC) and Central Disease Control Centre(s) (CDCC) in line with these plans<sup>15</sup>.

#### 5.2 International notification obligations

- 5.2.1 Within 24hrs of confirming swine fever the CVO for the UK will notify the OIE that swine fever is present in the UK. The CVO UK will also notify the European Commission of the presence of the disease.
- 5.2.2 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

- 5.3.1 Government will withdraw export health certificates for pig and pig products and will notify importing countries. It is likely that the UK will take voluntary action ahead of the formal confirmation of swine fever to minimise the risk of spreading undetected swine fever to other countries.
- 5.3.2 On confirming a swine fever outbreak the UK may seek, or be subject to, an EU safeguard measure. This will ratify the action taken by the UK to prevent the export to the EU of live pigs, or other pig products. The safeguard decision may impose additional controls. Export restrictions will apply to a much wider area than that where disease is currently identified to reflect the uncertainty of where else in the country swine fever may already be present. Thus export restrictions will apply to areas of UK which are outside of the control zones (see 7.1) and may initially extend to the whole of GB or UK. The specific measures and areas affected will depend on the precise disease situation and

 <sup>&</sup>lt;sup>14</sup> Commission Decision 2002/106/EC for CSF and Commission Decision 2003/422/EC for ASF.
<sup>15</sup> Defra's Contingency Plan for Exotic Animal Diseases; the Welsh Government Contingency Plan for Exotic Animal Diseases; Scotland's Exotic Animal Disease Contingency Framework Plan

these will be modified as the disease outbreak is brought under control and there is greater certainty about the affected regions.

#### **5.4 Disease control measures**

- 5.4.1 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 to limit the risk of local spread. The size of these zones and the control measures imposed in the zones are described in section 7.1.
- 5.4.2 If swine fever is confirmed in feral pigs, a Feral Pig Control Zone (FPCZ) will be declared. Further information on this and the control measures taken is found in sections 10.5 and 10.7.

### 5.5 Controls outside protection and surveillance zones

- 5.5.1 Legislation does not require any specific controls outside of the declared control zones if swine fever only affects kept pigs. 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 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.
- 5.5.2 In addition to the declared protection and surveillance zones, where <u>the</u> <u>presence of ASFV</u> has been confirmed in feral pigs there will be additional EU disease control zones implemented. [See section 10]. These zones are designed to further control disease spread where feral pigs are infected and to enable trade from disease-free areas of the UK to continue with the EU.
- 5.5.3 It is likely that the confirmation of swine fever in GB 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. Where feral pigs are found dead and there is suspicion that they may be infected with swine fever, these carcases will be tested to confirm or rule out the presence of ASFV/CSFV.
- 5.5.4 Enhanced biosecurity requirements to prevent further spread of ASFV may also be required outside of the declared control zones. For example, all vehicles used to transport livestock from premises where pigs are kept to a slaughterhouse may be required to undertake cleansing and disinfection of the vehicles used before loading the animals and before leaving the slaughterhouse.

#### 5.6 Cross-border zones

5.6.1 Where disease is confirmed and control zones are established in England, Scotland or Wales and the legal minimum zone size would overlap the other territory, a joint declaration will be prepared.

## 5.7 Communications and raising stakeholder awareness

- 5.7.1 During an outbreak, government must make information available 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 swine fever
  - action to take if swine fever is suspected
  - the current disease situation
  - current control measures
  - legislative and licensing procedures
- 5.7.2 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.
- 5.7.3 Owners must be made aware of the results of tests for swine fever performed on their pigs and any restrictions imposed as a consequence.
- 5.7.4 All livestock owners, including keepers outside zones, have responsibilities. General and targeted publicity will keep them appraised of the disease situation and help them understand how restrictions may impact their business. Keepers will be reminded to remain vigilant for signs of disease in their pigs and advice will be provided on how to improve and maintain high levels of biosecurity and other practices they might adopt to minimise the risk of exposure to or further spread of swine fever including observing the ban on feeding swill to pigs.
- 5.7.5 An outbreak of swine fever is unlikely to 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 swine fever does not have any public health implications. This information will be disseminated in partnership with the relevant government bodies<sup>16</sup>. Advice about food safety should be delivered by the FSA or FSS.

<sup>&</sup>lt;sup>16</sup> The Department of Health and Social Care and Public Health England in England, Public Health Wales in Wales and Scottish Government's Directorate for Chief Medical Officer and Public Health

### **6** Controls at infected premises

#### 6.1 Definition of an infected premises

- 6.1.1 The term "premises" is used throughout legislation and this strategy. An "infected premises" (IP) is any place where disease has been confirmed and an IP Restriction Notice served.
- 6.1.2 The IP Restriction Notice will make it clear what constitutes the IP and will take account of factors such as 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 premises.
- 6.1.3 If disease is confirmed on common land, the common will be treated as an IP and the same IP restrictions will apply. Restrictions may apply to bye land.

#### 6.2 Movement and access controls at IP

- 6.2.1 Where swine fever is confirmed pigs, carcases or anything suspected of being contaminated with swine fever must not be moved.
- 6.2.2 Once assessed by a VI, the movement of people, vehicles, equipment or other animals (excluding pigs) on and off the premises may be licensed by the VI subject to an assessment of the risk of spread of swine fever.
- 6.2.3 An important measure is to restrict the access of people to the IP to minimise the risk of swine fever being carried to another premises. Public rights of way e.g. footpaths and bridleways can present a significant risk by allowing general public access to the IP. The VI will assess the threat the presence of public rights of way pose to the IP and as necessary APHA will work with the appropriate local authority to seek closure of public rights of way on the IP which present a disease risk. It is anticipated that public rights of way will not need to be closed over a wide area although in some limited circumstances, where the risk of spread of swine fever is high, it may be necessary to seek the closure of footpaths close to an IP.
- 6.2.4 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

- 6.3.1 All pigs on an IP will be humanely culled as soon as practicable, whether or not they currently show signs of disease. Culling is undertaken by qualified persons, contracted by APHA, under the supervision of a VI.
- 6.3.2 For animals culled for disease control purposed, the transport of carcasses is undertaken by companies under the control of APHA following strict biosecurity protocols and using leak proof vehicles. Carcases will be destroyed under official supervision, ie APHA field vets.

6.3.2 Rendering is the preferred carcase 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

6.4.1 Semen, ova and embryos collected from pigs at the IP during the period between the probable introduction of swine fever 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 swine fever virus.

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

- 6.5.1 After the carcases have been disposed of, the premises and any potentially contaminated vehicles and equipment will need to be cleansed and disinfected under the supervision of a VI to prevent spread from the premises and potential re-emergence of disease when the premises is restocked. Disinfection must be carried out using a disinfectant approved for use in GB<sup>17</sup>.
- 6.5.2 There are two phases to C&D of an IP, preliminary and secondary.
- 6.5.3 Preliminary disinfection of the premises is carried out immediately after completion of culling and disposal under the direction and control of APHA and at government's expense. This involves the surface application (normally by spraying) of an approved disinfectant (diluted to the rate in the approved disinfectants' list) to those areas of the premises in which infected animals have been and the areas used for culling (note, this would generally not include fields/pastures etc). Preliminary disinfection is considered to be completed 24 hours after the last application of the approved disinfectant.
- 6.5.4 Secondary cleansing and disinfection is the responsibility of, and at the cost of, the occupier of the premises and must be completed in accordance with the directions of APHA. Irrespective of whether or not pigs are to be reintroduced on the premises, APHA may serve a notice requiring secondary C&D. In most cases APHA will serve a legal notice on owners to complete secondary C&D. If the owner does not undertake secondary cleansing and disinfection, APHA can arrange for this to be undertaken by others at the expense of the owner<sup>18</sup>.
- 6.5.5 Parts of the premises that cannot be cleansed and disinfected will remain under restriction for an extended period, until notified by the VI that they are satisfied there is no longer a risk of swine fever virus being present.
- 6.5.6 Vehicles on the premises will need to be unloaded and cleansed and disinfected under the supervision of a VI. Vehicles on the premises will remain there until they have completed full C&D and been licensed to move off the premises by APHA.

<sup>&</sup>lt;sup>17</sup> <u>The Diseases of Animals (Approved Disinfectants) (England) Order 2007</u>, <u>The Diseases of Animals</u> (Approved Disinfectants) (Scotland) Order 2008, <u>The Diseases of Animals (Approved Disinfectants)</u> (Wales) Order 2007

<sup>&</sup>lt;sup>18</sup> <u>Diseases of Swine Regulations 2014</u> (Regulation 14(3))

6.5.7 Any equipment, bedding etc. from the IP will either be destroyed or treated under official supervision. 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 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 buried. Slurry from an IP should be stored for at least 42 days for CSF, or 60 days for ASF, after the last addition of infected or potentially infected material. A shorter storage period may be permitted if a VI has given instructions to treat the slurry in some way prior to storage. Slurry from an IP should not be used for spreading.

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

- 6.6.1 Swine fever virus can remain active for months or years in infected meat and other products of porcine origin and can be a significant source of spread and dispersal of swine fever in pigs. Pigs moved from the IP to slaughter in the period after swine fever may have been introduced but before disease restrictions were imposed may have been infected with swine fever. Therefore, the meat from these pigs may be affected by swine fever and will be traced, withdrawn and disposed of. Animal products potentially infected with swine fever will be disposed of as category 2 animal by-products as defined in the Animal By-Products Regulations<sup>19</sup>.
- 6.6.2 The Food Business Operator (FBO) and FSA or FSS official veterinarian will be notified by APHA 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 has been moved. Records must be retained for inspection. Meat must be withdrawn by processors, manufacturers, distributors and retailers as far as retail shelves but not from end consumers.
- 6.6.3 Compensation is not payable for products withdrawn under these animal products legislation<sup>20</sup>.

<sup>&</sup>lt;sup>19</sup><u>The Animal By-Products (Enforcement)(England) Regulations 2013 (as amended); The Animal By-Products (Enforcement) (Scotland) Regulations 2013 (as amended)</u> and <u>The Animal By-Products</u> (Enforcement) (Wales) Regulations 2014

<sup>&</sup>lt;sup>20</sup> The Products of Animal Origin (Disease Control) (England) Regulations 2008 (as amended), The Products of Animal Origin (Disease Control) (Scotland) Order 2008 (as amended), The Products of Animal Origin (Disease Control) (Wales) Regulations 2008 (as amended)

### 6.7 For ASF only - Measures when tick vectors are suspected or confirmed at an IP

- 6.7.1 In addition to direct and fomite transmission, ASFV can also be transmitted by soft tick vectors (*Ornithodoros* species). Current evidence suggests there are no known competent vectors for ASFV in the UK<sup>21</sup>. However, if ASF is confirmed in GB, expert advice will be sought regarding the possibility of biological vectors (soft ticks) in the area or whether other mechanical transmission of infected blood could be involved in the epidemiology of the disease. If so, experts will assist in determining the appropriate control measures to be taken at IPs.
- 6.7.2 EC law requires special measures to be applied if the presence of ASFV viable vectors<sup>22</sup> is suspected or confirmed on an ASF-infected premises.
- 6.7.3 If the presence of vectors is suspected or possible on an IP, an inspection of the pigs' living and resting quarters and the surrounding area should be undertaken to establish the presence or absence of vectors (by physical inspection and the trapping of specimens if necessary). Experts will be engaged in the identification and confirmation of competent vectors, as necessary.
- 6.7.4 If the presence of tick vectors is confirmed:
  - the vectors will be tested to confirm or otherwise the presence of ASFV
  - further monitoring, checking and control measures will be established in the holding and the surrounding area
  - · the IP will be acaricide-treated in addition to cleansing and disinfection
- 6.7.5 The control of the tick vector can be very difficult due to its long life cycle, ability to survive long periods without feeding, the possibility of hosts other than pigs and the possibility of hiding deeply in the fissures of buildings where it is difficult to spray with acaricide.
- 6.7.6 The EU may specify further measures for the monitoring and control of vectors by an implementing decision.

#### 6.8 Compensation

- 6.8.1 Under the Diseases of Swine Regulations 2014, government will pay compensation for pigs culled for disease control purposes.
  - For pigs determined to be affected with swine fever the compensation will be at half the pig's value immediately before it became affected as determined by individual valuation.

<sup>&</sup>lt;sup>21</sup> Gale, P., Drew, T., Phillips, L.P., David, G. & Wooldridge, M. (2009) The effect of climate change on the occurrence and prevalence of livestock diseases in Great Britain: a review. J. Appl. Microbiol. 106: 1409-1423.

<sup>&</sup>lt;sup>22</sup> Council Directive 2002/60/EC defines a vector as a tick of the species Ornithodorus erraticus

• For unaffected pigs culled in order to control swine fever the compensation will be the value of the animal immediately prior to culling.

APHA maintains a list of approved valuers. Only approved valuers may value animals culled for the control of swine fever.

- 6.8.2 Compensation is also payable on anything seized by APHA and not returned, other than when this has been done because a person has failed to comply with their obligations.
- 6.8.3 Compensation is not available for consequential losses. Compensation is not payable for meat disposed of under the Products of Animal Origin (Disease Control) Regulations 2008 (as amended).

#### 6.9 Repopulation of infected premises

- 6.9.1 For CSF-infected premises, or ASF-infected premises where disease is not linked to vectors, restrictions will remain in place until:
  - i) More than 6 months has elapsed since the satisfactory completion of secondary C&D and the VI is of the opinion that restrictions can be lifted without risk of spread of disease; or
  - ii) Following satisfactory completion of secondary C&D, the premises has been tested for the presence of any remaining disease using sentinel pigs. If no disease is detected in these sentinel pigs, restrictions may be lifted. The process for this is further explained below.
- 6.9.2 For (ii), APHA will license the sentinel pigs on to the premises after a certain period of time (specified under law) has passed since the owner has satisfactorily completed secondary C&D, as follows:
  - At least 40 days for ASF-affected premises
  - At least 30 days for CSF-affected premises
- 6.9.3 The number of sentinel pigs to be used will be specified by the VI and will be the minimum sufficient number to detect disease on the premises. In this context the term "premises" relates to all parts of the holding specified in the IP restriction notice and will include all parts of the holding potentially exposed to disease.
- 6.9.4 These sentinel pigs must have tested negative for antibodies against the relevant swine fever virus (at the expense of the owner) or come from premises not subjected to swine fever restrictions.
- 6.9.5 APHA will undertake serological laboratory tests of the sentinel pigs:
  - 45 days after the arrival of the last sentinel pig onto an ASF-affected premises, or
  - 40 days after the arrival of the last sentinel pig onto a CSF-affected premises
- 6.9.6 If these final tests prove negative for swine fever antibodies, APHA will lift all restrictions on the premises and the occupier may fully restock.

- 6.9.7 For holdings where the pigs are kept indoors, the occupier can decide to use a much larger number of sentinel pigs. If a larger number of sentinel pigs are used, all the pigs must arrive within 20 days. The sentinel pigs should have tested negative for antibodies against the disease (at the expense of the owner) or come from premises not subjected to restrictions because of swine fever. These sentinel pigs will be subject to serological testing for swine fever as in 6.9.5.
- 6.9.8 The same restocking controls apply for dangerous contact premises where pigs have been pre-emptively culled (see section 4).

#### 6.10 Repopulation of ASF-infected premises where the occurrence of disease has been linked to soft tick vectors

- 6.10.1 In the case of ASF-infected premises where the occurrence of disease has been linked to tick vectors (as in section 6.7), restocking will not take place for at least 6 years unless:
  - Specific measures have been carried out, under APHA supervision, to eliminate the vector from the premises and other places where the pigs would be kept or come into contact with, or
  - It has been possible to show that the persistence of vectors no longer represents a significant risk of ASF being transmitted
- 6.10.2 Thereafter, the premises will be tested for any remaining disease through the use of sentinel pigs as in paragraphs 6.9.2 6.9.6 above. If no disease is detected, the occupier may restock as usual. Restrictions on the premises will not be lifted until at least 60 days has passed since this full restocking.

#### 6.11 Communications

- 6.11.1 Once disease is confirmed, APHA will take steps locally to ensure that everyone in and around an IP is made aware of the restrictions and requirements in force there. This may include displaying notices and signs.
- 6.11.2 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

7.1.1 See section 4.7 for an explanation of the use of temporary control zones declared where necessary on suspicion of swine fever in kept pigs.

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

- 7.2.1 Where disease is confirmed at an IP, there is an increased risk of disease spreading to pig premises in the vicinity. Therefore, government will declare protection and surveillance zones (PZ & SZ) 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.
- 7.2.2 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.
- 7.2.3 A decision to make zones larger will be taken based on epidemiological advice, the local industry 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.
- 7.2.4 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.
- 7.2.5 If an IP is detected in a geographically distinct area, government will declare a new PZ/SZ.

### 7.3 Disease control zone definitions – restriction zone

- 7.3.1 Government, 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, government 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 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 on all or part of GB
- 7.3.2 The European Commission may discuss with GB 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
  - export of pigs and/ or pig products are prohibited
- 7.3.3 If EU safeguard measures are imposed on an area wider than the PZ and SZ but not GB-wide, government will put in place a wider zone to control movements of pigs from this wider area to other parts of GB.
- 7.3.4 A possible approach is to extend the size of 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 a requirement to complete surveillance of all premises in the extended zone.
- 7.3.5 The preferred approach is to use legal powers to control pig movements over a wider area available under Article 5 of the Movement of Animals (Restrictions) (England) Order 2002 as amended, the Movement of Animals (Restrictions) (Wales) Order 2003, as amended and the Movement of Animal (Restrictions) (Scotland) Order 2003. For ease of reference in this document such a zone has been termed a "restricted zone".
- 7.3.6 In declaring the restricted zone, all pig movements could be prohibited with certain types of movement being allowed under licence (see section 7.8). 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 swine fever. 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.
- 7.3.7 The restricted zone would remain in place until a veterinary risk assessment enabled a decision to be taken that it is no longer required.

#### 7.4 Impact of multiple control zones

- 7.4.1 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 two 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

7.5.1 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 – EU African swine fever control zones

7.6.1 Please refer to section 10 for an explanation of the additional EU control zones implemented to when African swine fever is confirmed in feral pigs.

### 7.7 Disease control zone definitions – vaccination zone

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

### 7.8 Movement prohibitions and derogations in control zones

- 7.8.1 The focus of the remainder of section 7 is on controls in the PZ and SZ. The Diseases of Swine Regulations 2014 impose controls on the movement of livestock, genetic material, animal products, meat and fomites (any object which may transmit disease) in swine fever PZ and SZ. The aim of these movement restrictions is to prevent the spread of infection.
- 7.8.2 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 government will authorise this activity. In considering whether to authorise activity government will need to assess the risk the activity might present to control of the outbreak. Government 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.
- 7.8.3 During the early phase of an outbreak very tight controls are necessary to prevent spread of, as yet undetected ASFV/CSFV infection. Generally government will not derogate from these controls in this phase. Whilst there are large numbers of notifications of suspect swine fever, or if government is still confirming new IPs, in particular in and around the declared PZ/SZ, the disease situation will remain uncertain. Thus the risk of spreading undetected disease by authorising movements is likely to be high.

- 7.8.4 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 government 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 area and nationally, the degree of success in following-up tracings from IPs. Government will coordinate decisions on the principles of what restrictions may be eased through licensing. Decisions are constrained by the relevant EC Directive, which is prescriptive in what movements may be allowed and the earliest time at which restrictions may be eased.
- 7.8.5 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 disease control centre 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.
- 7.8.6 However, further outbreaks of swine fever or other information about the nature of the outbreak may require a return to the more restrictive phase.
- 7.8.7 For many of these derogations, EU law sets out minimum periods for allowing movements (for example, see paragraph 7.8.3).
- 7.8.8 The following paragraphs consider the prohibitions that apply to various scenarios and include comment on the derogations that may become available.
- 7.8.9 Section 12.1 describes what conditions need to be met in order to lift the control zones.

#### 7.9 Movement restrictions and licences – live pigs

- 7.9.1 Pigs cannot be moved off or onto premises in the PZ or SZ. Pigs may be moved within a premises so long as they do not cross a public or private road (see paragraph 7.8.6 for more information about when a holding is divided by a road).
- 7.9.2 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, government 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 carcase 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

- 7.9.3 In addition to the above factors, derogations will not be available until at least the following time period has passed:
- Table 1: Time periods for movements of live pigs post-confirmation

	ASF PZ	CSF PZ	ASF SZ	CSF SZ
Days since preliminary cleansing and disinfection at the infected premises	40 days	30 days	30 days	21 days
Days since the zone has been in place if there are multiple infected premises and welfare problems at other premises in the zone cannot be alleviated by management or husbandry practices	40 days	30 days	40 days	30 days

- 7.9.4 The time periods specified above for ASF can be reduced as in the table below if the relevant Minister determines that the sampling and testing programme<sup>23</sup> makes it possible to rule out the presence of ASF on the relevant premises. This option may be limited by logistics and available diagnostic resources.
- Table 2: Alternative (reduced) time periods for movements of live pigs post ASF confirmation

	ASF PZ	ASF SZ
Days since preliminary cleansing and disinfection at the infected premises	30 days	21 days
Days since the zone has been in place if there are multiple infected premises and welfare problems at the other premises in the zone cannot be alleviated by management or husbandry practices	30 days	30 days

- 7.9.5 Under very exceptional circumstances, a derogation may be granted earlier if a serious welfare situation has arisen at a premises as a result of a situation that could not be reasonably anticipated (force majeure), such as serious flooding.
- 7.9.6 Movements of pigs across roads are prohibited, even where the land belongs to the same pig holding. However, government recognise 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

<sup>&</sup>lt;sup>23</sup> This programme will as a minimum be that set out in the EU Diagnostic Manual for ASF
the local disease situation (and as necessary following a risk assessment by VIs or other official vets) government may consider a derogation to allow the movement of pigs 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 swine fever virus.

## 7.10Movement restrictions and licences – other (non-porcine) animals

7.10.1 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 swine fever.

### 7.11 Movement restrictions and licences – genetic material

- 7.11.1 Movement of semen, ova or embryos <u>off</u> premises in the PZ or SZ is prohibited, except for disposal at an approved facility.
- 7.11.2 There are no prohibitions on the movement of genetic material onto a pig premises in the PZ/SZ.

## 7.12Movement restrictions and licences – carcases, pig products and waste

- 7.12.1 Movement of deadstock off pig premises in a PZ/SZ is prohibited but may be licensed, most likely when the disease situation is stable and provided they are clean carcases.
- 7.12.2 Manure and slurry and other pig waste cannot be moved off a pig premises although it can be licensed for transport for disposal. The transport vehicle must be leak proof and the destination must be approved for handling the waste.
- 7.12.3 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<sup>24</sup>.

#### 7.13 Movement restrictions and licences – vehicles

7.13.1 Trucks and vehicles that have carried live pigs or other livestock or material which may be contaminated with swine fever virus are prohibited from leaving premises in the PZ/SZ unless they have undergone cleansing and disinfection

<sup>&</sup>lt;sup>24</sup> Muck spreading remains subject to the relevant environmental rules

(C&D). In the PZ, C&D of such vehicles must be inspected and authorised by a VI.

7.13.2 Such vehicles can continue to be used within the premises.

#### 7.14Movement restrictions and licences – feed

- 7.14.1 Feed should not be moved off a pig holding, unless the feed mill is a separate epidemiological unit. This will be determined by a VI.
- 7.14.2 Transportation of feed in the PZ/SZ is not prohibited but deliveries should try to 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.

#### 7.15Biosecurity at pig premises

- 7.15.1 The movement control measures on pigs, vehicles and other material likely to spread swine fever 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, disinfecting footwear and using clean, uncontaminated clothing<sup>25</sup>.
- 7.15.2 Outdoor pigs are at greater risk of exposure to disease incursion from wildlife (including feral pigs in some areas), public access and other fomites. There is no significant risk of an aerial plume of swine fever virus thus measures to minimise the risk of physical contact with outdoor pigs should help keep disease out. During an outbreak of disease, the owners of outdoor units are encouraged to upgrade their biosecurity and access controls and to seek to separate their pigs from any wildlife threats.

#### 7.16Surveillance and epidemiological investigations

- 7.16.1 Within the PZ and SZ, APHA will undertake surveillance 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 they will be handled as described in section 4.
- 7.16.2 Surveillance will be assisted by use of data from various sources on the location of registered pig keepers. However, this will be supplemented by APHA foot patrols to identify any other pig keepers in the area.
- 7.16.3 Similarly, data on feral pig populations will be considered and as necessary supplemented by visits by feral pig experts.

<sup>&</sup>lt;sup>25</sup> https://www.gov.uk/guidance/disease-prevention-for-livestock-farmers

- 7.16.4 Virological and serological surveillance may be carried out for epidemiological purposes and to support declaring previously infected areas (IAs) free from disease.
- 7.16.5 Veterinary visits to 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.
- 7.16.6 Such data will also be of value to disease modellers and experts to provide advice to veterinary and policy teams. The National Emergency Epidemiological Group (NEEG) will use the evidence obtained from all sources to assess:
  - the possible origin of the infection
  - the period during which swine fever may have been present on the premises prior to detection
  - the risk of disease dispersal through movement of pigs, personnel, vehicles, carcases, meat or any other material which may have transported virus from the premises
  - the risk of other premises that might be infected

7.16.7 The role of NEEG will also include:

- the provision of epidemiological advice and assessment on the determinants, level and distribution of the disease to the National Experts Group and other groups and the UK CVO to inform decisions on disease control and prevention measures including vaccination and surveillance
- leading the epidemiological investigations of the outbreak
- delivering epidemiological modelling
- designing surveillance plans and analysis of these surveillance outcomes
- providing epidemiology reports as necessary

#### 7.17Communications

- 7.17.1 Government will deliver a communication programme to inform keepers/owners of susceptible animals, veterinarians and other stakeholders of:
  - the disease situation
  - measures being implemented
  - advice on clinical signs of disease

#### 7.18Impact of controls

7.18.1 The restrictions set out in this section 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 government, delivery agents, pig producers and processors and related sectors to prepare contingency plans in advance of any outbreak of swine fever. Such action can help alleviate the overall impact on businesses and will help manage expectations.

- 7.18.2 Government recognise that, due to the nature and structure of pig production systems in GB, 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.
- 7.18.3 This strategy is not intended to directly address such impacts. However, government 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 strongly encouraged to put in place appropriate contingency plans. Government 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

8.1.1 There are some possible scenarios in which swine fever 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 swine fever will have arrived at the location already infected. Thus, special procedures apply where swine fever 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 swine fever in pigs at an establishment

- 8.2.1 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), knackers' yards (where animals are killed but not for the human food chain), and game handling establishments (where carcases of pigs killed in the wild may be taken for hanging and meat inspection in order to enter the food chain).
- 8.2.2 When APHA 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 APHA VI arrives and assesses the situation. The VI will wish to inspect the pigs prior to slaughter to assist with the assessment. No pig products should leave the establishment until the VI authorises such movement.
- 8.2.3 Investigations will initially focus on establishing whether swine fever should be suspected and whether samples need to be taken. If swine fever 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<sup>26</sup>.
- 8.2.4 If samples need to be taken to confirm or negate the presence of swine fever then restrictions will remain in force until laboratory results enable confirmation or negation of disease, usually for 24-48 hours; this will prevent further animals being brought into the abattoir for slaughter. The VI will assess which pigs in the lairage may be infected and take the necessary samples.
- 8.2.5 The VI will also seek to identify the source of the suspect pigs, including their route to the abattoir. Restrictions will be served by APHA on the source

<sup>&</sup>lt;sup>26</sup> Food Safety Act 1990

premises and any premises visited on route to the abattoir. These will be investigated by APHA as contact premises.

- 8.2.6 Once the VI has completed the initial assessment (including consideration of the chillers and any requirement to cleanse and disinfect) the VI will give instructions to the FBO on how the remaining pigs may be killed and the carcases 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 carcases with those that might be free of swine fever.
- 8.2.7 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 meat will be disposed of as category 2 animal byproduct. The FBO is advised to maintain the meat and any other relevant derivatives in suitable conditions to ensure that the meat remains fit for human consumption if swine fever is negated and the meat and/or related derivatives are released for sale.

#### 8.3 Confirmation of swine fever at an establishment

- 8.3.1 Where swine fever is confirmed in a pig or pig carcase at a slaughterhouse, knackers' yard or game handling establishment, 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 carcases contaminated with swine fever virus.
- 8.3.2 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 VI has assessed the risk of the meat being infected or contaminated with swine fever virus. Where there is no risk of swine fever infection or contamination, meat may be released otherwise it will be detained pending test results.
- 8.3.3 Where swine fever is confirmed the FBO will be required to dispose of the affected meat as category 2 animal by-product. The VI will direct what actions are needed, including C&D of the establishment.
- 8.3.4 Unless the establishment turned out to be the disease source it is likely restrictions will be lifted 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 VI.
- 8.3.5 Control zones are not ordinarily declared around infected establishments.

#### 8.4 Suspicion of swine fever at an animal gathering

8.4.1 Types of animal gatherings include licenced markets, shows, collection centres and approved export collection centres. Special procedures apply where swine fever 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.

- 8.4.2 When suspicion of swine fever at a gathering is notified, the gathering will be restricted and further movements of animals on or off will be prohibited whilst initial investigations take place. Investigations will initially focus on establishing whether swine fever 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.
- 8.4.3 If samples need to be taken to confirm or negate the presence of swine fever then restrictions will remain in force until laboratory results confirm or negate disease. Only in exceptional circumstances will it be possible to move further animals into or out of the gathering with agreement from the VI.
- 8.4.4 Since the gathering is unlikely to be the source of swine fever, the APHA VI 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 APHA VI considers necessary.
- 8.4.5 APHA 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. Animal gatherings are required to maintain contingency plans and these should include plans to take temporary care of animals, including their welfare during this time.
- 8.4.6 Subject to appropriate measures to minimise the risk of spread of swine fever, APHA 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 APHA may also place restrictions on the destination premises especially where other pigs are present.
- 8.4.7 If disease is negated all restrictions are removed immediately.

## 8.5 Confirmation of swine fever at an animal gathering

- 8.5.1 If swine fever 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 is 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.
- 8.5.2 Non-swine species may be licensed off the premises by a VI, subject to appropriate biosecurity protocols, including C&D of vehicles after unloading at the destination premises. If pigs are present or kept at the destination premises a VI 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 swine fever during transportation

- 8.6.1 If swine fever is suspected in transit (such as a roadside inspection of a livestock vehicle) a VI will assess the pigs and if swine fever 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 swine fever in transit is unlikely, this is treated as a special case since the vehicle is unlikely to be the source of swine fever. The vehicle's route(s) will therefore be traced and APHA will place the source and any other contact premises under restriction as necessary.
- 8.6.2 The vehicle and pigs will be moved to an appropriate location to be determined by the VI 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.
- 8.6.3 If disease is confirmed, the vehicle will be cleansed and disinfected as directed by a VI. 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 there is suspicion of swine fever at an establishment or gathering

8.7.1 It is not usual practice to make public statements about premises that are under investigation for suspect disease. However, where swine fever 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 government when swine fever 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

8.8.1 To operate a slaughterhouse in certain zones or for them to receive pigs from certain zones they must be "designated"<sup>27</sup>. For a slaughterhouse to be "designated", an application must be made to the relevant authority to verify and then be officially approved by the relevant Minister. The slaughterhouse must meet the requirements for sourcing pigs and separation as necessary,

<sup>&</sup>lt;sup>27</sup> The Products of Animal Origin (Disease Control) (England) Regulations 2008 (as amended), The Products of Animal Origin (Disease Control) (Scotland) Order 2008 (as amended), The Products of Animal Origin (Disease Control) (Wales) Regulations 2008 (as amended)

have sufficient C&D facilities for hauliers and have clear processes for handling any restricted meat produced.

- 8.8.2 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.
- 8.8.3 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 government will need to seek approval from the EC Standing Veterinary Committee<sup>28</sup>.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.
- 8.8.4 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 carcases or meat from animals originating outside the PZ/SZ but slaughtered within the PZ/SZ.
- 8.8.5 Once pigs originating from within the PZ/SZ can be licenced 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.
- 8.8.6 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.
- 8.8.7 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.
- 8.8.8 Note, in some circumstances the European Commission may take additional safeguard measures that apply to pigs, pork and pork products produced within the GB/UK or a region of the UK. Should 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.

<sup>&</sup>lt;sup>28</sup> The EC Standing Committee on Plants, Animals, Food and Feed (SCoPAFF).

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

- 8.9.1 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.
- 8.9.2 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, and animal gatherings have contingency plans in place in order to care for animals during this time.
- 8.9.3 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 VI may decide that the destination premises should be placed under restrictions for a period to ensure disease has not been introduced.
- 8.9.4 Approximately 48 hours is needed to allow a preliminary assessment of the disease situation. Subject to veterinary risk considerations and licensing by a VI, 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 VI 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

- 9.1.1 Swine fever 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".
- 9.1.2 The Farm Animal Genetic Resources Committee (FAnGR Committee) has published the list of approved UK pig breeds at risk and the associated criteria<sup>29</sup>. This is not a closed list, and if evidence can be provided to support the criteria, the 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 swine fever is not present

- 9.2.1 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). In areas where feral pigs are known to be present, keepers are advised to take extra precautions to prevent any contact between their pigs and feral pigs. These measures may include installing and maintaining boar-proof fencing.
- 9.2.2 If you keep animals from breeds which are on the breeds at risk list, you must have plans for what to do if there is a disease outbreak. The Committee's contingency plan guidelines<sup>30</sup> are available online.

## 9.3 General measures during a swine fever outbreak

- 9.3.1 EC law allows member states to consider derogating from culling of breeds at risk and the other categories of specialist pigs defined in point 9.1.1 provided that disease control is not jeopardised. As detailed below, government will consider such exemptions 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.
- 9.3.2 It is the responsibility of the pig keeper to notify the APHA VI if breeds at risk (or other specialist animals) are present on a suspect or contact premises.

<sup>&</sup>lt;sup>29</sup> https://www.gov.uk/government/publications/uk-breeds-at-risk-from-exoticanimal-disease-outbreaks

<sup>&</sup>lt;sup>30</sup> https://www.gov.uk/government/publications/farm-animal-genetic-resources-fangr-guidelines-ondeveloping-a-contingency-plan-for-breeds-at-risk

Keepers in GB can also register with APHA that they have breeds at risk pigs on their premises in advance of a disease outbreak. Information of how to do this is at http://www.defra.gov.uk/animal-diseases/controls/cullingexemptions/.

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

9.3.3 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

9.4.1 The movement controls described in section 7 will apply to breeds at risk and other specialist pigs (no special measures will 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

- 9.5.1 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 premises). Where the risk of exposure of pigs to swine fever is considered to be high, pigs may be pre-emptively culled in order to limit the risk of further disease spread.
- 9.5.2 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 swine fever virus (either entering or leaving the isolation facilities).
- 9.5.3 The decision to spare any pig from culling will be taken by the relevant Minister, informed by VRA and other expert advice.
- 9.5.4 When a decision is taken to spare animals on a premises, the VI 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.
- 9.5.5 The spared pigs will be regularly inspected and tested for swine fever before, during and after completion of the isolation period to determine the disease status of the pigs throughout.

9.5.6 Measures will be lifted following VRA on a case-by-case basis. If at any stage swine fever 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 swine fever

9.6.1 If swine fever 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 culled on suspicion of swine fever 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 culled on suspicion of swine fever but the premises would remain under strict biosecurity restrictions whilst laboratory results are awaited.

#### 9.7 Confirmation of swine fever

- 9.7.1 EU law requires pigs at an IP to be culled without delay after confirmation of disease. 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.
- 9.7.2 The decision to spare a pig from culling on an IP would be taken by the relevant Minister. 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. Government will immediately notify the Commission of such a decision who will review the situation with the EC Standing Veterinary Committee<sup>31</sup>. The Commission may impose additional safeguards on UK, GB or an area of GB. 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.
- 9.7.3 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.

<sup>&</sup>lt;sup>31</sup> The EC Standing Committee on Plants, Animals, Food and Feed (SCoPAFF).

### 10 Feral Pigs

#### 10.1General points on swine fever and feral pigs

All pigs are susceptible to CSFV and ASFV regardless of whether they are kept or feral, however the risk of infection and control measures applied to kept and feral pig populations do vary. Hence throughout this document the following definitions of kept and feral are utilised where distinction between the two populations is required:

Kept – all Suidae including domestic pigs and wild boar and hybrids of, which are kept as farmed animals or pets and those pigs taking part in pannage.

Feral Pigs - all Suidae including domestic pigs and wild boar and hybrids of, which are living in the wild.

- 10.1.1 All pigs whether kept or feral are susceptible to swine fever and therefore can potentially have a role in the spread of swine fever. Once swine fever has affected the feral pig population there is a risk of dispersal of swine fever over wider areas and the introduction from feral pigs into domestic pig premises. Under EU law, the UK is obliged to eradicate any incursion of swine fever into feral pigs and until this is complete there are likely to be trade implications. Once swine fever has entered feral pigs, demonstrating disease freedom in these wild populations is inherently more difficult than at a closed pig premises.
- 10.1.2 The feral pig situation in GB varies significantly from the rest of Europe in terms of population size, densities, land management practices and natural environments. In GB feral pig populations are found in a small number of geographically distinct areas. These feral pig populations can be either temporary or self-sustaining populations' which may be a mix of domestic pig breeds, wild boar or hybrids of these. The rest of Europe has much larger populations of wild boar with free movement between countries along very large corridors of forest. Much of Europe has a significantly larger hunting industry compared to that in GB.
- 10.1.3 A number of potential routes for swine fever to be introduced into feral pigs have been identified. These include virus transmission via fomites such as vehicles, people or clothing, through consumption of contaminated pork products, and from infected kept pigs. Any clothing, footwear, vehicles or equipment that could potentially be contaminated should be cleansed and disinfected. It is illegal to feed kept and feral pigs kitchen or catering waste. Any waste food should be disposed of securely to ensure that pigs cannot access this. The risk of introduction into feral pigs from kept pigs can be mitigated by maintaining and enforcing current disease control procedures and maximising biosecurity on domestic pig holdings.
- 10.1.4 A qualitative VRA on the likelihood and impacts of transmission of swine fever between feral pigs and kept pigs concluded that, whilst there are various potential routes for swine fever to be introduced into feral pigs, including virus transmission via fomites such as vehicles, people or clothing, through consumption of contaminated pork products, and from infected kept pigs. The risk of introduction into feral pigs from kept pigs can be mitigated by

maintaining and enforcing current disease control procedures and maximising biosecurity on domestic pig holdings.

- 10.1.5 Wild boar may only be kept under license in accordance with the Dangerous Wild Animals Act 1976. The keeping of wild boar for exhibition to the public in wildlife and farm parks is regulated by the Zoo Licensing Act 1981. Both licenses are administered and enforced by Local Authorities, licences will stipulate the requirements necessary to ensure the animals are kept securely. Under the Wildlife and Countryside Act 1981 it is an offence to release wild boar, or allow their escape into the wild. The release of wild boar is only permitted under licence as administered and granted by Natural England (NE) in England, Natural Resources Wales (NRW) in Wales and Scottish Natural Heritage (SNH)<sup>32</sup> in Scotland. The import and export of live wild boar within the EU is prohibited<sup>33</sup>.
- 10.1.6 When swine fever is absent from the UK, wild boar management policy does not require the eradication of feral pigs. Outside of an outbreak current government policy is that, as with other wildlife, individual public or private landowners are responsible for the management of feral pigs on their land. Where practical, Government will facilitate the management of feral pigs populations through the provision of guidance.

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

- 10.2.1 Regardless of whether or not swine fever is suspected in feral pigs, whenever there is an incursion of swine fever into kept 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 to model potential spread.
- 10.2.2 The VI's inspection of the IP will include an assessment of whether there is any sign of feral pigs being involved in the disease incursion.
- 10.2.3 Relevant bodies (e.g. NE, NRW, Science and Advice for Scottish Agriculture (SASA)) will be immediately consulted to advise if feral pig 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 feral pigs in domestic pig control zones.
- 10.2.4 If feral pigs are determined to be present within the protection or surveillance zones, an emergency meeting of an APHA coordinated Feral Pig National Expert Group (NEG) will be convened immediately to:
  - agree necessary actions to improve information on the feral pig population numbers, density and distribution

<sup>&</sup>lt;sup>32</sup> Scottish Natural heritage will be known as NatureScot from 01/05/2020

<sup>&</sup>lt;sup>33</sup> 2014/709/EU: Commission Implementing Decision of 9 October 2014 concerning animal health control measures relating to African swine fever in certain Member States and repealing Implementing Decision 2014/178/EU

- to start to consider the likely size of a Feral Pig Investigation Zone in case swine fever were to be suspected in feral pigs
- 10.2.5 Passive surveillance of feral pigs in the area will be undertaken, including testing of feral pigs found dead or shot. Domestic pigs in the protection and surveillance zones will continue to be monitored by pig keepers.
- 10.2.6 Ordinarily the size of the domestic pig protection or surveillance zones would not take account of 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.
- 10.2.7 Current expert opinion<sup>34</sup> states 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 carcases not being presented for examination. Therefore the killing or taking of feral pigs will be prohibited in surveillance and protection zones but allowed under licence on premises with pigs to prevent an incursion by feral pigs.

#### **10.3Detecting swine fever in feral pigs**

10.3.1 Under the current surveillance programmes for wildlife, any unusual mortality or disease reported in feral pigs is investigated in consultation with the relevant administration within GB (see below for details). Also the FSA and FSS inspects carcases of shot feral pigs presented at game handling establishments and any suspect cases are followed-up through the normal "report cases" system. No further disease surveillance in feral pig populations is intended when swine fever is absent from the UK.

#### **10.4Suspicion of swine fever in feral pigs**

10.4.1 There are two scenarios:

### Scenario a) - Swine fever is not known to be present in domestic pigs in the area but unusual mortality or signs of disease are observed in feral pigs.

These signs will be investigated in consultation with the relevant administration within GB. If carcases are available these will be examined and where necessary samples taken. Vigilance for signs of swine fever in domestic pig populations is considered the most appropriate route to identify the first case of swine fever in GB. If swine fever was absent from GB it is unlikely swine fever will be suspected in feral pigs without very strong evidence.

#### Scenario b) — Swine fever is present in domestic pigs in GB.

Swine fever would be suspected in feral pigs in or around a protection or surveillance zone if:

<sup>&</sup>lt;sup>34</sup> <u>EFSA Scientific Report: Epidemiological analyses of African swine fever in the European Union</u> (November 2017 until November 2018)

- unusual mortality or signs of disease are observed in feral pigs
- feral pigs or fresh evidence of feral pigs entering an IP during the period a VI suspects disease may have been present or introduced
- there was other strong epidemiological evidence

#### **10.5A Feral Pig Investigation Zone**

- 10.5.1 Following initial investigations government may conclude that it officially suspects swine fever may be present in feral pigs and further action is needed to confirm or negate this suspicion. The appropriate Minister may then declare a Feral Pig Investigation Zone (FPIZ).
- 10.5.2 Government will consider the size and shape of a FPIZ on a case-by-case basis, taking account of expert advice. Key factors in determining the size and boundaries of a FPIZ will be the feral pig population size, its distribution, and the surrounding habitat and geographical barriers.
- 10.5.3 All feral pigs shot or found dead within the FPIZ must be presented for sampling and testing.
- 10.5.4 There will be an active search for feral pig carcases in the FPIZ to confirm whether disease is present or absent. If sufficient carcases are not found naturally, feral pigs will be tracked and killed by experts employed by Government delivery agents and carcases tested for swine fever in order to determine whether disease is present.
- 10.5.5 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 to kept pigs). All feral pig carcases must be presented to government for sampling and testing.
- 10.5.6 In certain circumstances, it may be considered proportionate to introduce certain controls on pig premises in a FPIZ to reduce the risk of disease spreading to kept pigs or to other areas. These can include some or all of the controls available in a Feral Pig Control Zone (see paragraph 10.7). Such a decision will depend on the epidemiological situation and be based on expert advice. Government will work closely with industry to introduce appropriate controls on a voluntary basis in a FPIZ.
- 10.5.7 The FPIZ will not be lifted until swine fever has either 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 and results of samples taken.

#### **10.6Confirmation of Swine Fever in feral pigs**

10.6.1 The relevant CVO will confirm disease in feral pigs after laboratory confirmation of the presence of swine fever virus and following a teleconference between GB CVOs. On confirming disease in feral pigs a Feral Pig Control Zone (FPCZ) will be declared. The size of the zone will need to be determined based on expert advice and the local circumstances (see point 10.5.2 above).

- 10.6.2 Government, working with its delivery agents will prepare a swine fever eradication plan, which must be submitted to the European Commission within 90 days of confirmation of the first case of swine fever in feral pigs. This may require further investigation on the ground and contribution from experts.
- 10.6.3 Disease eradication policy is to, as far as practical avoid dispersing disease beyond its current location and to eradicate disease from the feral pig population. Experts will advise on the most appropriate disease eradication methods for the particular location and feral pig population. These measures may include but are not limited to:
  - the fencing of areas to limit the movement of feral pigs
  - restricting public access to infected areas
  - suspension of hunting and cull activities during the initial stages of infection
  - search and collection of carcases to remove infectious or potentially infectious material from the environment
  - hunting/trapping of feral pigs by government delivery agents
  - eventual cull of the affected feral pig population to eliminate disease
  - active cull of surrounding feral pig populations to reduce density and avoid further spread

The use of vaccination is discussed in section 11 but it is thought its application on feral pigs will not lead to rapid eradication and given the long-term trade impacts of employing vaccination it is not a control method of choice.

- 10.6.4 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 carcase should be examined, sampled and tested for notifiable diseases by trained personnel (under veterinary supervision) and also retained whilst testing is undertaken so infected carcases are not released. Infected carcases will be rendered or incinerated.
- 10.6.5 The meat from feral pigs from a FPCZ that are confirmed free of swine fever by testing, would be controlled, specially marked and treated (heat-treated) prior to being allowed to enter the food chain.

#### **10.7Control measures in a Feral Pig Control Zone**

- 10.7.1 The following measures will apply to premises in a FPCZ with pigs to prevent disease incursion or spread in kept pigs:
  - prevention of contact between feral and kept pigs. All kept 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 VI.
- appropriate means of disinfection should be provided and used at the entrances and exits of those parts of the premises in which pigs are being kept and of the holding itself
- no carcase or any part of a feral pig should be brought onto a premises in the FPCZ
- carcases of any feral pigs shot by owners on their premises to protect stock must be isolated from kept pigs and made available for examination, sampling and testing. Keepers should instigate cleansing and disinfection of the location the feral pig was shot, where appropriate, to reduce the potential of virus spread
- 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 premises is kept up-to-date and provided when requested by a VI (the first census may be based on an estimate for outdoor pigs)

10.7.2 Other controls in a FPCZ will be:

- no pig, semen, ovum or embryo should be moved out of the control zone except under licence. These must not be exported to other EU member states
- any person who comes into contact with a feral pig in the infected area should take steps to ensure they do not spread infectious or potentially infectious material.
- any person who finds the carcase of a feral pig should immediately inform officials so that the carcase can be sampled and tested for swine fever
- 10.7.3 The FPCZ will be lifted after disease eradication is completed but in line with EU law, monitoring will continue in the area for at least 24 months after the last case of swine fever in feral pigs in order to support disease freedom (see section 12.4).

#### **10.8Additional EU Control zones when African** swine fever is confirmed in feral pigs

- 10.8.1 Following confirmation of ASF in feral pigs, additional EU ASF control zones will be implemented according to the risk of further disease spread in these areas. Zones will be established on a risk basis depending on the disease situation in a particular area. The size of these zones will be determined based on expert advice and on local circumstances. Full details of the restrictions on movements in each of the part I-IV zones and the derogations from these can be found in EU <u>Commission Implementing Decision 2014/709</u>.
- 10.8.2 Affected areas and those at risk may be placed into one of the following zones:
  - Part I areas at risk due to their proximity to infection in feral pigs
  - Part II areas where disease is confirmed in feral pigs only

- Part III areas where ASF is confirmed in both feral pigs and kept pigs
- Part IV areas where the epidemiological situation has stabilised and disease is considered endemic.

Within these zones there will be restrictions on the movement of live pigs, pig genetic material, pork and feral pig meat and other products. Restrictions are risk based and subject to meeting certain safeguard conditions. There are derogations that allow areas listed in parts I-IV to trade in some circumstances. Other areas of the UK that do not fall into any part I-IV zones can continue to trade with the EU.

These zones only apply where ASFV has been confirmed in feral pigs.

### **11 Vaccination**

#### **11.1Availability of vaccines**

- 11.1.1 Currently there is no effective vaccine against ASF and EU law prohibits the use of ASF vaccine. Therefore, this section sets out the vaccination policy for CSF only.
- 11.1.2 The CSF vaccine currently considered viable for use in the UK 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.
- 11.1.3 It is possible other vaccines will become available from time to time. A key factor in deciding whether they are of value will be how quickly they provide immunity against CSF and whether it is effective and reliable.
- 11.1.4 The general principles of this strategy are unlikely to change fundamentally unless a sufficiently effective DIVA (Differentiation of Infected from Vaccinated Animals) 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.

#### **11.2Use of vaccination to control classical swine** fever

11.2.1 Vaccination of pigs against classical swine fever provides an additional method of controlling the spread of swine fever. However, decisions to

vaccinate are complex. Vaccination is not a cure for swine fever but can prevent pigs from becoming infected. It might therefore be a useful tool in stopping CSFV 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 CSFV and need to be culled out.

- 11.2.2 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 Cstrain 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 supress 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
- 11.2.3 Policy 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.
- 11.2.4 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.
- 11.2.5 It is unlikely vaccination would be an appropriate control method to control CSF in the small feral pig populations present in GB. However, in the exceptional circumstances that the policy set out in section 10 is unsuccessful in controlling disease in feral pigs living, 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 pig population.
- 11.2.6 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.
- 11.2.7 CSF vaccine, if required, will be sourced from the UK vaccine bank.

#### **11.3Legal obligations**

- 11.3.1 The use of vaccination against CSF is ordinarily prohibited<sup>35</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 GB, a person may only administer CSF vaccine to a pig if authorised to do so by the relevant Minister.
- 11.3.2 Before initiating a CSF vaccination campaign, government must submit a CSF vaccination plan 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.

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

- 11.4.1 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.
- 11.4.2 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 VI 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 such meat is safe to eat
  - control on reintroduction of pigs
- 11.4.3 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 DIVA-type vaccines would allow this fact to be established.
- 11.4.4 Government may decide that it is necessary to vaccinate feral pigs to control and eradicate CSF. In which case, government will submit a plan to the European Commission, including the measures taken to avoid the spread of

<sup>&</sup>lt;sup>35</sup> Diseases of Swine Regulations 2014 (Regulation 28)

disease to kept pigs. We anticipate requirements for pig holdings in the affected area will include:

- maintaining effective barriers to the entry of feral pigs onto the holding
- reporting any feral pigs found dead
- a ban on shooting unless licensed by A VI to protect kept pigs

It is likely the holdings will already be in a FPCZ and such restrictions will already apply

### **12 Gaining disease freedom**

#### **12.1Removal of control zones**

12.1.1 Zones will remain in place until they are amended or repealed by further declaration on behalf of the relevant Minister.

12.1.2 We will not lift protection zones until:

- all necessary cleansing and disinfection (C&D) has been carried out at all infected premises in the zone to the satisfaction of a VI
- 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 swine fever virus
- 12.1.3 For CSF, these examinations should not take place until at least 30 days after the satisfactory completion of preliminary C&D on the infected premises to which the zone relates.
- 12.1.4 For ASF, examinations in a protection zone should not take place until at least 45 days after the satisfactory completion of preliminary C&D on the infected premises to which the zone relates. This can reduced to 30 days if the relevant Minister determines that the sampling and testing programme<sup>36</sup> makes it possible to rule out the presence of ASFV on the relevant premises. This latter option may be limited by logistics and available diagnostic resources.
- 12.1.5 We will not lift surveillances zones until:
  - all necessary C&D has been carried out at all infected premises in the zone to the satisfaction of a VI
  - pigs on all holdings have undergone clinical and, where the inspector considers it necessary, laboratory examinations carried out in accordance with the diagnostic manual in order to detect the possible presence of swine fever virus

<sup>&</sup>lt;sup>36</sup> This programme will as a minimum be that set out in the EU Diagnostic Manual for ASF

- 12.1.6 For CSF, 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
- 12.1.7 For ASF, examinations in the surveillance zone should not take place until at least 40 days after the satisfactory completion of preliminary C&D on infected premises to which the zone relates. This can be reduced to 20 days if the relevant Minister determines that the sampling and testing programme<sup>37</sup> makes it possible to rule out the presence of ASF on the relevant premises.

This latter option may be limited by logistics and available diagnostic resources.

- 12.1.8 It is likely zones will remain in place for at least two months even for the smallest outbreaks and considerably longer if ongoing sporadic cases continue to be suspected or detected in the area.
- 12.1.9 Our policy is not to apply compartments (allowing easing of restrictions earlier in non-risk compartments). However, in an extended outbreak and where the disease is localised either geographically, or within a pyramid or sector this may be reviewed.

#### **12.2Trade within the EU**

- 12.2.1 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.
- 12.2.2 Where the EC has imposed a safeguard measure, which is likely, evidence will be provided to the Commission to seek removal of these safeguards once the area restrictions have been lifted.

#### **12.3Trade with Third countries**

- 12.3.1 There is no requirement or specific procedure for obtaining official recognition of disease freedom from ASF by the OIE. The UK may declare itself free of ASF when it complies with the required measures in Chapter 15.1 of the OIE (World Organisation for Animal Health) *Terrestrial Animal Health Code*. This requires the collection of relevant surveillance and epidemiological information which may need to be presented to the EU to remove safeguard measures and as necessary to importing countries as proof of the disease situation.
- 12.3.2 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

<sup>&</sup>lt;sup>37</sup> This programme will as a minimum be that set out in the EU Diagnostic Manual for ASF

which may also need to be presented to the EU to remove safeguard measures.

12.3.3 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.

#### 12.4Feral Pigs

- 12.4.1 If swine fever is confirmed in feral pigs, then special measures and monitoring must continue for at least 24 months after the last case of swine fever 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.
- 12.4.2 The detailed arrangements for lifting zones and for continuing measures will be set out in an eradication plan submitted to and agreed by the Commission at the time of outbreak. If GB populations of feral pigs are too small to achieve the required level of testing, the UK will agree an alternative approach 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 carcases are submitted for testing.

### **13 Glossary/Acronyms**

Abattoirs - see slaughterhouse

APHA - Animal and Plant Health Agency

AI - Artificial insemination

ASF - African swine fever

ASFV – African swine fever virus

C&D - Cleansing and disinfection

CDCC – Central Disease Control Centre

CSF - Classical swine fever

CSFV – Classical swine fever virus

CVO - Chief Veterinary Officer

EC/ EU - European Community/ European Union

Epidemiology - seeks to describe and explain the occurrence and distribution of disease by ensuring all possible explanations of the known facts are considered, and so can help identify what control measures are likely to work (or fail) under which circumstances

Feral pigs – all Suidae including domestic pigs and wild boar and hybrids of, which are living in the wild

Fomites - any object or material capable of carrying infectious agents such as CSF virus. For example, vehicles, equipment, feedstuffs, clothing, footwear etc. May also include scavenging animals, vermin etc.

FBO - Food Business Operator

FPCZ - Feral Pig Control Zone - legally a term for the area declared as a result of disease in feral pigs

FPIZ - Feral Pig Investigation zone – declared where disease is suspected in feral pigs

- FSA Food Standards Agency
- FSS Food Standards Scotland

GB - Great Britain

IA - Infected area

IAPO - Import of Animals Pathogen Order

IP - Infected premises

Kept pigs – all *Suidae* including domestic pigs, wild boar and hybrids of, which are kept as farmed animals or pets

MS - EU Member State/s

NE - Natural England

NEEG - National Emergency Epidemiological Group

NEG - National Expert Group

NDCC - National Disease Control Centre

NRW – Natural Resources Wales

OIE - World Organisation for Animal Health

OV - FSA or FSS Official Veterinarian

PZ - Protection Zone

Relevant Minister - Secretary of State, Scottish Ministers, or Welsh Ministers

SCoPAFF - Standing Committee on Plants, Animals, Food and Feed

SAPO - Specified Animals Pathogen Order

SASA – Science and Advice for Scottish Agriculture

Serological test - the testing of serum, which often refers to looking for antibodies, i.e. the animal's response to infection

Slaughterhouse – place where animals are slaughtered with the intention of the animal product entering the human food chain. These are licensed by the Food Standards Agency or Local Authorities.

SNH - Scottish Natural Heritage

SP - Suspect premises

SZ - Surveillance zone

TCZ - Temporary Control Zone

- UK United Kingdom
- VI Veterinary Inspector (agent of the Animal and Plant Health Agency (APHA))

Virological test - the testing for the presence of viral material rather than the testing for evidence of the animal's response to infection by that virus

VRA - Veterinary Risk Assessment