

SWINE VESICULAR DISEASE CONTROL STRATEGY

Annex to Scottish Government's Exotic Diseases of Animals Contingency Framework Plan

> Version 2 October 2017



Contents

Swine Vesicular Disease 2
Introduction2
Description of SVD2
Characteristics of the disease 2
Routes of spread
Carrier state 4
Role of wildlife in spread and maintenance of disease4
Legislation5
Links to further sources of information about SVD5
Prevention is better than cure5
Rationale for Control5
Initial Report & Investigation of Disease6
Stopping Spread – Actions at Suspect, Infected and Contact Premises
Compensation7
Breeds at risk and other specialist animals7
Area Movement Controls 8
Table 1: SVD Movement Controls9
Cleansing and Disinfection12
Decontamination of slurry12
Restocking12
Feral Pig Restricted Area Controls13
Vaccination13
Suspect or infected slaughterhouses14
Seropositive pigs14
Non-EU Countries15
Exit Strategy15
Appendix 1 Overall Scottish Government Control Structure
Figure 1 Summary of the Scottish Government Disease Control Process
Appendix 217
Figure 2 Summary of the SVD control process17

Swine Vesicular Disease

Introduction

1. This document is for use in the event of an outbreak of Swine Vesicular Disease (SVD) in Scotland, and should be read in conjunction with the Scottish Government's Exotic Diseases of Animals Contingency Framework Plan (hereafter referred to as 'the Contingency Framework Plan') and Scottish Government's Exotic Diseases of Animals Communications Strategy¹. In these documents the disease control concepts, actions and operational structures are set out.

2. However, in recognition that not everyone using this Annex may necessarily be thoroughly familiar with the framework document a diagram presenting interactions between the key Scottish control structures as well as an action flow chart of the key processes has been included at Appendix 1 and 2.

3. This Annex will be subject to on-going review by the Scottish Government with input from industry and other stakeholders.

Description of SVD

Characteristics of the disease

4. SVD is caused by a virus and is thought to have evolved in the 1960s producing a virus affecting only pigs and causing disease with signs identical to Foot and Mouth Disease (FMD). Because it is very difficult to distinguish between SVD and FMD without laboratory tests, SVD is a notifiable disease. In terms of mortality and animal welfare the impact of SVD is much less severe than FMD.

5. SVD first appeared in Britain in 1972 and was eventually eradicated in 1982. Outbreaks have been reported throughout Eurasia since the first recorded case in 1966 and the disease is currently considered to be endemic in Italy. The SVD virus is fast-spreading and highly resilient, which means that, once established, the disease is very difficult to eradicate. Many countries refuse to import pigs and/or pig products from regions where SVD is present, meaning that outbreaks can have a devastating effect on international trade.

6. The disease is characterised by vesicles (blisters) on the legs and around the mouth of affected pigs, hence the similarity with FMD. Affected pigs may also be lame as the vesicles appear and subsequently rupture. They may also be feverish and reluctant to eat although this is less common. SVD can be subclinical (pigs show no clinical signs but are infected and will still be infectious to others), mild or severe depending on the strain of virus, the age of pigs affected and the conditions under which the pigs are kept. Younger animals tend to show more severe clinical signs than older pigs and animals housed on wet

¹ Both documents are available at <u>www.gov.scot/ahwcontingencyplans</u>

concrete are usually worse affected than those on straw or grass as abrasion from hard floors bursts the vesicles and promotes secondary infection. The incubation period for SVD is between 2 and 7 days. Generally, the illness is short-lived and most pigs make a full recovery in 2 to 3 weeks. It is unusual for pigs to die from SVD.

7. Only one serotype of SVD is recognised but there are several different strains that can cause different clinical disease. The various strains are categorised into 4 distinct groups. 2 of the groups contain SVD viruses isolated before 1981 and the other 2 comprise the more recently discovered European viruses. The variation in strains over time reflects the gradual evolution of the SVD virus. When SVD first emerged the virus was virulent, producing severe clinical disease in affected pigs. As the virus has evolved, virulence has reduced due to mutations in the viral RNA. Therefore, disease outbreaks caused by more recently-evolved strains of the virus are mild or subclinical.

8. Laboratory tests are essential to confirm diagnosis of SVD, because it can be very difficult to distinguish the clinical signs from those produced by other vesicular diseases like FMD, or Vesicular Stomatitis. On suspicion of disease, samples are always submitted to test for FMD as well as for SVD.

9. SVD is specific to pigs. Human infections have been seen in laboratory workers who handle SVD virus, but have never been reported among vets or pig farmers dealing with naturally-occurring outbreaks in pigs.

Routes of spread

10. SVD virus is found in nasal and oral secretions and faeces of infected pigs. The virus can infect pigs through wounds or broken skin via the mucus membranes or by ingestion. Infected pigs can start shedding virus 2 days before clinical signs appear, and generally continue for 2 weeks (more virus is shed in the first week).

11. The disease can be spread by direct contact with secretions or faeces from infected animals, and via contaminated feed, water, implements, premises, human clothing, and other fomites (items that are not infectious in themselves but can become contaminated and transfer infection to susceptible animals).

12. SVD virus is extremely stable in the environment. It survives for weeks or months in soil, on fomites and in slurry. It is tolerant of a wide temperature range although it can be inactivated by heating to 60°C for 10 min or 56°C for 1 hour. It is also stable over a surprisingly wide pH range. The virus is relatively resistant to ordinary disinfectants but it can be inactivated by disinfectants approved under The Diseases of Animals (Approved Disinfectants) (Scotland) Order 2008². Inadequate disinfection is thought to be the reason many farms have SVD breakouts again after re-stocking, so thorough cleansing and

² For more information about approved disinfectants see <u>https://www.gov.uk/guidance/defra-approved-disinfectant-when-and-how-to-use-it</u>

disinfection is necessary to keep premises free from reoccurrence of the disease. The persistence of the SVD virus in the environment is a key aspect of the disease's capacity to spread.

13. The virus survives well in frozen or chilled meat and even in dried, salted or smoked meat. Disease can readily be spread by feeding uncooked infected meat to pigs. Swill feeding has been banned in the UK since 2001 and feeding any type of waste meat product to pigs is illegal.

14. Airborne spread is not a feature of SVD. In outbreaks on farms the disease often fails to spread between neighbouring pens unless they share drainage or infected pigs are moved from one pen to the other. This is in marked contrast to FMD and can give rise to a pattern of spread on the farm whereby some pens are full of affected pigs whilst in others none of the pigs are infected.

15. SVD often spreads successfully before being recognised and reported. The mild strains of the virus, which produce low-grade or asymptomatic illness, often go unnoticed until a routine serology test (e.g. prior to export) indicates exposure to disease. This aspect of the disease makes it very difficult to control.

Carrier state

16. Most pigs stop shedding SVD virus after two weeks of infection, but occasionally individuals are infected for longer and can continue to shed virus for several months; i.e. they become carriers. The occurrence of carriers is rare and so unlikely to play a major role in spreading disease.

17. Viral strains that produce mild and even asymptomatic infections can cause carrier pigs to appear healthy but still shed virus whilst infected.

Role of wildlife in spread and maintenance of disease

18. Surveys on European feral pig populations have occasionally identified antibodies to SVD, indicating that some feral pig populations have been exposed to the disease. However, it is not as wide spread amongst feral pigs as other pig diseases like Classical Swine Fever. Feral pigs have not been implicated in the spread of SVD outbreaks in the past.

19. Numbers of feral pigs, including wild boar, roaming freely in Scotland are small and dispersed. There are breeding populations of feral pigs in Scotland in Dumfries and Lochaber, with numerous sightings in other parts of Scotland such as Aberfoyle and Alyth. Feral pigs are not expected to play a significant role in spreading disease.

Legislation

20. There is a wide range of legislation giving Scottish Ministers the necessary powers to control animal disease. The principle legislation relating to SVD is The Diseases of Swine Regulations 2014: <u>http://www.legislation.gov.uk/uksi/2014/1894/contents/made</u>

Other relevant legislation includes:

The Animal Health Act 1981: http://www.legislation.gov.uk/ukpga/1981/22/contents

The Foot-and-Mouth Disease (Scotland) Order 2006: http://www.legislation.gov.uk/ssi/2006/44/contents/made

Links to further sources of information about SVD

21. OIE SVD technical disease card: http://www.oie.int/fileadmin/Home/eng/Animal_Health_in_the_World/docs/pdf/Disease_card s/SWINE_VESICULAR_DISEASE.pdf

European Union Disease Control Measures <u>http://ec.europa.eu/food/animals/animal-diseases/control-measures/other-diseases/index_en.htm</u>

Prevention is better than cure

22. As for all animal diseases, the livestock keeper has a vital role in preventing disease. Early recognition and reporting of disease is important and this along with good biosecurity is crucial for preventing the incursion or spread of disease. This role is set out in the leaflets linked below:

http://www.gov.scot/Resource/0049/00494857.pdf

http://www.spdcc.org/docs/GREEN_WARNING_POSTER_26-10-2015.pdf

http://www.spdcc.org/docs/RED_WARNING_POSTER_26-10-2015.pdf

Rationale for Control

23. SVD generally has low mortality and morbidity but in acute cases there can be some loss of production. Because the clinical signs of SVD are indistinguishable from FMD any suspect case of SVD must be investigated as a matter of urgency. The Chief Veterinary Officer (CVO) UK must notify any outbreak anywhere in the UK to the EU Commission. International standards require the elimination of the disease and country freedom is not recognised until this has been achieved.

Initial Report & Investigation of Disease

24. SVD is a notifiable disease. This means if anyone suspects SVD in a pig or pig carcase they must report it to their local Animal and Plant Health Agency (APHA) office. When SVD is suspected and reported an investigation will be carried out by an APHA Veterinary Inspector (VI) and restrictions will be imposed on the suspect premise.

25. Because SVD is clinically indistinguishable from FMD, any signs of vesicular disease in pigs will be treated as a suspect case of FMD until laboratory tests prove otherwise. Full details of the response to suspected FMD can be found in the Foot and Mouth Disease Control Strategy for Great Britain at:

(<u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69456/fmd-control-strategy111128.pdf</u>). Scottish Ministers will declare an FMD Temporary Control Zone (TCZ) with a radius of at least 10km around the suspect premises: restrictions within the TCZ are summarised at Table 1.

26. There are two types of laboratory tests: those that detect the presence of virus (antigen tests) and those that detect the presence of antibodies produced by the infected animal in response to the infection. As the disease may have gone unnoticed on farm for some time samples from other pigs on the farm should be submitted for evidence of both virus and antibodies.

27. It is important to note that pigs infected with mild or asymptomatic strains of the SVD virus produce low levels of antibodies that may be missed in some standard serology tests. Pigs infected with a more severe strain produce more antibodies. It is therefore easier to confirm an outbreak with severe clinical signs than to identify exposure to low-grade disease. Where the initial viral quantity is moderate to high a positive result can be available in four hours. In cases where the viral quantity is low virus isolation is repeated. A negative result should be available after 96 hours. Blood (serum) samples are tested for antibodies, which indicate exposure to disease.

28. CVO Scotland will confirm disease on the basis of the disease report from APHA, including the history of disease on the premises and the results of laboratory tests carried out on samples taken from suspect animals.

29. If laboratory results negate FMD before results can confirm or negate SVD then the FMD TCZ will be lifted and may, if considered necessary by the CVO, be replaced with a TCZ for SVD.

30. If the presence of SVD is confirmed any TCZ will be lifted and replaced with a Protection Zone (PZ) with a radius of at least 3 kilometres around the Infected Premises (IP) and a Surveillance Zone (SZ) with a radius of at least 10 kilometres around the IP. The size of these zones may be larger if considered appropriate for controlling the spread of disease. Restrictions that apply within the PZ and SZ are summarised in Table 1.

Stopping Spread – Actions at Suspect, Infected and Contact Premises

31. If SVD is suspected then the VI will serve a notice on the occupier of the suspect premises placing them under restrictions. In most cases restrictions will be applied for FMD in the first instance; however, if FMD has been negated but SVD is still suspected then FMD restrictions will be lifted and SVD controls applied. Restrictions will include:

- A requirement to maintain a record of pigs on the premises and their health.
- A requirement to ensure all pigs are kept in their buildings. If the pigs are in a field they must be kept isolated from any potential contact with feral pigs and, where possible, non-susceptible wild animals that could potentially spread disease. A VI may require and advise of more specific isolation arrangements.
- Restriction on movement of any animals to or from the suspect premises will be prohibited except as permitted by a licence issued by a VI.
- Restrictions will also apply to anything liable to transmit SVD, including vehicles to and from premises, except under licence.
- Restriction on spreading manure or slurry except under licence.
- Requirement to provide and maintain means of cleansing and disinfection at entrances and exits.

32. If SVD is confirmed on a premises then all pigs on that premises will be culled as soon as practicable, in line with the requirements of national and EU law. All carcases, tissue and blood must be disposed under APHA's supervision of in such a way as to avoid the risk of SVD spreading.

33. APHA will carry out epidemiological investigations to establish how long disease may have been present, the likely source and whether disease originated at these premises. The investigation may also identify animals, vehicles and other things that may have already taken disease out of the premises (or brought it into the premises) so that these can be traced. Contact premises may be placed under restrictions similar to a suspect premises while further investigations are carried out.

Compensation

34. Compensation may be paid for susceptible animals culled for control purposes as set out in the Disease of Swine Regulations 2014. Scottish Ministers will appoint a valuer to provide a valuation of the animals to be culled. The valuer will explain the valuation procedures and any appeals process to the owner of the livestock. For SVD compensation is paid at the value of the pig immediately before it became infected (less any price received by the owner at slaughter) or, for uninfected pigs killed to prevent disease spread, the value of the pig immediately before it was killed.

Breeds at risk and other specialist animals

35. SVD disease controls could have a direct impact on the survival of various pig breeds at risk (i.e. numerically rare pigs) or animals bred for scientific research, display or educational purposes such as zoos or wildlife parks. Such categories may be exempted

from the cull of animals on dangerous contact premises where it does not undermine disease control aims. Scottish Ministers must be assured by a veterinary risk assessment that sparing such animals will not jeopardise efforts to prevent the disease from spreading further. It is very unlikely any animals infected with SVD would be spared if found to be infected with SVD.

36. For further information on UK breeds considered to be at risk in the event of an outbreak of exotic disease, and the criteria for a breed to be included on the list please visit the Scottish Government website.

http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/animalwelfare/Diseases/breedsatrisk

Area Movement Controls

37. In the initial stages of a disease outbreak there will be uncertainty about the origin of the disease, how long it has been present, how far it has spread and how far it will spread. As a result, area restrictions are imposed to limit animal movements into, from and within specified areas, except under licence, to reduce the risk of further spread.

38. Additional controls may be placed on the movement of animal products, people, vehicles and non-susceptible animals if considered necessary to prevent the spread of disease. Table 1 below sets out the nature of the controls.

Table 1: SVD Movement Controls.

Note: This table is not a definitive summary of the requirements of the SVD legislation and should therefore be read as only a guide to the main features relating to the movement of livestock etc. and the treatment of products. Further controls may be declared if necessary including, but not limited to, controlling movement of non-susceptible animals.

Control zones	Movement controls	Conditions for marketing pig
		meat, and other products of pig
		origin
 FMD Temporary Control Zone (TCZ): Clinical signs for FMD and SVD are indistinguishable. Only laboratory diagnosis can differentiate. The initial disease response will therefore be to a suspect case of FMD. Can be such size as needed but normally covers a 10km radius of the suspect premises, as it can later form the boundary of a surveillance zone. A TCZ can be declared for SVD but the default position will almost always be based around suspicion of FMD first. 	 Ban on movements of FMD-susceptible animals into and out of TCZ except: through the zone without stopping; to complete a journey started before the creation of the zone. Ban on movement of FMD-susceptible animals from and between premises within TCZ except under licence. Stray or feral susceptible animals may be destroyed. Controls can be placed on the movement of animal products, things, people, vehicles and non-susceptible animals. 	See Foot and Mouth Disease Control Strategy for Great Britain.
SVD Temporary Control Zone (TCZ): Would only be implemented if FMD had been negated, but SVD was yet to be confirmed or negated. Can be such size as needed but normally covers at least a 10km radius around the suspect premises, as it can later form the boundary of a surveillance zone.	 Ban on movement of pigs from premises within TCZ except under licence. Scottish Ministers may apply further requirements to premises within the TCZ, if considered necessary. These may include but are not limited to: Requirement to keep records Requirement to confine pigs Restrictions on movement of people, vehicles, equipment, animals other than pigs, or any other thing liable to transmit disease, except under licence. 	Meat from a restricted animal originating on the suspect premises after a date specified by Scottish Ministers, or meat that has come into contact with such meat, must be detained until the premises are no longer suspect. If suspect premises are also within another zone, the conditions for that zone apply.

Control zones	Movement controls	Conditions for marketing pig meat, and other products of pig origin
Protection Zone (PZ): Of at least a 3km radius around the Infected Premises	 Live pigs cannot be moved off or onto premises in the PZ. Pigs may be moved under licence from a veterinary inspector in certain circumstances and once the disease situation is under control (minimum 21 days after preliminary cleansing & disinfection of the infected premise; 30 days if there is more than one IP within the zone). Pigs may be transported through the PZ without stopping. Movements of animals other than pigs, or anything liable to spread disease (including carcases, feed, manure, slurry, semen, ova or embryos) on or off a premises in the PZ where pigs are kept, must be licensed by a veterinary inspector. The spreading of manure or slurry which contains pig waste requires a licence from a veterinary inspector. All dead or diseased pigs must be reported to APHA. Vehicles that have transported pigs or other animals/ 'at risk' material must be cleansed and disinfected, with the approval of a VI, before leaving a premises within the PZ. 	Meat from an animal originating within PZ which was slaughtered in the period before SVD was confirmed, or meat that has come into contact with such meat, will be traced and destroyed. Once the disease situation is under control (minimum 21 days after preliminary cleansing & disinfection of the infected premise; 30 days if there is more than one IP within the zone) pigs may be licensed off premises within PZ for slaughter. Slaughterhouses used must be specifically designated to receive and process restricted animals.

Control zones	Movement controls	Conditions for marketing pig meat, and other products of pig origin
 Surveillance Zone (SZ): Surrounds the PZ. Of at least a 10km radius around the Infected Premises 	 Ban on movement of pigs from premises in the SZ except under licence in the following conditions: movement is to a premises within the PZ or SZ; no pig must have moved onto premises of origin in the last 21 days; satisfactory inspection and clinical examination of each pig to be moved, and the vehicle, by a VI; satisfactory serological testing of statistical sample of pigs to be moved within 14 days preceding the move (at keeper's expense) OR in the case of pigs going for slaughter, on the basis of blood samples taken at the designated slaughterhouse. In addition, the movement controls listed as bullet points which apply in the PZ also apply in the SZ, with the exception that the cleansing and disinfection of vehicles does not require VI approval. 	Meat from an animal originating on an IP which was slaughtered in the period before SVD was confirmed, or meat that has come into contact with such meat, must be immediately destroyed. Once the disease situation is under control (minimum 21 days after preliminary cleansing & disinfection of the infected premise; 30 days if there is more than one IP within the zone) pigs may be licensed off premises within PZ for slaughter. Slaughterhouses used must be specifically designated to receive and process restricted animals.

Cleansing and Disinfection

39. Primary cleansing and disinfection will be completed by APHA. Secondary cleansing and disinfection will be the responsibility of the pig keeper and costs will be met by them. This will also impact on when restocking can commence (see paragraph 42). The legal notice served on the owner of the premises by APHA will set out the secondary C&D that is required.

Decontamination of slurry

40. The SVD virus is very stable in the environment and survives well in slurry. Slurry from a premises where SVD has been identified should be treated by a method suitable for killing the virus. For instance, the virus is preserved by refrigeration and freezing and is also resistant to fermentation and meat smoking processes. Slurry treatments that have successfully destroyed SVD virus are: heating to 64°C for 2 minutes; addition of 1.5% (weight/volume) sodium hydroxide or calcium hydroxide (slaked lime) for 30 minutes at 22°C; addition of a combination of didecydimethyl ammonium chloride and 0.1% sodium hydroxide for 60 minutes. APHA will undertake the decontamination and disposal of any slurry on the IP. The Scottish Environment Protection Agency (SEPA) must be consulted before any treated slurry is spread on land. SEPA can also advise on appropriate slurry treatments.

Restocking

41. Restocking of pigs onto an IP can begin no sooner than 28 days after the satisfactory completion of secondary cleansing and disinfection. Procedures for restocking differ slightly between outdoor and indoor premises.

42. Restocking of outdoor premises may begin with the introduction of a number of "sentinel" pigs sourced from outwith any SVD control zones, which have been tested for SVD at the owners expense and shown to be free of the disease. A VI may issue a licence permitting the introduction of such sentinels to all parts of the premises previously used for housing pigs, to be observed for any signs of SVD. Sentinel pigs must be retested for SVD 28 days after the arrival of the last pig. If test results are seronegative then restrictions may be lifted and full restocking allowed.

43. In the case of indoor premises, a VI may license an unlimited number of sentinel pigs onto the premises. However all sentinel pigs must arrive within 8 days of each other, and no pig may leave the premises for 60 days following the introduction of the last sentinel. Sentinel pigs must be retested for SVD 28 days after the arrival of the last pig, and if results are negative then restrictions may be lifted.

44. If sentinel pigs are not used then restrictions cannot be lifted until APHA is satisfied that sufficient time has passed for the SVD virus to be inactive.

Feral Pig Restricted Area Controls

45. In addition to the standard restricted zones (PZ, SZ) other area controls may be required where SVD is suspected or confirmed in pigs or wild boar living in the wild.

46. Where SVD may be suspected in feral pigs the Scottish Government shall seek expert advice from a feral pig advisory group involving APHA, Science and Advice for Scottish Agriculture (SASA), Scottish Natural Heritage (SNH) and other key stakeholders. If SVD is officially suspected Scottish Ministers may declare a Feral Pig Investigation Zone (FPIZ). The location and size of the FPIZ would be as large as necessary to allow an investigation to be carried out to confirm or rule out the presence of the disease. Expert advice would be sought to determine the shape and size of such a zone, along with appropriate control measures. However, premises with domestic pigs may be required to put in place heightened biosecurity arrangements. Hunting would be prohibited except under licence and anyone who shoots, or finds the carcase of a feral pig in a FPIZ must inform their local APHA office as soon as possible so samples can be taken for testing. The FPIZ cannot be lifted until disease is negated based on veterinary and expert advice.

47. Where SVD is confirmed in feral pigs, a Feral Pig Control Zone (FPCZ) would be established and a disease eradication plan developed following discussion with the Animal Disease Policy Group (ADPG) and experts. Experts from the feral pig advisory group will advise on the most appropriate disease control measures within the infected feral pig population. Any control strategy will consider the risks of dispersing disease further through displaced populations following a cull or the impact of vaccination on international trade.

48. The FPCZ would set out the control measures in place and would be of sufficient size to cover any area where it is suspected that the disease may be present. Control measures within the FPCZ would be dependent on the situation and the size of the outbreak and on the expert advice given by the feral pig advisory group.

Controls may include a combination of;

- Prevention of contact between feral and domestic pigs
- Pig premises required to put in place heightened biosecurity (eg appropriate means of disinfection at farm entrance/exit)
- Domestic pig movements only allowed under licence
- Controls on feral pig carcasses
- Prohibition on hunting or feeding feral pigs except under licence

The FPCZ cannot be lifted until disease is negated based on veterinary and expert advice.

Vaccination

49. There is currently no available vaccine for SVD. If a vaccine were to become available, its use would currently be prohibited under the Disease of Swine Regulations 2014.

Suspect or infected slaughterhouses

50. If SVD is suspected in a slaughterhouse then the killing of pigs will be halted and no pig may be moved to or from that slaughterhouse. The suspect pig must be kept alive until it has been inspected by a VI. If the pig has been slaughtered the carcase must be kept separate from any other or pig carcases to allow the VI to take any samples.

51. If SVD is confirmed at a slaughterhouse then any remaining pigs will be killed without delay and the meat detained and kept separate from other meat until it has been assessed by a VI. The VI will provide directions for the destruction of carcases and offal, and cleansing and disinfection of the building, equipment and vehicles.

52. Unless the establishment turned out to be the disease source it is likely restrictions will be lifted quickly and the establishment will be allowed to recommence operations. However, restrictions cannot be lifted until at least 24 hours after C&D is completed to the satisfaction of the VI. Control zones are not ordinarily declared around infected establishments.

Seropositive pigs

53. Serological surveillance is an essential step in "clearing" the control zones, i.e. demonstrating freedom from disease. It is carried out by blood sampling a statistically significant number of pigs in the zone, in accordance with the Directive. The blood samples are sent for laboratory testing to check for the presence of antibodies, which would indicate exposure to disease. Only when a full set of clear results are received can the zone be declared free of disease.

54. It is important to note that occasional false positives will occur during most laboratory testing. These are samples that give a positive result even though the samples under test are actually negative. Where samples taken from pigs have tested positive for antibodies to SVD - indicating the pigs have been exposed to SVD virus at some point in time - but there are no clinical signs and virus has not been isolated on the premises, further investigations will be required. The premises will continue to be monitored and further samples taken and tested at least 28 days from the date when disease was first suspected.

55. If, after further investigations and resampling, there is still no evidence of SVD virus on the premises then any pigs which show seropositive results will be culled and disposed of. If there is no direct epidemiological link to an IP then any restrictions imposed as a suspect premises may be lifted. If tests at any stage show SVD virus exists on the premises it will be declared an IP.

56. As an alternative to the culling and disposal of seropositive pigs, pigs may be slaughtered at a slaughterhouse approved for that purpose by Scottish Ministers. The seropositive pig(s) must be transported and slaughtered separately from other pigs, and the carcases/by-products must be kept separate and not be exported from the UK.

Export Controls

Intra-Community Trade

57. On confirmation of an outbreak of SVD, the European Commission may introduce safeguard measures banning intra-community trade in susceptible animals from the whole of GB although trade in some products may be permitted subject to conditions. As the disease situation develops these measures will be kept under review.

Non-EU Countries

58. When disease is confirmed, Defra will suspend all third country export health certificates for pigs and pig products until it can be established whether the certificates are still applicable.

Exit Strategy

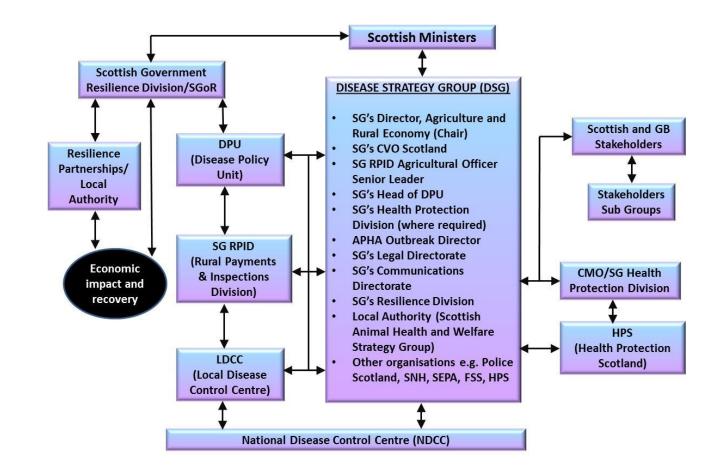
59. The Disease Strategy Group will determine the Exit Strategy. They will consult with the Scottish Government, industry and other Stakeholders to minimise the impacts of the disease on the industry, rural communities, the rural and wider economy and the environment. The exit strategy must be considered as integral to the control strategy from the outset of the outbreak.

60. The EU Directive sets out the minimum time scale for lifting area restrictions. PZ and SZ restrictions will remain in place until all necessary C&D has been carried out at all IPs in the zone to the satisfaction of a VI and pigs on all holdings have undergone clinical and laboratory examinations to detect the possible presence of SVD virus. Examinations on holdings should not take place until at least 28 days after the completion of secondary C&D. This process becomes complicated when the outbreak is prolonged with many cases spread over a wide geographical area. Resources, including laboratories, may be stretched dealing with bringing the outbreak under control before they can be diverted to carry out the surveillance necessary to lift restricted areas and prove country freedom.

61. Depending on the disease situation it may be possible, following a risk assessment, to divide the country into different risk areas and allow the relaxation of some controls.

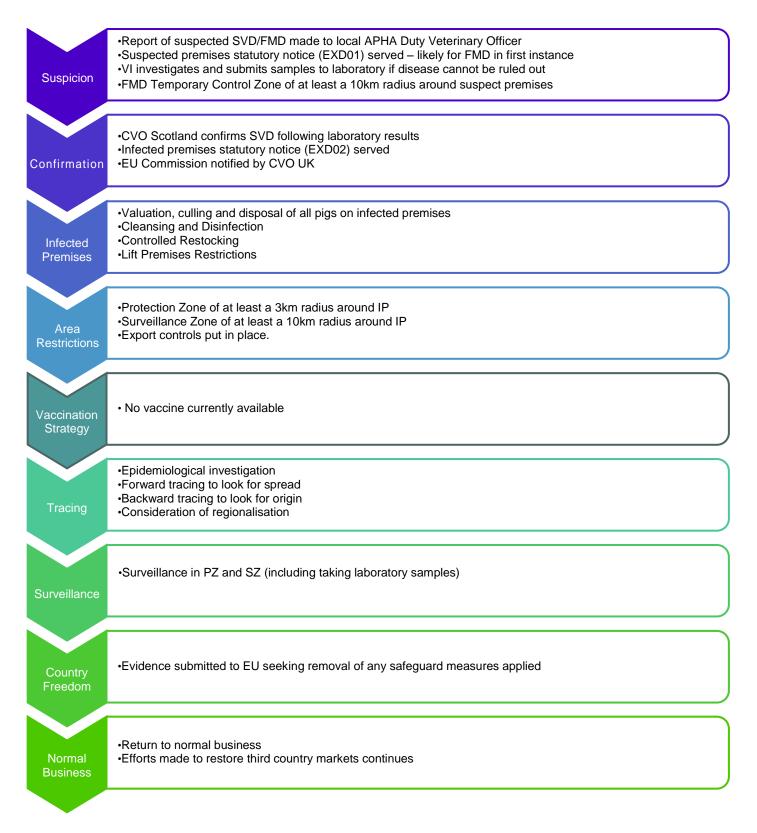
Appendix 1 Overall Scottish Government Control Structure

Figure 1 Summary of the Scottish Government Disease Control Process



Appendix 2

Figure 2 Summary of the SVD control process





© Crown copyright 2017



This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit **nationalarchives.gov.uk/doc/open-government-licence/version/3** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: **psi@nationalarchives.gsi.gov.uk**.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at The Scottish Government St Andrew's House Edinburgh EH1 3DG

ISBN: 978-1-78851-250-3 (web only)

Published by The Scottish Government, October 2017

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA PPDAS301446 (10/17)

www.gov.scot