Chapter 5

CSF PROTOCOLS

Contents

CSF P1  Hygiene Protocol for RVL/DVO staff visiting suspect premises
CSF P2  Protocol for clinical examination and sampling of pigs on suspect holdings
CSF P3  Protocol for collection of samples
CSF P4  Protocol for the transport of samples to the NSFL
CSF P5  Protocol for delivery of samples to NSFL, Abbotstown for CSF Testing
CSF P6  Protocol for sampling of pigs before slaughter following confirmation of disease
CSF P7  Protocol for sampling of pigs killed as a preventive measure on a suspect or contact holding
CSF P8  Protocol for clinical examination and sampling of pigs before authorisation is given to move them from holdings in a PZ or SZ, or for slaughter or killing
CSF P9  Protocol for the movement of pigs from a PZ or SZ in accordance with Article 10.3 of 2001/89/EC
CSF P10 Protocol for clinical examination and sampling on a holding in relation to re-stocking
CSF P11 Protocol for sampling of holdings in the protection zone before lifting restrictions
CSF P12 Protocol for sampling of holdings in the surveillance zone before lifting restrictions
CSF P13 Serological monitoring and sampling procedures in areas where CSF is suspected to occur or has been confirmed in feral pigs
CSF P14 95% confidence table for use when sampling
CSF P15 Protocol for bleeding and euthanasia of pigs
CSF P16 Protocol for cleaning and disinfection
Hygiene protocol when visiting farms

N.B. Additional biosecurity hygiene rules required by the farmer must also be strictly followed.

1. All cars **MUST** remain on the public road.
2. At the car rubber boots must be put on.
3. A disposable overall is put on at the car.
4. The V.I. takes the Epizootic pack and supply of the approved disinfectant with him.
5. The team takes enough writing pens, thermometers, disposable gloves, mouth-caps, ear plugs and forms **sealed in a plastic bag**.
6. On entering the farm the rubber boots are disinfected in a bath containing approved disinfectant.
7. Before entering the pig stalls the thermometer must be clean and sterile.
8. Before entering the pig stalls wash your hands with disinfectant soap.
9. The V.I. must wear disposable gloves.
10. The V.I. must use a new set of documents, including writing paper and clipboard for every farm.
11. The V.I. must disinfect his / her rubber boots between each pig house.
12. The V.I. must disinfect the thermometer after every batch of pigs.
13. The thermometer is cleaned and disinfected.
14. The V.I. must disinfect the farm rubber boots using an approved disinfectant before leaving the farm.
15. The V.I. must take off the disposable overalls and leaves these on the farm.
16. The V.I. completes the appropriate form with all the required details.
17. The rubber boots are put back into the car.
18. The documents used on the farm just visited are kept separate.
Protocol for clinical examination and sampling of pigs on suspect holdings (Ch.IV.A of Annex, 2002/106/EC)

1. Member States shall ensure that appropriate clinical examinations, sampling and laboratory investigations are carried out in suspected holdings to confirm or exclude classical swine fever, in accordance with the guidelines and procedures laid down in subparagraphs 2 to 7.

Irrespective of the measures referred to in Annex X being carried out on CSF suspect holdings, these guidelines and procedures shall also apply in cases of disease whenever CSF is considered in the differential diagnosis. This will include occasions when the clinical signs and epidemiological pattern of disease that are observed in pigs suggest a very low probability of occurrence of classical swine fever.

In all other cases where one or more pigs are suspected of being infected with CSF virus the measures referred to in Article 4(2) of Directive 2001/89/EC shall be adopted in the suspected holding in question.

In case of suspicion of CSF in pigs in a slaughterhouse or means of transport, the guidelines and procedures laid down in subparagraphs 2 to 7 shall also apply mutatis mutandis.

2. When an official veterinarian visits a suspected holding to confirm or rule out classical swine fever:
   - a check of the production and health records of the holding must be carried out, if these records are available;
   - an inspection in each house of the holding must be carried out to select the pigs to be clinically examined.

The clinical examination must include the taking of body temperature and must primarily concern the following pigs or group of pigs:
   - sick or anorexic pigs;
   - pigs recently recovered from disease;
   - pigs recently introduced from confirmed outbreaks or from other suspected sources;
   - pigs kept in sub-units recently visited by external visitors which had a recent close contact with classical swine fever suspected or infected pigs or for which other particularly risky contacts with a potential source of classical swine fever virus have been identified;
   - pigs already sampled and serologically tested for classical swine fever, in case the results of these tests do not allow to rule out classical swine fever, and in-contact pigs.
If the inspection in the suspected holding has not indicated the presence of the pigs or group of pigs referred to in the above subparagraph, the competent authority, without prejudice to other measures that may be applied in the holding in question in accordance with Directive 2001/89/EC and taking into account the epidemiological situation, shall:

- carry out further examinations in the holding in question in accordance with paragraph 3 below; or
- ensure that blood samples for laboratory tests are taken from the pigs in the holding in question. In this case the sampling procedures laid down in paragraph 5 below, shall be used for guidance purposes; or
- adopt or maintain the restriction measures laid down in Annex 5 of Chapter 1, Suspect CSF, pending further investigations in the holding in question; or
- rule out the suspicion of classical swine fever.

1. When reference is made to this paragraph, the clinical examination in the holding in question must be carried out on pigs selected at random in the sub-units for which a risk of introduction of classical swine fever virus has been identified or is suspected.

   The minimum number of pigs to be examined must allow for the detection of fever if it occurs at a prevalence of 10 % with 95 % confidence in these sub-units.

   However, in case of:
   - breeding sows, the minimum number of sows to be examined must allow for the detection of fever if it occurs at a prevalence of 5 % with 95 % confidence;
   - at semen collection enters, all boars must be examined.

2. If dead or moribund pigs are detected in a suspected holding, post-mortem examinations must be carried out, preferably on at least 5 of these pigs and in particular on pigs:
   - that before death have shown or are showing very evident signs of disease;
   - with high fever;
   - recently dead.

   If these examinations have not shown lesions suggesting classical swine fever but, due to the epidemiological situation, further investigations are deemed necessary:
   - a clinical examination, as laid down in subparagraph 3, and blood sampling as laid down in subparagraph 5 must be carried out in the house where the dead or moribund pigs were kept; and
   - post-mortem examinations may be carried on 3-4 in-contact pigs.

Irrespective of the presence or absence of lesions suggesting classical swine fever, samples of the organs or tissues from pigs that have been subjected to post-mortem examination must be collected for virological tests. These samples must be preferably collected from recently dead pigs.
When post-mortem examinations are carried out the competent authority must ensure that:

- the necessary precautions and hygienic measures are taken to prevent any disease spread, and,
- in case of moribund pigs, they are killed in a humane way in accordance with Council Directive 93/119/EEC.

5. **If further clinical signs or lesions that may suggest classical swine fever are detected** in a suspected holding, **but** the competent authority deems that these findings are not sufficient to confirm an outbreak of CSF and that laboratory tests are therefore necessary, blood samples for laboratory tests must be taken from the suspected pigs and from other pigs in each house in which the suspected pigs are kept, in accordance with the procedures laid down below.

The minimum number of samples to be taken for serological tests must allow for the detection of 10 % seroprevalence with 95 % confidence in the house in question.

However, in the case of:

- breeding sows, the minimum number of sows to be sampled must allow for the detection of 5 % serop- prevalence with 95 % confidence;
- a semen collection centre, blood samples must be taken from all boars.

The number of samples to be taken for virological tests will be in accordance with the instructions of the competent authority, which will take into account the range of tests that can be performed, the sensitivity of the laboratory tests that will be used and the epidemiological situation.

6. **If the suspicion of CSF in the holding in question is related to the results of previous serological tests**, in addition to the blood samples to be taken from the pigs referred to in 2, second subparagraph, fifth indent, the following procedures shall be applied:

   (a) if the seropositive pigs are **pregnant sows**, some of them, preferably not less than three, shall be euthanased and subjected to a post-mortem examination. Prior to killing a blood sample must be taken for further serological tests. The foetuses shall be subjected to examination for CSF virus, virus antigen or virus genome to detect intrauterine infection;

   (b) if the seropositive pigs are **sows with suckling piglets**, blood samples must be taken from all piglets and shall be subjected to examination for CSF virus, virus antigen or virus genome. Blood samples must also be taken from the sows for further serological tests.

7. **If**, after the examination carried out in a suspected holding, **clinical signs or lesions suggestive of classical swine fever are not detected**, but further laboratory tests are deemed necessary by the competent authority to rule out CSF, the sampling procedures laid down in subparagraph 5 shall be used for guidance purposes.
Protocol for collection of samples  
(Ch.V of Annex, 2002/106/EC)

**General principles**

1. Before sampling, each house and pen on the holding must be identified on a sketch of the layout of the holding.

2. In cases where re-sampling may be necessary (i.e. all cases where pigs are to remain alive), all pigs must be uniquely identified.

3. Pigs less than 8 weeks old should not be blood sampled.

4. Clotted blood samples for serological examination must be accompanied by Form CSF LS1.

   Blood and tissue samples for virological examination must be accompanied by Form CSF LS2.

   A copy of the Suspect Premises Report (where relevant) must accompany the samples (or be faxed to the CVRL Incident Room).

5. The age, category and pen/house/farm of origin must be recorded, along with the identification tag/mark of the animal.

**Samples for virological testing**

1. Tissues from dead or euthanased animals must include:
   - tonsils
   - spleen and
   - kidney

2. In addition the following samples should be taken:
   - 2 samples of other lymphatic tissue (e.g. retro-pharyngeal, parotid, mandibular or mesenteric lymph nodes) and
   - sample of ileum

3. In the case of autolysed carcases the following should be taken:
   - entire long bone or
   - sternum

4. Anticoagulated blood or clotted blood should be taken from:
   - Pigs showing signs of fever or other clinical signs
Protocol for the transport of samples to the NSFL

It is recommended that all samples

- are transported and stored in leak-proof containers
- are not frozen but kept cool at refrigerator temperature
- are delivered to the laboratory as quickly as possible
- are kept in a package where ice packs rather than wet ice is used inside to keep them cool
- of tissue or organs are placed in a separate sealed plastic bag and properly labelled. They must be then placed in larger strong outer containers and packed with sufficient absorbent material to protect from damage and absorb leakage
- whenever possible, are directly transported to the laboratory by competent personnel in order that a rapid and reliable transport is ensured

The outside of the package must be addressed to the Central Veterinary Research Laboratory, Abbotstown and the following message should be prominently displayed: *Animal Pathological Material; Perishable; Fragile; Do not open outside the classical swine fever laboratory.*

The NSFL Abbotstown must be informed by fax/e-mail/telephone in advance of the arrival of the samples.
Protocol for delivery of samples to NSFL, Abbotstown for CSF testing

- Collection from DVO and delivery to CVRL, can be arranged by you through Express Link (they need fax confirmation of order) – phone Gary Griffin at 086-2543626 fax 01-8378511

- Please ensure sample boxes are disinfected by wiping or spraying with Virkon and packaged securely for transport. Single blood boxes which are not packaged in larger boxes should be wrapped in at least three layers of plastic bags. Outer plastic bag should be disinfected.

- The NSFL requires the following information to be enclosed (documents to be placed in their own plastic bag) with each package of samples:

  (1) Suspect Premise form or In-contact Premises form, or Infected Premises Report

  (2) CSF Serology and/or CSF Tissues, Laboratory Submission forms

  OR

  Name and address of herdowner for each herd sampled.
  Herd number of each herd if available
  Species of animals sampled in each herd
  Number of samples from each herd.
  A contact name and phone number (DVO staff) we can use for any queries regarding the submissions.

  OR

  CSF VP1 form (dual purpose serology/tissues submission form)

- Please ensure documentation is clearly legible (BLOCK CAPITALS).

- Give courier a copy of these details to be left at the CVRL Security Gate.

- The Security Gate is manned 24 hours enabling deliveries at any time.

As soon as possible before sending the samples, please inform the NSFL by fax (01-6072663) of the herdowner’s name and address for each set of samples which you have sent. In addition, state whether the samples are sera and/or tissues and whether they are for diagnostic or surveillance purposes.
Protocol for sampling of pigs before slaughter following confirmation of disease
(Ch.IV.B of Annex, 2002/106/EC)

1. In order that the manner of introduction of CSF virus into an infected holding and the length of time elapsed since its introduction may be established, when pigs are killed on a holding following confirmation of an outbreak in accordance with Article 5(1)(a) of Directive 2001/89/EC, blood samples for serological tests must be taken at random from the pigs when they are killed.

2. The minimum number of pigs to be sampled must allow for the detection of 10% seroprevalence with 95% confidence in pigs in each house of the holding. Samples for virological tests may also be taken in accordance with the instructions of the competent authority, which will take into account the range of tests that can be performed, the sensitivity of the laboratory tests that will be used and the epidemiological situation.

3. However, in case of secondary outbreaks, the competent authority may decide to derogate from subparagraphs 1 and 2 and establish ad hoc sampling procedures, taking into account the epidemiological information already available on the source and means of virus introduction into the holding and the potential spread of disease from the holding.
1. In order that classical swine fever may be confirmed or ruled out and additional epidemiological information is gained, when pigs are killed as a preventive measure on a suspect holding or dangerous contract holding, blood samples for serological tests as well as blood or tonsils samples for virological tests must be taken in accordance with the procedure laid down in paragraph 2.

2. Sampling must primarily concern:
   - pigs showing signs or post-mortem lesions suggesting classical swine fever and their in-contact pigs;
   - other pigs which might have had risky contacts with infected or suspected pigs or which are suspected to have been contaminated with classical swine fever virus.

These pigs must be sampled in accordance with the instructions of the competent authority, which will take into account the epidemiological situation. In this case, the sampling procedures laid down below shall be used for guidance purposes.

Furthermore, pigs from each house of the holding must be sampled at random. In this case, the minimum number of blood samples to be taken for serological tests must allow for the detection of 10 % seroprevalence with 95 % confidence in the house in question.

However, in the case of:
   - breeding sows, the minimum number of sows to be sampled must allow for the detection of 5 % seroprevalence with 95 % confidence;
   - a semen collection centre, blood samples must be taken from all boars.

The type of samples to be taken for virological tests and the test to be used will be in accordance with the instructions of the competent authority, which will take into account the range of tests that can be performed, the sensitivity of these tests and the epidemiological situation.
Protocol for clinical examination and sampling of pigs before authorisation is given to move them from holdings in a PZ or SZ, or for slaughter or killing (Ch.IV.D of Annex, 2002/106/EC)

1. When pigs are permitted to move from holdings in the PZ or SZ, the protocol set out in Protocol CSF P9 must be followed. The clinical examination to be carried out by an official veterinarian must:
   • be carried out within the 24-hour period before moving the pigs;
   • be in accordance with the provisions laid down in 2 below.

2. In the case of pigs to be moved to another holding, in addition to the investigations to be carried out in accordance with subparagraph 1, a clinical examination of pigs must be carried out in each sub-unit of the holding in which the pigs to be moved are kept. In case of pigs older than three to four months, this examination must include the taking of temperature of a proportion of pigs.

   The minimum number of pigs to be checked must allow for the detection of fever if it occurs at a prevalence of 10 % with 95 % confidence in these sub-units.

   However, in the case of:
   • breeding sows, the minimum number of sows to be examined must allow for the detection of fever if it occurs at a prevalence of 5 % with 95 % confidence in the sub-unit where the sows to be moved are kept;
   • boars, all boars to be moved must be examined.

3. In case of pigs to be moved to a slaughterhouse, to a processing plant or to other places to be then killed or slaughtered, in addition to the investigations to be carried out in accordance with subparagraph 1, a clinical examination of pigs must be carried out in each sub-unit in which the pigs to be moved are kept. In case of pigs older than three to four months, this examination must include the taking of temperature of a proportion of pigs.

   The minimum number of the pigs to be checked must allow for the detection of fever if it occurs at a prevalence of 20 % with 95 % confidence in the sub-units in question.

   However, in the case of breeding sows or boars, the minimum number of pigs to be examined must allow for the detection of fever if it occurs at a prevalence of 5 % with 95 % confidence in the subunit where the pigs to be moved are kept.

4. When the pigs referred to in subparagraph 3 are slaughtered or killed, blood samples for serological tests or blood or tonsils samples for virological tests must be taken from pigs proceeding from each of the sub-units from which pigs have been moved.
The minimum number of samples to be taken must allow for the detection of 10 % seroprevalence or virus prevalence with 95 % confidence in each sub-unit.

However, in the case of breeding sows or boars the minimum number of pigs to be sampled must allow for the detection of 5 % of seroprevalence or virus prevalence with 95 % confidence in the subunit where these pigs were kept.

The type of samples to be taken and the test to be used will be in accordance with the instructions of the competent authority, which will take into account the range of tests that can be performed, the sensitivity of these tests and the epidemiological situation.

5. However, if clinical signs or post-mortem lesions suggesting classical swine fever are detected when the pigs are slaughtered or killed, by way of derogation from subparagraph 4, the provisions on sampling laid down in C shall apply.
Protocol for the movement of pigs from a PZ or SZ in accordance with Article 10.3 of 2001/89/EC

1. Situations where these rules may be applied:
   a) Movements from a PZ (after 30 days after preliminary cleaning and disinfection of the infected premises has been completed)
   b) Movements from a PZ where the movement controls have been in place for longer than 30 days, and welfare or other problems are arising
   c) Movements from a SZ (after 21 days after preliminary cleaning and disinfection of the infected premises has been completed)*
   d) Movements from a SZ where the movement controls have been in place for longer than 30 days, and welfare or other problems are arising

2. Movements must be direct to:
   a) A designated slaughter plant (preferably in the PZ of SZ) for immediate slaughter
   b) A suitable place for slaughter and immediate destruction
   c) Exceptionally to other premises in the PZ (if inform Commission & MS)

3. Procedure to be applied:
   a) a clinical examination of the pigs in the holding and in particular those to be moved, including the taking of the body temperature of a proportion thereof, and a check of the register and the pig identification marks referred to in Articles 4 and 5 of Directive 92/102/EEC have been carried out by an official veterinarian
   b) the checks and examinations above have shown no evidence of classical swine fever and compliance with the provisions of Directive 92/102/EEC
   c) the pigs are transported in vehicles sealed by the competent authority
   d) the vehicle and equipment which have been involved in the transport of the pigs are immediately cleaned and disinfected after the transport
   e) if the pigs are to be slaughtered or killed, a sufficient number of samples shall be taken from the pigs in accordance with Protocol CSF P8, in order that the presence of classical swine fever virus in these holdings can be confirmed or ruled out
   f) if the pigs are to be transported to a slaughterhouse:
      • the competent authority responsible for the slaughterhouse shall be informed of the intention to send pigs to it and notifies the dispatching competent authority of their arrival,
      • on arrival at the slaughterhouse these pigs shall be kept and slaughtered separately from other pigs,
      • during ante and post-mortem inspection carried out at the designated slaughterhouse, the competent authority shall take into account any signs relating to the presence of classical swine fever,
      • the fresh meat from these pigs shall be either processed or marked with the cross stamp and subsequently treated in accordance with the rules laid down in Council Directive 2002/99/EC. This shall be done at an establishment designated by the competent authority. The meat shall be sent to the said establishment on condition that the consignment is sealed before departure and remains sealed throughout the transport.
      • the meat must at all times be processed, stored and transported separately from other meat

* a derogation may be granted from the requirement to sample pigs, and to cross-stamp and treat the meat, under SCoFCAH procedure.
Protocol for clinical examination and sampling on a holding in relation to re-stocking
(Ch.IV.E of Annex, 2002/106/EC)

1. When pigs are re-introduced into a previously infected premises or following slaughter of vaccinated pigs, the following sampling procedures must be applied:

- in case sentinel pigs are reintroduced, blood samples for serological tests must be taken at random from a number of pigs that allow for the detection of 10% seroprevalence with 95% confidence in each house on the holding;

- in case of total re-population, blood samples for serological tests must be taken at random from a number of pigs that allow for the detection of 20% seroprevalence with 95% confidence in each house on the holding.

- However, in the case of breeding sows or boars the number of samples to be taken must be such as to detect 10% seroprevalence with 95% confidence.

2. After re-introduction of pigs, the competent authority shall ensure that in case of any disease or death of the pigs in the holding due to unknown reasons, the pigs in question are immediately tested for CSF. These provisions shall apply until the restrictions are lifted from the holding in question, when all serological results have been received, and are negative.
Protocol for sampling of holdings in the protection zone before lifting restrictions (Ch.IV. A & F of Annex, 2002/106/EC)

1. **Clinical examination** must include:
   - a check of the **production and health records** of the holding must be carried out, if these records are available;
   - an **inspection in each house** of the holding must be carried out to select the pigs to be clinically examined.

The **clinical examination** must include the taking of **body temperature** and must primarily concern the following pigs or group of pigs:
   - sick or anorexic pigs;
   - pigs recently recovered from disease;
   - pigs recently introduced from confirmed outbreaks or from other suspected sources;
   - pigs kept in sub-units recently visited by external visitors which had a recent close contact with classical swine fever suspected or infected pigs or for which other particularly risky contacts with a potential source of classical swine fever virus have been identified;
   - pigs already sampled and serologically tested for classical swine fever, in case the results of these tests do not allow to rule out classical swine fever, and in-contact pigs.

2. The **clinical examination** in the holding in question must be carried out on pigs selected at random in the houses.

The minimum number of pigs to be examined must allow for the detection of fever if it occurs at a prevalence of 10 % with 95 % confidence in these houses.

However, in case of:
   - breeding sows, the minimum number of sows to be examined must allow for the detection of fever if it occurs at a prevalence of 5 % with 95 % confidence;
   - at semen collection centres, all boars must be examined.

3. The minimum number of **blood samples** to be taken must allow for the detection of 10 % seroprevalence with 95 % confidence in pigs in each house in the holding.

However, in the case of:
   - breeding sows, the minimum number of samples to be taken must allow for the detection of 5 % seroprevalence with 95 % confidence;
   - a semen collection centre, blood samples must be taken from all boars.
Protocol for sampling of holdings in the surveillance zone before lifting restrictions (Ch.IV. A & G of Annex, 2002/106/EC)

1. Clinical examination must include:
   - a check of the production and health records of the holding must be carried out, if these records are available;
   - an inspection in each house of the holding must be carried out to select the pigs to be clinically examined.

The clinical examination must include the taking of body temperature and must primarily concern the following pigs or group of pigs:
   - sick or anorexic pigs;
   - pigs recently recovered from disease;
   - pigs recently introduced from confirmed outbreaks or from other suspected sources;
   - pigs kept in sub-units recently visited by external visitors which had a recent close contact with classical swine fever suspected or infected pigs or for which other particularly risky contacts with a potential source of classical swine fever virus have been identified;
   - pigs already sampled and serologically tested for classical swine fever, in case the results of these tests do not allow to rule out classical swine fever, and in-contact pigs.

2. The clinical examination in the holding in question must be carried out on pigs selected at random in the houses. The minimum number of pigs to be examined must allow for the detection of fever if it occurs at a prevalence of 10 % with 95 % confidence in these houses. However, in case of:
   - breeding sows, the minimum number of sows to be examined must allow for the detection of fever if it occurs at a prevalence of 5 % with 95 % confidence;
   - at semen collection centres, all boars must be examined.

3. In addition, blood samples for serological tests must be taken from pigs:
   - in all the holdings where no pigs of 2-8 months of age are kept;
   - whenever the competent authority deems that CSF might have spread unnoticed amongst breeding sows;
   - in all semen collection centres.
   - in any other holding where sampling is deemed necessary by the NDCC

4. The minimum number of blood samples to be taken must allow for the detection of 10 % seroprevalence with 95 % confidence in pigs in each house in the holding.

   However, in the case of:
   - breeding sows, the minimum number of samples to be taken must allow for the detection of 5 % seroprevalence with 95 % confidence;
   - a semen collection centre, blood samples must be taken from all boars.

   However, if the competent authority deems that CSF might have spread unnoticed amongst breeding sows, sampling may only be carried out in the houses where these animals are kept.
Serological monitoring and sampling procedures in areas where CSF is suspected to occur or has been confirmed in feral pigs
(Ch.IV. A & G of Annex, 2002/106/EC)

1. In the case of serological monitoring in feral pigs in areas where classical swine fever has been confirmed or is suspected to occur, the size and the geographical area of the target population to be sampled should be previously defined in order to establish the number of samples to be taken. Sample size must be established as a function of the estimated number of living animals and not as a function of shot animals.

2. If data on population density and size are not available, the geographical area within which to sample must be identified taking into account the continuous presence of feral pigs and the presence of natural or artificial barriers efficient to prevent large and continuous movement of the animals. When such circumstances do not occur, or in case of large areas, it is recommended to identify sampling areas of not more than 200 km$^2$, where population of about 400 to 1,000 feral pigs may usually live.

3. Without prejudice to the provisions of Article 15(2)(c) of Directive 2001/89/EC, the minimum number of pigs to be sampled within the defined sampling area must allow to detect 5 % seroprevalence with 95 % confidence. For this purpose at least 59 animals must be sampled in each area which has been identified.
   It is also recommended that:
   • in areas where hunting pressure is higher and regularly performed, or selective hunting is carried out as a disease control measure, approximately 50 % of the sampled animals belong to the three months to one year age class, 35 % to one to two years age class and 15 % to more than 2 years age class;
   • in areas where hunting pressure is very low or absent, at least 32 animals are sampled for each one of the three age classes;
   • sampling is performed in a short time, preferably not more than one month;
   • the age of sampled animals is identified according to the teeth eruption.

4. Collection of samples for virological tests from feral pigs shot or found dead must be carried out as laid down in Chapter V B.1. When virological monitoring on shot feral pigs is deemed necessary, it must be primarily carried out on animals three months to one year old.

5. All samples to be sent to the laboratory must be accompanied by the questionnaire referred to in Article 16(3)(1) of Directive 2001/89/EC.
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Protocol for blood sampling & euthanasia in pigs

Euthanasia: 2½ inch 14 G
20 ml (side nozzle) syringe
200 mg/ml pentobarbitone sodium (1 ml/3 lbs)
site is intracardiac
location is lateral to costo-chondral junction in an inter-costal space in
which the heart beat can be felt

Suicalm at least 1½ inch 14 – 18 G
0.5 - 1.0 ml/20 kg (animal quiet, remains standing)
1.0 – 2.0 ml/20 kg (loss of aggression, lies down) – method of choice
for blood sampling
2.0 – 4.0 ml/20 kg (2-4 hrs recumbency, no response to external
stimuli)
sedation in 10-15 mins (lasts 1-4 hours)
site is intramuscular

Blood Sampling 1½ - 2 inch 18 G
vacutainer (+adaptor if 2 inch needle used)
ave 35 pigs/hour

Jugular standing
Restrain by snaring
Hold head high and straight (fix if possible 3’ above ground)
Neck must be stretched or vein will roll away
Pull back foreleg on side being sampled
Site is half way down the neck, at base of neck furrow –
1½” anterior to point of shoulder & 1½” from the mid-line
Use 1½” (or 2” needle + adapter) & standard vacutainer
Insert needle at right angles, pushing in, as vein is deep
Side effects are minimal (rarely shock or death)
Principles and procedures for cleansing and disinfection

1. General principles and procedures:

(a) the cleansing and disinfection operations and where necessary the measures to destroy rodents and insects are carried out under official supervision and in accordance with the instructions given by the official veterinarian;

(b) the disinfectants to be used and their concentrations are officially approved by the competent authority to ensure destruction of classical swine fever virus;

(c) the activity of disinfectants is to be checked before use, as activity of certain disinfectants is diminished by prolonged storage;

(d) the choice of disinfectants and of procedures for disinfection is to be made taking into account the nature of the premises, vehicles and objects which are to be treated;

(e) the conditions under which degreasing agents and disinfectants are used must ensure that their efficacy is not impaired. In particular technical parameters provided by the manufacturer, such as pressure, minimum temperature and required contact time, are to be observed;

(f) irrespective of the disinfectant used, the following general rules are to apply:
   • thorough soaking of bedding and litter as well as faecal matter with the disinfectant,
   • washing and cleaning by careful brushing and scrubbing of the ground, floors, ramps and walls after the removal or dismantling, where possible, of equipment or installations so as to avoid impairing the cleansing and disinfection procedures, then,
   • further application of disinfectant for a minimum contact time as stipulated in the manufacturer's recommendations,
   • the water used for cleaning operations is to be disposed of in such a way as to avoid any risk of spreading the virus and in accordance with the instructions of the official veterinarian;

(g) where washing is carried out with liquids applied under pressure, re-contamination of the previously cleansed parts is to be avoided;

(h) washing, disinfecting or destroying of equipment, installations, articles or compartments likely to be contaminated is to be carried out;

(i) following the disinfection procedures, re-contamination is to be avoided;

(j) cleansing and disinfection required in the framework of CSF controls is to be documented in the holding or vehicle register and, where official approval is required, be certified by the supervising official veterinarian.
Cleansing and disinfection of infected holdings

1. Preliminary cleansing and disinfection:
   a) during the killing of the animals all necessary measures are to be taken to
      avoid or minimise the dispersion of classical swine fever virus. This is to
      include inter alia the installation of temporary disinfection equipment, supply
      of protective clothing, showers, decontamination of used equipment,
      instruments and facilities and the interruption of power supply to the
      ventilation,
   b) carcases of killed animals are to be sprayed with disinfectant,
   c) if the carcases must be removed from the holding for processing, covered and
      leak proof containers are to be used,
   d) as soon as the carcases of the pigs have been removed for processing, those
      parts of the holding in which these animals were housed and any parts of other
      buildings, yards, etc. contaminated during killing, slaughter or post-mortem
      examination are to be sprayed with approved disinfectant (shelf-life must be in
      date),
   e) any tissue or blood which may have been spilled during slaughter or post-
      mortem or gross contamination of buildings, yards, utensils, etc., is to be
      carefully collected and processed with the carcases,
   f) the disinfectant used is to remain on the treated surface for at least 24 hours;

2. Final cleansing and disinfection:
   a) manure and used bedding are to be removed and treated in accordance with
      point (3)(a),
   b) grease and dirt are to be removed from all surfaces by the application of a
      degreasing agent and the
   c) surfaces washed with water,
   d) after washing with water, further spraying with disinfectant is to be carried
      out,
   e) after 7 days the premises must be treated with a degreasing agent, rinsed with
      water, sprayed with
   f) disinfectant and rinsed again with water.

3. Disinfection of contaminated bedding, manure and slurry:
   a) manure and used bedding are to be stacked to heat, sprayed with disinfectant
      and left for at least 42 days or destroyed by burning or burying;
   b) slurry is to be stored for at least 42 days after the last addition of infective
      material, unless the competent authorities authorise a reduced storage period
      for slurry which was actually treated in accordance with the instructions given
      by the official veterinarian so as to ensure the destruction of the virus.

4. However, by way of derogation from points 1 and 2, in case of open-air
   holdings, the competent authority may establish specific procedures for
   cleaning and disinfection, taking into account the type of holding and the
   climatic conditions.