



Department
for Environment
Food & Rural Affairs

Code of practice for the welfare of

PIGS



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Preface

This preface is not part of the Code; instead, it explains the Code's role and the broad considerations on which it is based.

This Code applies to England only. It replaces the Code of Recommendations for the Welfare of Livestock: Pigs, issued in 2003.

The legal text in boxes throughout this document is not part of this Code but highlights relevant legislation. The text in these boxes is the law as it stands on the date that this Code is published (please see the final page for the date of publication). Owners/keepers should be aware that any of the legal requirements quoted here could change, and they should check that they are an accurate statement of the law as it currently stands. See Annex 1 for a list of other relevant legislation.

This Code is made under the Animal Welfare Act 2006. The Act makes owners and keepers responsible for ensuring that the welfare needs of their animals are met. This includes their need to exhibit normal behaviour patterns; their need to be housed with, or apart from, other animals; their need for a suitable environment; an appropriate diet and to be protected from pain, injury, suffering and disease.

Section 14 of the Animal Welfare Act 2006 states:

- 14 (1) The appropriate national authority may issue, and may from time to time revise, codes of practice for the purpose of providing practical guidance in respect of any provision made by or under this Act.
- (2) The authority responsible for issuing a code of practice under subsection (1) shall publish the code, and any revision of it, in such manner as it considers appropriate.
- (3) A person's failure to comply with a

provision of a code of practice issued under this section shall not of itself render him liable to proceedings of any kind.

- (4) In any proceedings against a person for an offence under this Act or an offence under regulations under section 12 or 13—
 - (a) failure to comply with a relevant provision of a code of practice issued under this section may be relied upon as tending to establish liability, and
 - (b) compliance with a relevant provision of such a code of practice may be relied upon as tending to negative liability.

The principal legislation referred to in this Code are the Welfare of Farmed Animals (England) Regulations 2007 and the Mutilations (Permitted Procedures) (England) Regulations 2007. There may be other legislation and requirements (for example organic standards and legislation for farmed wild boar) that are not outlined in this Code but with which, where relevant, owners/keepers must be familiar and in compliance. See Annex 1 and 2.

Section 3 of the Animal Welfare Act 2006 states:

- 3 (1) In this Act, references to a person responsible for an animal are to a person responsible for an animal whether on a permanent or temporary basis.
- (2) In this Act, references to being responsible for an animal include being in charge of it.
- (3) For the purposes of this Act, a person who owns an animal shall always be regarded as being a person who is responsible for it.
- (4) For the purposes of this Act, a person

shall be treated as responsible for any animal for which a person under the age of 16 years of whom he has actual care and control is responsible.

Regulation 6 of the Welfare of Farmed Animals (England) Regulations 2007 states:

6 (1) A person responsible for a farmed animal—

(a) must not attend to the animal unless he is acquainted with any relevant code of practice and has access to the code while attending to the animal; and

(b) must take all reasonable steps to ensure that a person employed or engaged by him does not attend to the animal unless that other person—

(i) is acquainted with any relevant code of practice;

(ii) has access to the code while attending to the animal; and

(iii) has received instruction and guidance on the code.

(2) In this section, a “relevant code of practice” means a code of practice issued under section 14 of the Animal Welfare Act 2006 or a statutory welfare code issued under section 3 of the Agriculture (Miscellaneous Provisions) Act 1968 relating to the particular species of farmed animal to which a person is attending.

This Code is intended to help all those who care for pigs to practise good standards of stockmanship to safeguard pig welfare. Without good stockmanship,

animal welfare can never be adequately protected. Adherence to these recommendations will help keepers to maintain the standards required to comply with relevant legislation.

Owners/keepers who care for pigs should demonstrate:

- Caring and responsible planning and management;
- Skilled, knowledgeable and conscientious stockmanship;
- Knowledge of appropriate environmental design;
- Considerate loading, unloading and transport; and
- Ability to undertake humane killing.

The welfare of pigs is considered within a framework that was developed by the Farm Animal Welfare Council (now known as the Farm Animal Welfare Committee or “FAWC”) and known as the ‘Five Freedoms’. These form the guiding principles for the assessment of welfare within any system, together with the actions necessary to safeguard welfare within the constraints of an efficient livestock industry. The Five Freedoms should be considered in conjunction with FAWC’s three essentials of stockmanship.

The Five Freedoms are:

- 1. Freedom from hunger and thirst**
by ready access to fresh water and a diet to maintain full health and vigour;
- 2. Freedom from discomfort**
by providing an appropriate environment including shelter and a comfortable resting area;
- 3. Freedom from pain, injury or disease**
by prevention or rapid diagnosis and treatment;
- 4. Freedom to express normal behaviour**
by providing sufficient space, proper facilities and company of the animals’ own kind;

5. Freedom from fear and distress

by ensuring conditions and treatment to avoid mental suffering.

The Three Essentials of Stockmanship are:

1. Knowledge of animal husbandry

Sound knowledge of the biology and husbandry of farm animals, including how their needs may be best provided for in all circumstances.

2. Skills in animal husbandry

Demonstrable skills in observation, handling, care and treatment of animals, and problem detection and resolution.

3. Personal qualities

Affinity and empathy with animals, dedication and patience.

During on-farm welfare inspections carried out by the Animal and Plant Health Agency (APHA, an executive agency of Defra and exercising Secretary of State functions) and Local Authorities, inspectors will assess compliance against legislation and this Code. Not complying with the welfare-related legislation outlined in the boxes throughout this Code is an offence. In cases that go to court for prosecution, whether someone has met the requirements of this Code, or not, can be used to help establish or disprove a person's liability.

Section 4 of the Animal Welfare Act 2006 states:

4 (1) A person commits an offence if—

- (a) an act of his, or a failure of his to act, causes an animal to suffer,
- (b) he knew, or ought reasonably to have known, that the act, or failure to act, would have that effect or be likely to do so,

(c) the animal is a protected animal, and

(d) the suffering is unnecessary.

(2) A person commits an offence if—

(a) he is responsible for an animal,

(b) an act, or failure to act, of another person causes the animal to suffer,

(c) he permitted that to happen or failed to take such steps (whether by way of supervising the other person or otherwise) as were reasonable in all the circumstances to prevent that happening, and

(d) the suffering is unnecessary.

(3) The considerations to which it is relevant to have regard when determining for the purposes of this section whether suffering is unnecessary include—

(a) whether the suffering could reasonably have been avoided or reduced;

(b) whether the conduct which caused the suffering was in compliance with any relevant enactment or any relevant provisions of a licence or code of practice issued under an enactment;

(c) whether the conduct which caused the suffering was for a legitimate purpose, such as—

(i) the purpose of benefiting the animal, or

(ii) the purpose of protecting a person, property or another animal;

- (d) whether the suffering was proportionate to the purpose of the conduct concerned;
 - (e) whether the conduct concerned was in all the circumstances that of a reasonably competent and humane person.
- (4) Nothing in this section applies to the destruction of an animal in an appropriate and humane manner.

Section 9 (1) and (2) of the Animal Welfare Act 2006 states:

- 9 (1) A person commits an offence if he does not take such steps as are reasonable in all the circumstances to ensure that the needs of an animal for which he is responsible are met to the extent required by good practice.
- (2) For the purposes of this Act, an animal's needs shall be taken to include –
- (a) its need for a suitable environment,
 - (b) its need for a suitable diet,
 - (c) its need to be able to exhibit normal behaviour patterns,
 - (d) any need it has to be housed with, or apart from, other animals, and
 - (e) its need to be protected from pain, suffering, injury and disease.

Suggested sources of additional information can be found at the end of this Code, including a section on “pet” pigs kept in a domesticated environment. These sources of further information are relevant to the welfare of pigs, but are for information only and are not considered to be part of this Code of Practice.

This Code has been issued by the Secretary of State for Environment, Food and Rural Affairs (following no objections by either House after being laid in draft in both Houses of Parliament).

THIS WELFARE CODE CAME INTO FORCE ON 1 MARCH 2020

Introduction

1. This Code (which applies in England only) covers all farmed pigs, including piglets, whether they are being kept for breeding, growing and/or finishing, whether they are “wild” type or Eurasian boar kept in a confined farm (or exhibition / farm park) environment, and whether kept singly or in multiples. This Code will help owners/keepers of pigs to comply with animal welfare legislation, however, it is not intended as a replacement for advice from a veterinary surgeon or an expert technical advisor. Furthermore, whilst many of the provisions of this Code are specific to an on-farm environment, others may offer valuable insights relevant to anyone who keeps pigs, including those keeping companion/“pet” pigs.
2. The Welfare of Farmed Animals (England) Regulations 2007 lays down the conditions under which all farmed animals, including pigs, must be kept (Schedule 1). They also specify additional conditions that only apply to the keeping of pigs (Schedule 8). Some of the specific legal requirements are repeated in boxes throughout the Code. The Council of Europe has also made recommendations concerning farmed pigs. Where these are not already set out in legislation, they are reflected in the Code.
3. There are also licensing requirements for Old World pigs (family Suidae), such as wild boars and warthogs under the Dangerous Wild Animals Act 1976 which may apply. Other legislation (for example, in relation to welfare at time of killing, welfare during transport, or animal identification) may be relevant to pig welfare. Expert advice, such as from a veterinary surgeon or expert technical advisor, should also be sought. See Annex 1.
4. The relevant animal welfare legislation applies to owners as well as to anyone who is responsible for a pig, whether on the farm, during transport (including loading and unloading) and at the point of slaughter. This includes anyone given temporary responsibility for pig care, including a veterinary surgeon. A written contract for both permanent staff and third parties contracted to carry out specific roles, such as on-farm killing, can be useful in making sure that everyone involved is clear about their animal welfare responsibilities. However, the obligations imposed by law will still apply, whether or not a contract exists. Certain aspects of livestock husbandry can present hazards to the health and safety of the stock-keeper. Advice on such matters is available from the local Agricultural Safety Inspector of the Health and Safety Executive.
5. Pigs are inquisitive, social animals and adapt well to different environments, but careful supervision is still important when changes are introduced at different stages of rearing. Pigs can be kept in a range of rearing environments, from those reared wholly outdoors to those reared in indoor units. Meeting the pigs’ welfare needs in these different environments presents different challenges for owners/keepers.
6. Pigs should receive appropriate and positive human handling from an early age. They should react inquisitively towards humans, including those they are not familiar with. However, they should not be used for public spectacles or demonstrations if such use is likely to be detrimental to their welfare, including their health. In addition to movement licences, there are also licensing requirements associated with exhibiting animals to the public for educational or entertainment purposes in the course of business.
7. It is important that animal welfare should be considered before installing any new equipment. The husbandry system used and herd size must be appropriate for the pig breed type selected and any environmental restrictions on the land, including farm size. Staff time available and their skill / competence to manage the particular system will also influence this. New building or equipment design or any environmental or other management changes should aim to maintain or improve welfare.

Definitions

8. For the purposes of this Code, definitions of terms used in this Code are summarised below. The majority of these are taken directly from the relevant legislation. Others are included to provide an explanation for the purposes of the Code. Farming practices may vary as regards to age, but the Code remains applicable accordingly.

‘pig’ means an animal of the porcine species of any age, kept for breeding, growing and/or finishing;

‘boar’ means a male pig after puberty, intended for breeding;

‘gilt’ means a female pig intended for breeding after puberty and before farrowing;

‘sow’ means a female pig after the first farrowing;

‘farrowing’ means the process of giving birth to piglets;

‘dry sow’ means a sow between weaning her piglets and the perinatal period;

‘piglet’ means a pig from birth to weaning;

‘weaner’ means a pig from weaning to the age of 10 weeks;

‘rearing pig’ means a pig from the age of 10 weeks to slaughter or service;

‘Old World pig’ means species in the family Suidae (except the domestic pig *Sus scrofa domesticus*) including the wild boar and the warthog;

‘owner’ or ‘keeper’ means any person or persons responsible for, in charge of, or who owns an animal (whether on a permanent or temporary basis), including staff or contracted workers;

‘mutilation’ is a procedure which involves interference with the sensitive tissues or bone structure of an animal, otherwise than for the purpose of its medical treatment.

Section 1 - Recommendations applying to all pigs

This section should be read in conjunction with Section 2 as appropriate.

Stockmanship and staffing

Paragraph 1 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

1. Animals must be cared for by a sufficient number of staff who possess the appropriate ability, knowledge and professional competence.

9. Stockmanship is one of the most important influences on the welfare of pigs. A good keeper will have a compassionate and humane attitude, will be able to anticipate and avoid many potential welfare problems and have the ability to identify those that do occur and respond to them promptly. Those responsible for managing a farm unit should make sure that the pigs are cared for by well-motivated and competent staff. Before any unit is set up or expanded, it is important to be certain that the level of stockmanship will be sufficiently high to safeguard the welfare of each individual pig.
10. All owners/keepers, should be trained and competent. They must be competent in the use of any equipment when performing specific tasks. Wherever possible, owners/keepers should attend relevant on and off-farm courses run by a suitable trainer or training organisation. Ideally, the training should lead to formal accredited recognition of competence in pig husbandry, health and welfare.
11. Specific knowledge and skills should be developed further on the farm unit, by

working with a skilled stock-keeper who is experienced in the relevant system. Whilst under the supervision of others and before being given sole responsibility for animals, owners/keepers should have demonstrated competence and understanding, including on-farm practical ability, to ensure that they are capable of safeguarding the animals under all foreseeable conditions. Specific tasks requiring a competence assessment should be recorded in a health and welfare plan. All owners/keepers should understand to whom they should refer if they encounter issues beyond their existing knowledge base.

Health and welfare plan

12. It is recommended that the owner/keeper should draw up and implement a written pig health and welfare plan with a veterinary surgeon and, where necessary, other technical advisors. Owners/keepers should review and update this health and welfare plan regularly. This plan should set out health and husbandry activities that cover the cycle of production and include plans to prevent, treat or limit disease problems. It should also include strategies such as recording and evaluating on-farm and slaughterhouse findings to prevent, treat or limit health and welfare problems on the unit. The plan should include enough records for owners/keepers to assess the basic output of the herd and monitor the welfare of the pigs, including animal-based measures. See paragraphs 46 to 48.
13. Pig producers can also receive regular inspections from independent schemes as part of their supply contract and from government inspectors. The health and welfare plan should be updated through the year to consider findings from such inspections, from slaughterhouse reports

and from trusted advice sources. Social media discussion forums can be a useful source of sharing information, but may not be monitored by the hosts and advice given on such sites should always be checked before implementing with a veterinary surgeon or technical advisor.

Disease control and biosecurity

14. Any person who keeps pigs must by law register the place where they keep them with the Animal and Plant Health Agency (APHA), regardless of whether this is for a single pig or several in a herd. In the event of a disease outbreak, knowing the precise location of all livestock is essential for effective measures to control and eradicate highly contagious diseases. Livestock in the area are at risk if holdings are not registered. See Annex 1.
15. Incoming stock presents the greatest risk to the health of a herd as regards infectious disease. It is not possible to prevent all airborne infections from entering a unit, but when planning new sites or using existing buildings for new purposes, consideration should be given to providing the maximum possible distance between the proposed site and existing sites, as this will reduce the risk of spread of airborne infectious diseases. There are laws relating to pig identification, pre-movement notifications and controls on movements. See Annex 1.
16. There is a legal duty to immediately report suspicions that any animal is suffering from a notifiable disease. APHA must be notified and failure to do so is an offence under the Animal Health Act 1981. See Annex 1. All keepers/ owners of pigs, should be familiar with the signs and symptoms associated with notifiable diseases which affect pigs. Where there is any doubt a veterinary surgeon should be consulted.
17. The term “biosecurity” means a set of management actions and physical measures designed to reduce the risk of introduction, establishment and spread of disease to, from and within the pig herd.
18. Good biosecurity measures should result in:
 - a) farm units/premises being more secure from the introduction of infectious diseases;
 - b) the spread of any diseases within the unit / premises itself being kept to a minimum; and
 - c) a reduced risk of spread of disease from unit to unit or elsewhere.
19. Good biosecurity could be achieved through:
 - a) sourcing pigs from limited sources with high health status or at the minimum, a known disease status;
 - b) appropriate quarantine procedures for new pigs entering the herd. Owners/keepers should have isolation facilities to observe / test incoming stock for a suitable period when they arrive, before they join the rest of the herd. See Annex 1.
 - c) limit external vehicle / equipment / people movement onto the unit and instigate appropriate cleansing and disinfection procedures, for example, cleaning of the vehicle when drivers deliver stock or collect fallen stock, including;
 - i) appropriate pig free periods for visitors and a defined visitor protocol, including visitor book;
 - ii) loading facilities and, where possible, feed bins and dead stock collection points should be sited at the unit perimeter;

- d) good management/husbandry procedures on-farm, this includes:
 - i) separating different age pigs on the unit;
 - ii) where possible 'All In - All Out' management of pigs – by unit or by accommodation block;
 - iii) disinfection points on entry / exit from each accommodation / rearing section;
 - iv) separating staff responsibilities to specific sections and/or following strict disinfection protocols between age groups;
 - v) designing daily management routines which move from youngest pigs through to the oldest;
- e) good hygiene throughout the unit, this includes:
 - i) defining protocols in a health and welfare plan for owners/keepers and visitor hygiene and cleansing and disinfection procedures (including hand washing / disinfection) when moving between pig accommodation;
 - ii) high levels of hygiene / disinfection procedures during interventions, such as at farrowing / piglet treatments;
- f) preventive disease control programmes including vaccination and parasite control programmes, (including worming programmes for on-farm domestic animals that may present a risk to the pigs); and
- g) a pest control programme described in a health and welfare plan which limits access of rodents, wild birds, wildlife, feral cats, domestic animals (for example, dogs and cats) and other risks, to animals and feed stores.

Contingency planning for disease and other emergencies

- 20. Any health and welfare plan should include contingency plans to deal with emergencies on the unit/premises, such as fire; flooding; temperature extremes; temporary restriction on movement of pigs from the unit (for example, during suspect or actual notifiable disease outbreaks); disruption of supplies (for example, feed, water and electricity) and when automated equipment fails and cannot be immediately rectified. Owners/keepers should have appropriate training and be competent in the use of any equipment included in the emergency contingency plan, and be able to respond in cases of emergency to safeguard, as far as possible, the welfare of the animals.
- 21. Contingency plans should be included for both endemic disease and potential notifiable disease on the unit and in relation to disease risks identified elsewhere. They should be drawn up for situations where movement of pigs off the premises would not be permitted (for example, notifiable diseases) and for situations where it may be necessary to compartmentalise access to parts of the unit (for example, an endemic disease or food safety incident). Where notifiable disease is confirmed in pigs or other livestock near the unit/premises, restrictions on movements could persist for a considerable length of time.
- 22. Contingency plans should consider ways to manage any short-term restrictions, for example, for up to one to two weeks during a disease / incident investigation on the unit or farm nearby, and the impact of long-term restrictions (over a month) linked to more serious incidents. Plans should include sites for suitable temporary accommodation and siting for additional feed and bedding storage or slurry management procedures or provisions for killing and the holding of

carcasses. Restrictions on one premises could also affect any linked locations. See Annex 1.

23. The installation of alarm systems should be considered (for example, for fire or power cuts) that can both be heard on the unit/premises and communicated via mobile telecommunications to duty staff members or any alternative contacts who are off-site or unable to hear the external alarm systems. Arrangements should ensure that alarms can be responded to at any time of day or night.
24. Responsibility for animal welfare remains with the owners/keepers during any enforced restrictions on movement or any other emergency on the unit/premises. Any concerns about animal welfare during such periods should be discussed with a veterinary surgeon and, where appropriate, reported to APHA if animal welfare conditions deteriorate.

Inspection

Paragraph 3 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

3. Where animals are kept in a building, adequate lighting (whether fixed or portable) must be available to enable them to be thoroughly inspected at any time.

Paragraph 2 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

2. All pigs must be inspected by the owner or other person responsible for the pigs at least once a day to check that they are in a state of well-being.

25. The health and welfare of animals depends on them being regularly inspected by the owner/keeper. For all pigs, inspections must be at least once per day. However, there may be some occasions where more frequent inspections are necessary, for example, at and post-farrowing and when pigs are in hospital accommodation.
26. Adequate lighting must be available to enable a thorough inspection of the stock. All owners/keepers should be familiar with the normal behaviour of pigs. It is essential that early signs of distress or disease in individual pigs and behavioural problems in pigs in the group (for example, aggression or other injurious behaviours) are recognised. To do this effectively, it is important that owners/keepers have enough time to:
 - a) inspect the stock;
 - b) check equipment; and
 - c) take action to deal with any problem, including recording findings and actions taken. See paragraphs 46 to 61.
27. The owner/keeper should always be looking out for signs of ill health and poor welfare in pigs, which include, but not restricted to:
 - a) separation from the group;
 - b) listlessness;
 - c) swollen navel, udder or joints;
 - d) rapid or irregular breathing;
 - e) persistent coughing or panting;
 - f) shivering;
 - g) discoloration or blistering of the skin;
 - h) loss of body condition;
 - i) sneezing;

- j) lameness (inspection of the feet and legs is particularly important) and limb lesions / swellings;
 - k) lack of co-ordination;
 - l) constipation;
 - m) diarrhoea;
 - n) poor appetite;
 - o) vomiting;
 - p) body injuries including wounds, tail bites, vulva bites and other animal-based measures;
 - q) persistently aggressive pigs and victims of aggression;
 - r) abnormal behaviours including ear, flank and tail biting; and
 - s) increase in expected mortality for age category.
28. Owners/keepers should be able to anticipate problems or recognise them in their earliest stages and, in many cases, should be able to identify the cause and put matters right immediately. Recording such incidents in sufficient detail at the time is key to monitoring, evaluating and reviewing changes in pig health and welfare over time. Also see paragraphs 12 and 13.
- or body contact with one another. Sharp corners should be avoided. Once one pig starts moving the others should follow.
30. Accommodation and walkway designs should, therefore, support this natural flow of pig movement. Any new building designs should consider pigs' needs during handling and movement. Owners/keepers must ensure that all floors and walkways are well maintained and provide a non-slip, but non-abrasive grip surface, to avoid damage to feet and legs. The floor should not slope too steeply, as this can increase the risk of slipping and injury. See paragraphs 36 to 38 and 76 and 77.
31. When designing a system to help with pig flow the following should be considered:
- a) consistent width passageways – allowing two pigs to move side by side is ideal which should also be sufficient space to turn them if they end up facing the wrong way;
 - b) long passages with few turns – allowing pigs to see each other and follow one another quietly and calmly;
 - c) consistent colour / consistency of walls and floors – ideally at a height that prevents pigs from seeing beyond the passageway they are following; and
 - d) even lighting along the route.
32. The following can upset pig movement and should be avoided where possible:
- a) flapping objects;
 - b) shiny objects;
 - c) varied light and shade patterns including dappled shadowing;
 - d) sudden noise;
 - e) sudden movements by owner/keeper;

Handling

29. All owners/keepers should have access to easy to use and efficient handling systems. This is to allow pigs to be routinely moved, managed and treated and ensures that they are quietly and gently handled. Pigs should be moved at their own pace with the owner/keeper staying behind the pigs. They move most freely in small groups where they can have visual and/

- f) narrowing passageways; and
 - g) constant turns that reduce ability of pigs to see and touch one another as they move.
33. Pigs have a very wide angle of vision and are easily disturbed by novel objects, sudden movements, variations in lighting or sudden noise. Excessive force must not be used. It is not acceptable to strike or kick pigs. Avoid putting any pressure on the body of the pig, particularly the face, snout and belly. Pig boards should be used only for encouraging pigs in the right direction, for blocking visible exits / gaps along the route and must not have a sharp or pointed end. See also paragraphs 36 to 38 and 73 to 75.

Paragraph 30 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

30. An electrical current must not be applied to an animal for the purpose of immobilisation.

34. Electro-immobilisation, the use of electricity to paralyse an animal to stop it from moving during a procedure, is illegal.
35. Electric goads should not be used. More important are an appropriate design of the accommodation and passageways and the skill of the owner/keeper. There are additional legal requirements at loading / unloading. See paragraphs 36 to 38.

Tethering

Paragraphs 3, 4 and 5 (2) (a) and (e) of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

3. No person responsible for a pig may tether it or cause it to be tethered, except while it is undergoing any examination, test, treatment or operation carried out for any veterinary purpose.
4. (1) Where tethers are used in accordance with paragraph 3, they must not cause injury to the pigs and must be inspected regularly and adjusted as necessary to ensure a comfortable fit.
- (2) Each tether must be of sufficient length to allow the pigs to move as stipulated in paragraph 5(2)(a) and (e) and the design must be such as to avoid, as far as possible, any risk of strangulation, pain or injury.
5. (2) The accommodation used for pigs must be constructed in such a way as to allow each pig to—
- (a) stand up, lie down and rest without difficulty;
 - (e) have enough space to allow all the animals to lie down at the same time.

Loading, unloading and transport

36. There are detailed rules relating to the transport and movement of pigs to and from the farm which are covered by different pieces of legislation and which owners/keepers should be familiar with. See Annex 1. They cover the following:
- a) fitness of the pigs for the intended journey;
 - b) loading and unloading facilities, including on the farm;
 - c) electronic notification of movements ahead of the journey;
 - d) requirement for approval of the vehicle used for long journeys;
 - e) requirements for driver training and transporter authorisation;
 - f) requirement for journey logs for long journeys to another country; and
 - g) transport documentation needed for all journeys.
37. There are additional requirements associated with moving pigs to slaughter. A food chain information form must be completed, including details on the health of the pigs and on meeting medicine withdrawal periods for any treated pigs. See paragraph 66.
38. In instances where the owner/keeper is using their own transport, then they will need to ensure they are complying with the legislation concerning the welfare of animals during transport. In instances where the owner/keeper contracts a third party transporter, the owners/keepers are responsible for ensuring trusted, reliable and demonstrably competent transporters are used. The transporter will have the responsibility for ensuring they meet

all the legal requirements for transporting pigs. When loading or unloading at a place of departure, transfer or destination, the owner/keeper and transporter of the pigs will be responsible for ensuring loading and unloading facilities are appropriate, that pigs are correctly identified and that the animals are fit for the intended journey.

Council Regulation (EC) No 1/2005, Annex I (Technical Rules), Chapter III (Transport Practices) states:

Facilities and procedures

- 1.3. Facilities for loading and unloading, including the flooring, shall be designed, constructed, maintained and operated so as to:
- (a) prevent injury and suffering and minimise excitement and distress during animal movements as well as to ensure the safety of the animals. In particular, surfaces shall not be slippery and lateral protections shall be provided so as to prevent animals from escaping;
 - (b) be cleaned and disinfected.
- 1.4. (a) Ramps shall not be steeper than an angle of 20 degrees, that is 36,4 % to the horizontal for pigs, calves and horses and an angle of 26 degrees 34 minutes, that is 50 % to the horizontal for sheep and cattle other than calves. Where the slope is steeper than 10 degrees, that is 17,6 % to the horizontal, ramps shall be fitted with a system, such as provided by foot battens, which ensure that the animals

climb or go down without risks or difficulties;

- (b) lifting platforms and upper floors shall have safety barriers so as to prevent animals falling or escaping during loading and unloading operations.

1.5. Goods which are being transported in the same means of transport as animals shall be positioned so that they do not cause injury, suffering or distress to the animals.

1.6. Appropriate lighting shall be provided during loading and unloading.

Handling

1.8. It shall be prohibited to:

- (a) strike or kick the animals;
- (b) apply pressure to any particularly sensitive part of the body in such a way as to cause them unnecessary pain or suffering;
- (c) suspend the animals themselves by mechanical means;
- (d) lift or drag the animals by head, ears, horns, legs, tail or fleece, or handle them in such a way as to cause them unnecessary pain or suffering;
- (e) use prods or other implements with pointed ends;
- (f) knowingly obstruct any animal which is being driven or led through any part where animals are handled.

1.9. The use of instruments which administer electric shocks shall be avoided as far as possible. In any case, these instruments shall only be used for adult bovine animals and adult pigs which refuse to move and only when they have room ahead of them in which to move. The shocks shall last no longer than one second, be adequately spaced and shall only be applied to the muscles of the hindquarters. Shocks shall not be used repeatedly if the animal fails to respond.

1.11. Animals shall not be tied by [...] the nose rings nor by legs tied together. [...]

When animals need to be tied, the ropes, tethers or other means used shall be

- (a) strong enough not to break during normal transport conditions;
- (b) such as to allow the animals, if necessary, to lie down and to eat and drink;
- (c) designed in such a way as to eliminate any danger of strangulation or injury, and so as to allow animals to be quickly released.

Marking

39. Pigs which are 12 months of age or older must, in order to be moved from a holding, have a permanent mark. A permanent mark is also required for pigs less than 12 months of age to be moved from a holding to a slaughterhouse, to a market or to a show, or when being moved for the purposes of export (whether to the EU or otherwise). A temporary mark can be used for all other movements of pigs less than 12 months old off the holding, including between farms.
40. Ear tags used in pigs for this purpose must meet all the legal requirements. They must be tamper proof; incapable of being re-used; easy to read; made of metal and/or plastic; heat resistant (for processing at the slaughter house); and must be designed to remain attached to the pig without harming it. Where, for herd management purposes, ear marking is by notching or punching, appropriate equipment should be used.
41. Permanent marking of pigs with an ear tag or tattoo should only be carried out by a trained and competent operator, using properly maintained instruments under hygienic conditions and in compliance with the law. Any form of marking which pierces or cuts the skin is a mutilation which causes pain. The necessity for additional management marking procedures should be carefully considered. Only permitted procedures are allowed. See Annex 1 and 2.
42. Tattooing must be carried out using tattoo forceps on the ear, by tattooing each shoulder (using equipment which uses compressed air to drive the tattooing pins into the skin of the pig), or by using slap marking equipment on each shoulder. Tattooing of the live pig is only permitted for identification or management purposes and should be restricted to minimum interference with the skin in order to create the animal's identity. A decorative tattoo applied to the skin of a live pig is illegal. See paragraph 41.
43. When ear tagging or applying tattoos with tattoo forceps, animals should be properly restrained. Care should be taken to position and insert tags correctly by following the manufacturer's instructions, avoiding main blood vessels and ridges of cartilage.
44. Slap marking can be done at any age, providing the mark meets the legal requirements as detailed in paragraphs 39, 41 and 42.
45. Ensure only non-toxic substances are used when using aerosols or paints for temporary marking and ensure the face and other sensitive areas of the body are avoided.

Monitoring animal health and welfare

Animal-based measures

46. Many recognised welfare standards are based on “inputs”, such as daily management duties and husbandry procedures or resources provided by owners/keepers to the animals such as housing, feed and water. Many of these inputs are defined as minimum standards in law and are covered throughout this Code. However, certain animal-based measures can help provide a better understanding of how these inputs directly affect individual pigs and the herd as a whole. This in turn should focus owners/keepers, the veterinary surgeon and other expert advisors connected with the farm unit, in addressing the key issues in a particular pig herd.
47. Any animal-based measures which are monitored and recorded need to be practical and easily measurable and indicate the wellbeing of the pigs. Some of the measures are not new and should already be familiar, such as body condition assessment, lameness and on-farm mortality. Others, such as cleanliness of pigs, evidence of fighting such as body marks and injuries on specific body parts (for example, ears or tails), should also be recorded and reported as an indicator of wellbeing in pigs. Where there is a gradation of severity, for example, minimal to mild or severe tail-biting, then simple scoring systems that all staff can consistently record in the same way should be considered.
48. Routine animal-based measures to be carried out on the farm unit/premises should be agreed with a veterinary surgeon. There may be additional requirements specified through private schemes and supply contracts with which a veterinary surgeon / or scheme advisor can provide assistance. All agreed measures, method and frequency of recording should be detailed in a health and welfare plan. All owners/keepers should be clear about their

responsibilities in accurate recording, at every inspection. Additional information from market sales and slaughterhouses may give further information on the health and welfare of the pigs. A number of the more common examples of animal-based measures are included in the following paragraphs.

Fighting and aggressive behaviours

Paragraph 8 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

8. (1) If pigs are kept together, measures must be taken to prevent fighting which goes beyond normal behaviour.
- (2) Pigs which show persistent aggression towards others or are victims of such aggression must be separated from the group.

49. Although fighting is a natural behaviour, minimising aggression between pigs should have production benefits, in addition to improving their welfare. Whilst some wounds may be caused by poor pen or equipment design, others will be caused by aggressive interactions. Body marks / scratches on different areas of pigs can help indicate different causes of aggressive interaction between pigs.
50. Aggressive interactions, fear and the wounds associated with fighting result in poor welfare for the pigs affected. Aggression between groups of pigs, including sows and boars, can be precipitated by a number of factors. As soon as new pigs are introduced to, or removed from a group this will affect the hierarchy and social structure of the group,

leading to some fighting to establish a new ranking order. Prompt action must be taken to separate pigs when severe aggression and wounding occurs. If identified, persistent aggressors must be removed promptly and pigs with serious injuries must be removed to a hospital pen for treatment and recovery or be humanely killed as soon as possible. See Annex 1 and paragraphs 166 to 168.

51. Aggression can also occur due to competition over access to feed or water. There should, therefore, be sufficient access to both feed and water for the number of pigs in each pen. See paragraphs 103 to 113.
52. Energy expended during aggressive activities and the healing from wounds as a result, can lead to a reduction in productivity for all pigs (including the aggressor) and thus poorer feed conversion rates.

Body condition assessment

53. Body condition scoring (BCS) is a key measure of the health and welfare state of a sow. Condition scoring is a simple technique for all pig owners/keepers to carry out that allows the body reserves (i.e. muscle and fat cover) of individual pigs to be assessed and enables better monitoring and adjustment of feed and management practices. Pigs can be assessed to ensure they are not too fat or too thin and sows and gilts can be properly managed throughout their breeding cycle. There should be clear guidance in a health and welfare plan for the expected BCS at different stages of growth and physiological states, including the frequency and timing that BCS should be carried out.
54. Evidence of poor body condition, despite adjusting feed levels, may suggest disease challenge, nutritional or water issues, or

behavioural problems that need further investigation. In any case, where there is unexplained poor body condition, veterinary advice should be sought. There should be a clear protocol for managing chronic, poorly conditioned pigs in the herd, including humane killing. It is poor practice to move these pigs into groups of younger animals as they could spread disease.

Lameness and limb lesions

55. Lameness or limb injury / lesion in any animal is usually a sign that they are in pain. It can also negatively affect productivity of growing and breeding pigs, particularly if appetite or access to the feeder is reduced. Replacement gilts should be carefully monitored for lameness as the quality and quantity of nutrition at certain stages of growth can significantly affect the incidence of lameness in replacement breeding stock.
56. It is important that lameness and limb lesions are accurately recorded, noting both the age of the pig(s), type of lesion or lameness and pen location of affected animals. If a significant percentage of pigs in a herd are affected, the cause should be investigated and veterinary advice should be sought promptly.
57. Pigs that are unable to walk independently without pain and those that have a severe open wound or prolapse are considered unfit to transport. Sick or injured animals may be considered fit for transport if they are slightly injured or ill and transport would not cause additional suffering: in cases of doubt veterinary advice should be sought. If a lame animal does not respond to treatment following veterinary advice, it must be humanely killed on farm as soon as possible rather than leave it to suffer. See paragraphs 62 to 66.

Managing sick and injured animals

Paragraphs 5 and 6 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 state:

5. Any animals which appear to be ill or injured must be cared for appropriately and without delay; where they do not respond to such care, veterinary advice must be obtained as soon as possible.
 6. Where necessary, sick or injured animals must be isolated in suitable accommodation with, where appropriate, dry comfortable bedding.
58. Immediate action must be taken if any pigs appear to be ill or injured. A veterinary surgeon should be consulted if there are any doubts about the cause of the ill health or the most effective treatment, including appropriate pain relief. It is important to regularly review an individual pig's response to treatment and if the pig is not improving, a veterinary surgeon's advice must be sought as soon as possible. Where appropriate, the owner/keeper must ensure the pig is humanely killed.
 59. Any health and welfare plan should specify a procedure for isolating and caring for sick or injured animals. Hospital pens should be available for each category of pig on the unit and be easily reached. The animals in them should be regularly checked through the day. When moving sick or injured pigs to the hospital pens, owners/keepers must ensure that unnecessary suffering does not occur. Drinking water must be continuously available along with feeding facilities which can easily be accessed by all pigs.
 60. Lamé or recumbent animals should be well bedded on straw or similar bedding to avoid pressure sores developing. The use of rubber matting as an alternative can also be considered. Particular care is needed where recumbent animals are isolated to ensure that they can be checked and are seen to be consuming any feed and water provided.
 61. Animals should be temporarily identified at the time of treatment, so that any medical treatments can be recorded against the individual animal and the time in the hospital pen can be monitored. Protocols for decision-making on culling, particularly for recumbent pigs should be established. If an animal does not respond to treatment and is unfit to transport, it must be humanely killed on-farm. Any animals suffering from painful and incurable conditions must be killed as soon as possible. See paragraphs 62 to 66.

On-farm killing

62. Any health and welfare plan should detail the routine methods to be used for killing animals and who is competent to do this. It should also outline contingency procedures in the event such persons are unavailable, such as obtaining a licensed slaughter-person or a veterinary surgeon to carry out this procedure as soon as possible.
63. Animals must be killed humanely using a method which immediately renders them unconscious until death. Pigs routinely culled on-farm must not be killed with a non-mechanical percussive blow to the head. A mechanical percussive blow to the head is a simple stun and must be followed by a killing method such as bleeding.
64. Where a pig has to be killed in an emergency,

for example, animals that are injured or have a disease associated with severe pain or suffering that cannot be practically alleviated, then any method of killing is allowed as long as the animal is spared any avoidable pain, distress and suffering and is killed as soon as possible. Checks should be made to ensure that there is no sign of life. This must be done by someone who is suitably trained and competent in the killing method to be used and in the use of the equipment. In emergency circumstances, a Welfare at the Time of Killing (WATOK) licence is not required, however it is desirable. When routinely killing pigs on farm a WATOK licence is required, unless one of a very limited number of exemptions apply.

65. After a pig's death or killing, the carcass must be disposed of promptly and without delay by a suitable method and the death recorded. Whilst awaiting disposal the carcass must be stored in a leak-proof container that is inaccessible by dogs, cats and wildlife. The products of farrowing, still born pigs, foetuses and after-birth (placentas), are all animal by-products covered by legislation. See Annex 1.
66. An animal must only be transported if it is fit for the intended journey and is healthy enough to tolerate the entire journey it is about to make (including loading, unloading and any other journey breaks). A sick or injured animal can only be transported under veterinary supervision for, or following, veterinary treatment or diagnosis. There are strict legal requirements associated with the transport of slightly injured or ill animals. If in doubt, seek veterinary advice, including clinical inspection where necessary, before transport. Where the pigs are being transported for slaughter for human consumption, additional requirements may need to be met and should be agreed with the Official Veterinarian present at the slaughterhouse on the day of consignment. See also paragraph 37, 57 and Annex 1.

Responsible medicines usage and record keeping

67. Any pig health and welfare plan, agreed with a veterinary surgeon, should focus on disease prevention through appropriate biosecurity, hygiene and vaccination protocols.
68. Antimicrobials should not be used routinely but only for the treatment, control or prevention of disease as prescribed by a veterinary surgeon when specific disease or infection has been diagnosed.
69. Worming and ectoparasiticide treatments should be carried out in accordance with veterinary advice as described in a health and welfare plan. Only UK authorised veterinary medicinal products may be used and they must be administered according to the manufacturer's instructions. Any variation must be under veterinary direction.
70. Full records of all medicines used in line with current medicines legislation for food-producing animals must be kept. Under welfare legislation, these records must be kept for at least three years. There are additional legal requirements for medicines records under the legislation for food-producing animals. See Annex 1.

Paragraphs 7 and 8 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 state:

7. A record must be maintained of –
 - (a) any medicinal treatment given to animals; and
 - (b) the number of mortalities found on

each inspection of animals carried out in accordance with any of the following provisions-

[...]

(iii) in the case of pigs, paragraph 2 of Schedule 8;

8. The record referred to in paragraph 7 must be retained for a period of at least three years from the date on which the medicinal treatment was given, or the date of the inspection, and must be made available to an inspector on request.

71. The medicines records must be available for a government or local authority inspector to review at any time. Where records are kept on a computer or on-line, owners/keepers must be able to produce a copy of them on request for the inspector. See Annex 1.
72. In terms of individual animal management and overseeing herd health issues, it may be useful to record reasons for treatment, such as mastitis, lameness and other disorders. Where ongoing issues have been identified, owners/keepers should agree management and treatment protocols with a veterinary surgeon and add them to a health and welfare plan. See also paragraphs 46 to 61.

Accommodation

Paragraphs 5 and 6 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

5. (1) A pig must be free to turn round without difficulty at all times.
- (2) The accommodation used for pigs must be constructed in such a way as to allow each pig to –
- (a) stand up, lie down and rest without difficulty;
 - (b) have a clean, comfortable and adequately drained place in which it can rest;
 - (c) see other pigs, except-
 - (i) where the pig is isolated for veterinary reasons; or
 - (ii) in the week before the expected farrowing time and during farrowing, when sows and gilts may be kept out of sight of other pigs;
 - (d) maintain a comfortable temperature; and
 - (e) have enough space to allow all the animals to lie down at the same time.
6. (1) The dimension of any stall or pen used for holding individual pigs must be such that the internal area is not less than the square of the length of the pig, and no internal side is less than 75% of the length of the pig, the length of the pig in each case being measured from the tip of its snout to

the base of its tail while it is standing with its back straight.

- (2) Sub-paragraph (1) does not apply to a female pig for the period beginning with seven days before the predicted day of her farrowing and ending when the weaning of her piglets (including any piglets fostered by her) is complete.
- (3) Sub-paragraph (1) does not apply to a pig held in a stall or pen—
 - (a) while it is undergoing any examination, test, treatment or operation carried out for veterinary purposes;
 - (b) for the purposes of service, artificial insemination or collection of semen;
 - (c) while it is fed on any particular occasion;
 - (d) for the purposes of marking, washing or weighing it;
 - (e) while its accommodation is being cleaned; or
 - (f) while it is awaiting loading for transportation,

provided that the period during which it is so kept is not longer than necessary for that purpose.

- (4) Sub-paragraph (1) does not apply to a pig held in a stall or pen which the pig can enter or leave at will, provided that the stall or pen is entered from a stall or pen in which the pig is kept without contravention of this paragraph.

General

Paragraphs 11 and 12 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 state:

- 11. Materials used for the construction of accommodation, and in particular for the construction of pens, cages, stalls and equipment with which the animals may come into contact, must not be harmful to them and must be capable of being thoroughly cleaned and disinfected.
 - 12. Accommodation and fittings for securing animals must be constructed and maintained so that there are no sharp edges or protrusions likely to cause injury to them.
-
- 73. Owners/keepers should seek appropriate welfare advice from a veterinary surgeon or technical advisor when new facilities are to be constructed or existing facilities are modified. Suitable sites should be selected, taking into consideration the risk of outside environmental factors such as noise, vibration and atmospheric pollution. New facilities should be compliant with current legislation. For example, designs must enable the provision of sufficient and suitable environmental enrichment for all pigs. Some specialised buildings use complex mechanical and electrical equipment which require additional technical and management skills and may require training to ensure that husbandry and welfare requirements are met.
 - 74. The internal surfaces of housing and pens should be made of materials that can be easily cleaned and disinfected regularly, that are safe to use for pigs and can be easily replaced when necessary.

75. Where buildings (temporary or permanent) or outdoor pens are constructed over existing hard standing floor bases, (for example, on disused roads, tracks and airfields not originally designed for livestock use), owners/keepers must ensure that the flooring is made suitable for keeping pigs and is not hazardous to pig health and welfare. Where necessary, such flooring may require additional treatments to make it suitable for livestock use. Specialist advice should be sought before use is made of such hard standings.

Floors

Paragraphs 11 and 12 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

11. Where pigs are kept in a building, floors must –

- (a) be smooth but not slippery;
- (b) be designed, constructed and maintained so as not to cause injury or suffering to pigs standing or lying on them;
- (c) be suitable for the size and weight of the pigs; and
- (d) where no litter is provided, form a rigid, even and stable surface.

12. (1) Where concrete slatted floors are used for pigs kept in groups, the maximum width of the openings must be –

- (a) 11 mm for piglets;
- (b) 14 mm for weaners;
- (c) 18 mm for rearing pigs; and

(d) 20 mm for gilts after service and sows.

(2) The minimum slat width must be –

- (a) 50 mm for piglets and weaners; and
- (b) 80 mm for rearing pigs, gilts after service and sows.

76. Good floor design and adequate maintenance is essential. Poor floor construction, incorrect slat width for the weight or size of pig and surfaces that are worn or damaged, can cause injury to pigs' feet and legs. Damaged floors should be repaired or replaced promptly or the pen taken out of commission.

Paragraph 10 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

10. Where bedding is provided, it must be clean, dry and not harmful to the pigs.

77. The lying area should always be kept dry and pen floors, including the dunging area, should be drained effectively. Where bedding is provided, this must be clean, dry and not detrimental to the health of the pigs and should be regularly topped up or changed.

Enrichment

Paragraph 15 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

15. To enable proper investigation and manipulation activities, all pigs must have permanent access to a sufficient quantity of material such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such which does not adversely affect the health of the animals.

78. All pigs must have permanent access to enrichment materials which provide pigs with the opportunity to enable proper investigation, manipulation and foraging activities. Enrichment materials should enable pigs to fulfil their essential behavioural needs without compromising their health. They must be safe, hygienic and should ideally have the following characteristics:

- a) **edible**— so that pigs can eat or smell them, (possibly with some nutritional benefits);
- b) **chewable**— so that pigs can bite them;
- c) **investigable**— so that pigs can investigate them; and
- d) **manipulable**— so that pigs can change their location, appearance or structure.

79. Straw, and dried grasses, such as hay, are examples of optimal materials for environmental enrichment, as they can satisfy all of the characteristics described above when they are provided in sufficient quantities and regularly replenished. They are fibrous materials which the pig can eat; the pig is able to root in and play with; and, when used as bedding, these

materials can provide the pig with physical and thermal comfort. There are a variety of straw types that can be suitable for enrichment, but some are less suited as bedding than cereal straws such as barley, wheat and oats. The key consideration is the quality of the material used, for example, not wet or mouldy.

80. The following are examples of materials which are not recommended due to potential health or environmental risks or other concerns: mushroom compost, peat or novel sources of bedding, such as “green” bedding.

81. Objects such as footballs and chains can satisfy some of the pigs’ behavioural needs, but can quickly lose their novelty factor. The use of such items is unacceptable, unless they are complemented by materials that meet the requirements of a suitable enrichment material. See table provided in paragraph 83.

82. Enrichment materials have been categorised according to how well they meet the characteristics:

- a) **optimal materials**—materials possessing all the characteristics listed in paragraph 78 and therefore, such materials can be used alone;
- b) **suboptimal materials**—materials possessing most of the required characteristics and therefore, such materials should be used in combination with other materials to improve the enrichment experience of the pig; and
- c) **materials which are not acceptable on their own**—materials of limited interest to pigs, which are not considered capable of fulfilling their essential needs for enrichment purposes and therefore should be used in conjunction with optimal or suboptimal materials.

83. The following table, which is not an exhaustive list, provides guidance on the suitability of commonly used enrichment materials.

Suitability of materials for providing environmental enrichment

Materials	Provided as	Suitability of environmental enrichment material	Additional information	Risks (always check for toxicity)
Cereal straws and dried grasses.	Bedding	Optimal	Meets all the requirements of appropriate enrichment material. Most of these also provide appropriate thermal and physical comfort needs as bedding.	Competition if insufficient for all pigs. Can get dirty or wet, may need regular replenishment. Some straws less suitable as bedding materials.
Silage, root vegetables (N.B.parsnips are toxic to pigs).	Novel food source	Optimal	If silage is permanently available / constantly replenished then this would be considered optimal.	Provide in appropriate amounts to avoid competition and over-feeding. Ensure vegetable type is safe to eat for the quantities provided.
Cereal straws and dried grasses.	Rack or in dispenser	Suboptimal to Optimal	If material is constantly replenished then this would be considered optimal. More hygienic than when provided as bedding.	Competition if insufficient dispensers and/or insufficient daily supply for all pigs.
Wood shavings, sawdust.	Bedding	Suboptimal	May be complemented by edible / manipulable materials.	Must ensure safe to use – an untreated wood source, no metal content.
Sand.	Bedding	Suboptimal	May be complemented by edible / manipulable materials.	Must ensure safe to use.
Shredded paper.	Bedding / nesting material	Suboptimal	May be complemented by edible / manipulable materials.	Ensure safe to use and metal-free. Printed or recycled is not recommended due to toxins in the ink.
Soft, untreated wood, cardboard, natural rope, hessian sack.	Object	Suboptimal	May be complemented by edible / investigable materials. If using rope, try tying knots in it so that pigs cannot bite off long pieces that could end up in the slurry system.	Competition if insufficient for all pigs.
Compressed straw in cylinder.	Object	Suboptimal	May be complemented by investigable /manipulable materials.	Competition if insufficient for all pigs.
Sawdust briquette (suspended or fixed).	Object	Suboptimal	May be complemented by edible / investigable / manipulable materials.	Competition if insufficient for all pigs.
Chain, rubber, soft plastic pipes, ball, hard plastic, hard wood.	Object	Materials of marginal interest.	Should be complemented by optimal or suboptimal materials.	Interest quickly lost. Suspending objects prevents soiling. Change regularly.

84. Enrichment needs to sustain interest and should always be available and in sufficient quantity to allow all pigs the opportunity to interact. Materials which do not have all of the defined characteristics are less likely to achieve this and may need replacing or changing more often. See paragraph 78.
85. If the enrichment is provided as bedding, there should be sufficient quantity to maintain interest as long as the bedding is hygienic, clean, dry and safe to use as pig bedding. Improved enrichment in straw or other materially-bedded environments may include regularly adding large bales that the pigs can pull apart themselves.
86. Where the provision of larger volumes of enrichment material is limited due to the floor and slurry removal systems, owners/keepers should ensure that what is provided is replenished sufficiently often to maintain interest.
87. The enrichment material's frequency of renewal, its accessibility, and quantity are all key factors in maintaining a pig's interest, and where appropriate physical checks as well as visual checks may be needed. Re-directed chewing behaviours towards other pigs or non-enrichment materials, such as faeces or equipment, may suggest the enrichment material is inadequate or ineffective and therefore should be reviewed. See paragraphs 129 to 147.

Ventilation and temperature

Paragraph 13 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

13. Air circulation, dust levels, temperature, relative air humidity and gas concentrations must be kept within limits which are not harmful to the animals.

Paragraph 16 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

16. Pigs must not be kept in an environment which involves maintaining high temperatures and high humidity (known as the "sweat-box system").

88. Effective ventilation is essential to the wellbeing of the stock as it provides fresh air, removes noxious gases and aids in controlling temperature. High ammonia levels have negative impacts on pig health as well as on the health of those who care for the pigs.
89. Temperature and air quality can be controlled by a combination of an efficient ventilation system and adequate insulation to the roof, walls and floors of the building.
90. Ventilation equipment should be kept clean and well maintained and operated according to the manufacturer's recommendations.
91. It is vital for the owner/keeper to observe the behaviour of the pigs in determining whether the environment is suitable and, if not, to take appropriate action. It is also important to avoid draughts. Also see section from paragraphs 136 to 147.
92. The farm's health and welfare plan should detail any additional protocols or management changes needed at different times of the year to help the pigs cope with fluctuating external temperatures, taking into account liveweight; age; group size; herd health; floor type (presence or absence of bedding); air speed and humidity.
93. Pigs are acutely susceptible to heat stress. There should be some dry lying area available as a matter of choice, so that the pigs can move away to cooler conditions. A health and

welfare plan should include contingencies for lengthy spells of hot weather or where building temperatures are likely to become elevated. Where necessary, and during the summer months, these could include reducing the stocking density; using water sprays; misting or increased air flow, and, for example, by opening drop out windows and vents or altering side curtains where such action would not compromise controlled ventilation systems, including in relation to humidity control.

94. Cold stress can be equally harmful to pigs, especially the very young in all systems and all pigs kept in systems lacking active control of the environment. Provision of supplementary heating, increased insulation and bedding, minimising draughts over pigs and any other pertinent reactive husbandry actions are essential to minimise harm where weather conditions render exposure to cold a risk. These should be recorded in a health and welfare plan.
95. The plan should also include contingencies for wide fluctuations in daily external temperatures, to avoid stress which may lead to disease or vice.
96. Straw bedding can help create a microclimate to level out temperature changes. However, too much straw in outdoor farrowing accommodation can lead to increases in piglet mortality.
97. When pigs are moved to new accommodation, the pen should be dry and at a similar temperature to that which the pig has been moved from. This is particularly important for newly weaned pigs.
98. When removing slurry from under slats, special care should be taken to avoid a concentration of dangerous gases which are a danger to both humans and pigs. Ideally, the building should be empty or very well ventilated during the procedure.

Lighting and noise levels

Paragraph 16 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

16. Animals kept in buildings must not be kept without an appropriate period of rest from artificial lighting.

Paragraphs 7, 17 and 18 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

7. Where pigs are kept in an artificially lit building, lighting with an intensity of at least 40 lux must be provided for a minimum period of 8 hours per day subject to paragraph 16 of Schedule 1.
 17. Pigs must not be exposed to constant or sudden noise.
 18. Noise levels above 85 dBA must be avoided in that part of any building where pigs are kept.
99. Owners/keepers should routinely check light levels are appropriate and keep a record of levels in pens at all stages of rearing, including farrowing accommodation. Lighting should be regularly checked, maintained and cleaned.
 100. The siting of machinery such as feed milling units should be appropriate to minimise the noise impact on housed stock.

Automated and mechanical equipment

Paragraphs 18 to 21 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 state:

18. All automated or mechanical equipment essential for the health and well-being of the animals must be inspected at least once a day to check there is no defect in it.
19. Where defects in automated or mechanical equipment of the type referred to in the paragraph 18 are discovered, these must be rectified immediately, or if this is impossible, appropriate steps must be taken to safeguard the health and well-being of the animals pending the rectification of those defects including the use of alternative methods of feeding and watering and methods of providing and maintaining a satisfactory environment.
20. Where the health and well-being of the animals is dependent on an artificial ventilation system –
 - (a) provision must be made for an appropriate back-up system to guarantee sufficient air renewal to preserve the health and well-being of the animals in the event of failure of the system; and
 - (b) an alarm system (which will operate even if the principal electricity supply to it has failed) must be provided to give warning of any failure of the system.
21. The back-up system referred to in paragraph 20(a) must be thoroughly inspected and the alarm system referred to in paragraph 20(b) tested at least once every seven days in order to check that there is no defect, and, if any defect is found at any time, it must be rectified immediately.

101. All equipment, including feed hoppers; drinkers; ventilation equipment; heating and lighting units; fire extinguishers and alarm systems, should be cleaned and inspected regularly and kept in good working order. All mains electrical equipment should meet relevant standards and be properly earthed, safeguarded from rodents and out of the pigs' reach.
102. Any health and welfare plan should include contingency plans for anticipated risks to key animal welfare needs caused by failure of any automated system. If, for example, water supply relies on a pressurised supply that fails and it is unable to be fixed, there should be a plan in place for providing an alternative water supply to all pigs to meet their daily needs, including over the weekend.

Feed, water and other substances

Paragraphs 22 to 27 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 state:

22. Animals must be fed a wholesome diet which is appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health, to satisfy their nutritional needs and to promote a positive state of well-being.
23. Animals must not be provided with food or liquid that contains any substance that may cause them unnecessary suffering or injury and must be provided with food and liquid in a manner that does not cause them unnecessary suffering or injury.
24. All animals must have access to feed at intervals appropriate to their physiological needs (and, in any case, at least once a

day), except where a veterinary surgeon acting in the exercise of his profession otherwise directs.

25. All animals must either have access to a suitable water supply and be provided with an adequate supply of fresh drinking water each day, or be able to satisfy their fluid intake needs by other means.

26. Feeding and watering equipment must be designed, constructed, placed and maintained so that contamination of food or water and the harmful effects of competition between animals are minimised.

27. (1) No other substance, with the exception of those given for therapeutic or prophylactic purposes or for the purpose of zootechnical treatment, may be administered to animals unless it has been demonstrated by scientific studies of animal welfare or established practice that the effect of that substance is not detrimental to the health or welfare of the animals.

Paragraph 13 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

13. (1) All pigs must be fed at least once a day.

(2) Where pigs are housed in a group and do not have continuous access to feed, or are not fed by an automatic feeding system feeding the animals individually, each pig must have access to the food at the same time as the others in the feeding group.

103. It is illegal to feed any catering waste, kitchen scraps, meat or meat products to farmed animals, including pigs. This includes using kitchen waste from all households and any catering waste from any establishment regardless of whether they are vegan or vegetarian kitchens.

104. All pigs need a balanced daily diet to maintain full health and vigour, and any changes in diet should be planned and introduced gradually.

105. When introducing pigs to unaccustomed housing, owners/keepers should make sure that the animals are able to find the feed and water points. When newly weaned piglets are moved to pens where water is provided through nipple drinkers unfamiliar to the piglets, it is good practice to provide alternative water sources for the first few days.

106. Where pigs are not fed ad-lib, and where they are fed as a group, and food delivery is intermittent or rationed, owners/keepers must ensure that adequate trough or feeder space is provided to ensure that all pigs can feed at the same time without interference from other pigs. The following guidelines for trough space per pig apply:

WEIGHT OF PIG (KG)	TROUGH SPACE (CMS)
5	10
10	13
15	15
35	20
60	23
90	28
120	30

107. Good hygiene is necessary for storage and feeding systems, as moulds can develop in stale feed which is harmful to pigs.

Paragraph 14 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

14. All pigs over two weeks of age must have continuous access to a sufficient quantity of fresh drinking water.

108. There are various factors which should be taken into consideration when looking at the provision of water to pigs:

- a) the total volume available;
- b) the flow rate (pigs will not spend a long time taking water);
- c) the method of provision, for example, the type of drinker;
- d) its accessibility to all pigs over two weeks of age, including sick and injured pigs in the hospital pens;
- e) the requirement for increased water supply for consumption during hot weather and for sick pigs for example, with diarrhoea;
- f) water supplies to meet other needs for example, for cooling down in pens and for wallows on outdoor units;
- g) its suitability as a safe drinking water source (and appropriate regular testing requirements) if the water is not a mains water supply;
- h) the need for water delivery systems to be kept hygienic; and

i) the daily routine of owners/keepers to check on water supplies to all pigs to comply with legal requirements.

109. The following is a guide to minimum daily water requirements for various weights of pig:

Weight of pig (kg)	Daily requirement (litres)	Minimum flow rate through nipple drinkers (litres/min)
Newly weaned	1.0 – 1.5	0.3
Up to 20 kgs	1.5 – 2.0	0.5 – 1.0
20 kgs – 40 kgs	2.0 – 5.0	1.0 – 1.5
Finishing pigs up to 100 kgs	5.0 – 6.0	1.0 – 1.5
Sows and gilts – pre-service and in-pig	5.0 – 8.0	2.0
Sows and gilts - in lactation	15 – 30	2.0
Boars	5.0 – 8.0	2.0

110. Waste water and excessive or insufficient flow rates can be detrimental, particularly for sows in farrowing accommodation and very young pigs. The water supply connected to a wet-dry feeder should not be counted as a sufficient water supply alone for drinking, since feeding pigs will block access to these points.

111. The height at which water nipples and bowls are placed should be carefully considered. All pigs should be able to access the drinking point so this might require it to be height-adjustable, or there may have to be several different drinkers at various heights when groups of pigs, of a range of weights, are housed together or when pigs are housed in a pen for a long period.

112. Where nipple drinkers are used, a drinking point should be available for every ten weaner pigs and any other pigs on rationed feeding. On unrestricted feeding, one nipple drinker should provide adequate supply for 15 pigs given sufficient flow rates. Bowl drinkers which have a reservoir of water contained within them, should be suitable to supply 30 pigs per bowl. Where trough systems are used, the following guidelines should be applied:

WEIGHT OF PIG (KG)	TROUGH SPACE PER HEAD (CM)
Up to 15	0.8
15 - 35	1.0
>35	1.2

113. Pigs are highly susceptible to dehydration and the condition commonly known as “salt poisoning”. In an emergency, where access to sufficient water is likely to be limited for 24 hours or more, an alternative system of manually supplying water must be provided. Water must not be withdrawn from sows which are being dried off at weaning.

Management

General

Paragraph 17 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

17. Animals not kept in buildings must, where necessary and possible, be given protection from adverse weather conditions, predators and risks to their health and must, at all times, have access to a well-drained lying area.

Paragraph 9 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

- 9.(1) Housing, pens, equipment and utensils used for pigs must be properly cleaned and disinfected as necessary to prevent cross-infection and the build-up of disease-carrying organisms.
- (2) Faeces, urine and uneaten or spilt food must be removed as often as necessary to minimise smell and avoid attracting flies or rodents.

114. All areas of the building, accommodation and equipment with which the pigs come into contact, should ideally be cleaned and disinfected between batches of pigs. It is a statutory requirement where piglets weaned below 28 days of age are being moved to new accommodation, for that accommodation to be cleaned and disinfected. See box in paragraph 157. Where possible, rooms should be filled and emptied on a batch-wise basis to facilitate this and to minimise disease transmission between groups of pigs.

115. All buildings, fields and paddocks need to be kept clear of debris that could injure the pigs.
116. Owners/keepers should take all practical measures to remove all pigs from areas that are in imminent danger of flooding.

Natural service, artificial insemination and vasectomy

Paragraph 28 and 29 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 state:

28. (1) Natural or artificial breeding or breeding procedures which cause, or are likely to cause, suffering or injury to any of the animals concerned, must not be practised.

(2) Sub-paragraph (1) does not preclude the use of natural or artificial breeding procedures that are likely to cause minimal or momentary suffering or injury or that might necessitate interventions which would not cause lasting injury.

29. Animals may only be kept for farming purposes if it can reasonably be expected, on the basis of their genotype or phenotype, that they can be kept without any detrimental effect on their health or welfare.

117. Breeding programmes should pay at least as much attention to improving health and welfare, as to production criteria. Therefore, the conservation or development of breeds of pigs which would limit or reduce animal welfare problems, should be encouraged.
118. All boars should have good and safe service conditions. Slatted floors and slippery

conditions underfoot are not suitable for mating animals. As part of a health and welfare plan, avoidance of injury to boars and sows through excessive mating activity should be discussed with the owners'/keepers' veterinary surgeon.

Paragraph 5 (1) and 6 (3)(b) of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

5. (1) A pig must be free to turn round without difficulty at all times.

6. (3) Sub-paragraph (1) does not apply to a pig held in a stall or pen—
[...]

(b) for the purpose of service, artificial insemination or collection of semen;
[...]

provided that the period during which it is so kept is not longer than necessary for that purpose.

119. Sows should be kept in their groups until insemination, at which time they can be moved to an appropriate stall or pen and inseminated. Sows should be allowed time to settle down in the stall or pen, and then exposed to a boar in order to encourage the standing reflex before artificial insemination takes place. It is not acceptable for sows to be left for long periods of time in insemination pens in which they cannot turn around easily, either before or after insemination.
120. Sows should be left undisturbed, to allow uterine contractions to stop after artificial insemination (and natural service), but they should then rejoin their group, including in between any insemination point, in order to minimise bullying within the group hierarchy.

121. Semen collection and artificial insemination should only be carried out by a trained, competent and experienced operator. Vasectomy may only be carried out by a veterinary surgeon.

Mutilations

Section 5 of the Animal Welfare Act 2006 states:

5. (1) A person commits an offence if—
- (a) he carries out a prohibited procedure on a protected animal;
 - (b) he causes such a procedure to be carried out on such an animal.
- (2) A person commits an offence if—
- (a) he is responsible for an animal,
 - (b) another person carries out a prohibited procedure on the animal, and
 - (c) he permitted that to happen or failed to take such steps (whether by way of supervising the other person or otherwise) as were reasonable in all the circumstances to prevent that happening.
- (3) References in this section to the carrying out of a prohibited procedure on an animal are to the carrying out of a procedure which involves interference with the sensitive tissues or bone structure of the animal, otherwise than for the purpose of its medical treatment.
- (4) Subsections (1) and (2) do not apply in such circumstances as the appropriate national authority may specify by regulations.

122. Mutilations of pigs are generally prohibited by the Animal Welfare Act 2006. Certain procedures (see Annex 2) are permitted under the Mutilations (Permitted Procedures) (England) Regulations 2007, provided that they are carried out by a person permitted to carry out the procedure and:
- a) in accordance with the relevant requirements in the Schedules;
 - b) in such a way as to minimise the pain and suffering it causes to the animal;
 - c) in hygienic conditions; and
 - d) in accordance with good practice.
123. Mutilations can cause pain to pigs and they should only be carried out having sought appropriate advice on possible alternative interventions in each case and not as a routine practice. See Annex 2.

Tail docking

Paragraph 5 of Schedule 3 to the Mutilations (Permitted Procedures) (England) Regulations 2007 states:

5. The procedure may only be carried out where measures to improve environmental conditions or management systems have first been taken to prevent tail-biting, but there is still evidence to show that injury to pigs' tails by biting has occurred.

The method used must involve quick and complete severance of the tail.

An anaesthetic and additional prolonged analgesia must be administered where the animal is aged 7 days or over.

Regulation 5 of the Mutilations (Permitted Procedures) (England) Regulations 2007 states:

5. (1) Any procedure permitted under regulation 3 to which the Veterinary Surgeons Act 1966 or the Veterinary Surgeons (Exemptions) Order 1962 applies, with the exception of the procedures referred to in paragraph (2), may only be carried out by a person permitted to carry it out under that legislation.
- (2) Tail docking, or castration, of pigs may only be carried out by a veterinary surgeon or, where the animal is aged not more than 7 days, by a person experienced in performing the techniques involved and who is either a person responsible for the animal or a person employed or engaged by such a person to attend to the animal.

124. Routine tail docking is not permitted. Tail docking should only be used as a last resort, after improvements to the pigs' environment and management have proved ineffectual in preventing tail biting. Owners/keepers should document evidence of tail biting and keep records of the measures instigated and their effectiveness on improving the pigs' welfare. Where records are not available and pigs are found to be tail docked, this may be considered in any decisions regarding the legality of the tail docking procedure being carried out by owners/keepers. Where breeding units are tail docking in response to requests from finishing units, it is the owner's responsibility to request this evidence from their supply units to justify any level of tail docking on the breeding unit.
125. Written approval from a veterinary surgeon is required before any tail docking is

commenced. Confirmation from a veterinary surgeon should agree that, based on their veterinary risk assessment of the measures and management practices undertaken and records of tail biting and other associated records (for example, slaughterhouse findings), tail docking is necessary and unavoidable for the particular batch of pigs in question or for a fixed period of time, i.e. at least quarterly. The veterinary surgeon should include what evidence has been reviewed in this written confirmation.

126. There should be a regular review of on-farm and slaughterhouse reports of tail damage and associated post mortem findings. The origins and the causes and control of tail biting will be specific to the individual farm and circumstances of outbreaks.
127. If tail docking has been used on a farm to prevent tail biting for a sustained period of time, there should be a more regular review of current measures being taken to minimise tail biting in the herd and owners/keepers may need to consider changing management procedures or changes to the system in which the pigs are reared. Any new accommodation and slurry management systems should be designed to ensure that adequate enrichment material can be provided and other trigger factors for tail biting have been addressed to ensure tail docking is only seen as a last resort, non-routine measure. When designing and installing new accommodation the appropriateness of the flooring should be a material consideration. Also see paragraph 124.
128. Where it is necessary to tail dock, it must be carried out in accordance with the law by a competent, trained operator before the seventh day of life, or by a veterinary surgeon. It is important that all equipment used should be cleaned and disinfected between litters of pigs.

Managing and reducing the risk of tail biting

129. Tail biting is a multi-factorial problem. Good stockmanship is important for identifying any risks before tail biting occurs, and addressing the underlying causes should improve health and welfare, promote positive well-being in the pigs and should ultimately reduce antibiotic use, mortality and carcass rejections which should lead to improved productivity of the herd. Routine management procedures and expected daily monitoring / recording requirements for tail biting risks should be recorded, for example, in a health and welfare plan.
130. Decision making around management / stockmanship measures all require skill and commitment from owners/keepers in performing these tasks competently, for example, management of ventilation; thermal comfort; manner of feed and water supply; contingency planning for rectifying failures in food, water, and ventilation; choice of pig genetics; tail length variation; mixing pigs; picking up on early signs of tail biting; identifying tail biters or tail bitten pigs; removing the biter when identified; and hospital pen management in the early stages of an incident.
131. To help owners/keepers find the solutions and management strategies that work best on a particular farm, a number of elements of the farm structure, its management, including stockmanship, and the pigs should be evaluated and where necessary changes made, with the advice of a veterinary surgeon. Factors to consider include:
1. **resources** or 'inputs' – such as pen structure, fittings, diet and environmental enrichment material;
 2. **environmental outcome measures** – such as thermal comfort (temperature and relative

humidity, temperature changes, draughts), air quality (for example, ammonia, dust, carbon dioxide levels) and light levels; and

3. **animal-based outcome measures** – such as health/ disease, including injuries; cleanliness; positive and negative behaviours (for example, play, aggression, chewing/biting other body parts); and competition for feed/water access.

Some of these factors are expanded upon in more detail in the following paragraphs:

- **Pen structure and cleanliness;**
- **Enrichment material (see paragraphs 78 to 87);**
- **Diet;**
- **Thermal comfort, air quality and light;**
- **Health and fitness; and**
- **Competition.**

Resource factors:

Pen structure and cleanliness

132. A dirty environment reduces the comfort of a living area and increases levels of noxious gases, stressing the pigs and increasing the risk of disease. It is important to have well-defined areas for resting, feeding and dunging. It can also make it more difficult to assess early signs of ear, flank and tail biting on dirty pigs. Potential indicators of an unsuitable pen structure or lack of cleanliness, which could lead to tail biting are:
- presence of manure on the pigs' bodies. Dirty pigs could be a potential indicator of a suboptimal environment, poor nutrition or disease; and
 - increased disease (lameness, diarrhoea, respiratory infections, secondary infection of skin wounds).

Enrichment material

133. Environmental enrichment is the process of improving and enhancing the environment that the pig is reared in by stimulating its natural and highly motivated behaviours to explore and forage. This often involves adding complexity and additional materials to the environment. This should then reduce stress and injurious behaviours such as tail biting in pigs or fighting between pigs. Potential indicators of ineffective or insufficient enrichment material, which could lead to tail biting, are:

- bitten tails and ears;
- skin lesions;
- loss of interest in enrichment materials over time;
- biting pen fittings or other pigs instead of enrichment materials;
- rooting in and manipulating dung;
- competition or fighting for use of enrichment materials; and
- belly-nosing.

Some of the above may also be associated with other risk factors. Any risk assessment should be carried out holistically for all identified risks on the farm and at any source breeding units where appropriate. See paragraphs 78 to 87.

Diet

134. Pigs need feed of adequate consistency, as well as the right levels of minerals, fibre and essential amino acids. They also need a sufficient quantity of fresh, good quality water. Good intestinal health means fewer cases of diarrhoea; healthier pigs; higher daily gain; better feed conversion and less use of antibiotics. Potential indicators of an unsuitable diet, which could lead to tail biting are:

- low body condition or body fat measure;
- variation in weight;
- poor carcass classification; and
- poor gut health including stomach and intestinal ulcers.

135. A correctly balanced feed will help keep pigs healthy and ensure good gut condition. Pigs that have to adapt suddenly to new feed may become stressed, and may turn to tail biting.

Environmental outcome measures:

Thermal comfort, air quality and light

136. Pigs need a stable environment that is close to their optimum temperature and humidity, draught-free and with suitable lighting conditions. Maintaining the right temperature and good air quality is extremely important in keeping stress levels low. If pigs are not comfortable, they may become aggressive and may begin tail, leg, flank or ear biting. See paragraphs 88 to 99.

137. In cold weather, insulation, sufficient bedding or a heating system can ensure thermal comfort. During warm weather, options include, air conditioning, floor cooling, misting and drip systems, showers and wallows.

138. Limiting the flow of cold air over sleeping areas is important as well as keeping dust and ammonia levels to a minimum. It is also important for pigs to be able to avoid direct sunlight. Continuous lighting causes stress and is not permitted. Very bright lights should be avoided. For direct sunlight, the solution could be as simple as fitting blinds or white washing the windows. Keeping pigs in semi-darkness to avoid attacks is ineffective and is not permitted. See paragraph 99.

139. Ensuring good overall health is another way to help avoid tail biting. A pig in poor health is a stressed pig.

Animal-based outcome measures:

Health and fitness

140. Indicators of poor health that could lead to tail biting are:
- bitten or limp tail;
 - skin lesions or scratches;
 - increased restlessness;
 - lameness;
 - lack of appetite;
 - panting, shivering, coughing, sneezing, diarrhoea;
 - abnormal body size;
 - social isolation;
 - secondary skin infection and necrosis of wounds; and
 - increased mortality.
141. A comprehensive health and welfare plan and regular visits by a veterinary surgeon are important for maintaining the overall health of pigs and avoiding clinical outbreaks of diseases on the farm/premises.

Competition

142. There should be sufficient space in each pen, relevant to the system in use, to avoid competition. For example, for food and drink, sufficient trough space and numbers of drinkers should be provided. Potential indicators of a lack of feed/water space, which could lead to tail biting are:

- poor body condition;
- variability in body size within a pen;
- skin lesions on hind quarters (food competition);
- skin lesions on forequarters (space competition);
- increased aggression, for example, fighting around feeders;
- pigs crowding around feeders; and
- poor distribution of pigs in each area of the pen.

Identifying, monitoring and managing tail biting incidents

143. If a tail biting or other aberrant behaviour occurs, it is important to identify the potential cause early:
- If possible, correct the deficiency(s),
 - remove the biter (if it can be identified), remove the bitten pigs and treat injuries; and,
 - provide distraction by adding fresh enrichment material such as rope, fresh wood or straw. Consider keeping a supply of enrichment material for emergencies.
144. All known risk factors should be considered, recorded and suitable management changes should be made in those areas identified as being at risk. It can spread quickly through the pen and the severity of injury caused can increase very quickly.
145. There are a number of identifiable and multiple causes associated with tail biting and in order to understand why the problem is occurring, a systematic way of monitoring and recording incidents and possible causes should be developed and be part of a health and welfare plan.

146. If improvements are not successful in stopping tail biting, then a reassessment of the measures introduced should be made to identify areas where further suitable changes need to be made. Veterinary advice should be sought, as necessary, as to whether tail docking should be employed as a last resort, depending on the severity of the outbreak.
147. This process of reassessing and identifying successful measures should continue until tail-biting behaviour is consistently no longer seen. A plan for rearing pigs with undocked tails should then be developed with the veterinary surgeon, alongside suitable contingency planning to manage any future outbreaks of tail biting.
148. Piglets compete aggressively with their litter mates for a particular teat on the sow. As piglets are born with sharp teeth, this may result in injuries to the piglets' faces and to the sows' udders. Injuries are reduced if sows are lactating well and do not have extremely large litters. Cross fostering piglets from very large litters to a sow with a smaller litter may help avoid injuries. See paragraphs 160 to 162.
149. Routine clipping or grinding of teeth is not permitted. Where tooth reduction has to be performed as set out in the above legislation, it should always be considered a last resort. Tooth reduction can cause short-term pain and may cause long-term pain if teeth are fractured due to poor technique. Local infection and joint infection can result. If owners/keepers are carrying out tooth reduction on the farm unit, the health and welfare plan should identify the specific circumstances where tooth reduction may be necessary.

Teeth clipping/grinding

Paragraph 6 of Schedule 3 to the Mutilations (Permitted Procedures) (England) Regulations 2007 states:

6. The procedure may only be carried out on an animal that is aged not more than 7 days.

The procedure must consist only of the uniform reduction of the corner teeth by either grinding or clipping so as to leave an intact smooth surface.

The procedure may only be carried out where measures to improve environmental conditions or management systems have first been taken to prevent tail-biting and other vices, but there is still evidence to show that injury to sows' teats or to other pigs' ears or tails by biting has occurred.

150. Suitable sharp, clean clippers or an appropriate grinder should be used. All equipment should be cleaned and disinfected between litters. Risk of injury and infections occur with both methods and appear more related to the proficiency of the operator than the procedure used (clipping or grinding). Those undertaking the procedure should be trained and competent to carry out the task and only the tip of the teeth should be clipped or ground.

Castration

**Paragraph 1 of Schedule 3 to the Mutilations
(Permitted Procedures) (England)
Regulations 2007 states:**

1. Castration

The method used must not involve the tearing of tissues.

An anaesthetic and additional prolonged analgesia must be administered where the animal is aged 7 days or over.

151. Owners/keepers should consider carefully whether surgical castration is necessary. Castration is a mutilation and should be avoided wherever possible. It is also advisable that analgesia is used where pigs less than 7 days old are castrated, not just where pigs are 7 days of age or older. Alternative methods to surgical castration are available which can prevent “boar taint” developing in the meat of heavier boars, such as use of a vaccine.

Section 2 – Additional specific recommendations

The section is intended to be read in addition to Section 1.

Farrowing sows and piglets

Paragraphs 22 to 26 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

- 22. Pregnant sows and gilts must, where necessary, be treated against external and internal parasites.
- 23. Pregnant sows and gilts must be thoroughly cleaned before being placed in farrowing crates.
- 24. In the week before the expected farrowing time, sows and gilts must be given suitable nesting material in sufficient quantity unless it is not technically feasible for the slurry system used.
- 25. During farrowing, an unobstructed area behind the sow or gilt must be available for the ease of natural or assisted farrowing.
- 26. Farrowing pens where sows are kept loose must have some means of protecting the piglets, such as farrowing rails.

Paragraph 5 (2) of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

- 5. (2) The accommodation used for pigs must be constructed in such a way as to allow each pig to—
 - (c) see other pigs, except—

- (ii) in the week before the expected farrowing time and during farrowing, when sows and gilts may be kept out of sight of other pigs;

- 152. Owners/keepers should manage the feeding of sows and gilts so that they are in a suitable body condition at the time of farrowing. See paragraphs 53 and 54.
- 153. Nesting material should be provided, wherever possible, particularly in the 24 hours prior to farrowing to satisfy the sow's need to nest build and therefore minimise stress. Nesting material is in addition to any environmental enrichment material already provided. See paragraphs 78 to 87.
- 154. In order to minimise infection risks, the farrowing environment should be designed so that the sow and her piglets stay clean and dry throughout lactation.
- 155. The thermal comfort zones of the sow and her litter are considerably different and the latest data available for the specific conditions at the time should be taken into account.
- 156. Where overhead lamps/heaters are used they should be securely fixed, checked regularly to reduce the fire risk and be protected from interference by the sow or piglets.
- 157. In indoor free farrowing systems where the sow is not confined, the sow should have sufficient space to allow her to nest build, to turn around, rise up and lie down again, as well as access feeding and dunging areas without difficulty. Farrowing rails or other means to protect piglets from crushing must be incorporated into the pen design. This farrowing pen design should allow for the sow to be confined when any procedures need to be carried out on the piglets.

Paragraphs 34 to 38 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

34. Where a farrowing crate system is used, piglets must be provided with a source of heat and a solid, dry and comfortable lying area away from the sow where all of them can rest at the same time.
35. A part of the floor where the piglets are kept, and which is large enough to allow the animals to rest together at the same time, must be solid or covered with a mat, or be littered with straw or other suitable material.
36. Where a farrowing crate system is used, the piglets must have sufficient space so they can be suckled without difficulty.
37. Subject to paragraph 38, piglets must not be weaned from the sow at an age less than 28 days, unless the health and welfare of the sow or piglets would otherwise be adversely affected.
38. Piglets may be weaned up to seven days earlier than the age referred to in paragraph 37 if they are moved into specialised housings which is –
- (a) emptied and thoroughly cleaned and disinfected before the introduction of a new group; and
 - (b) separate from housing where other sows are kept.

158. The aim is for farrowing crates to no longer be necessary and for any new system to protect the welfare of the sow, as well as her piglets. Where the sow is confined in a farrowing crate, it should be large enough to accommodate her and to allow her to rise and lie down without difficulty

and should be easily accessed in an emergency. The crate length should be sufficient to allow space for farrowing. The sow should only be confined in a crate for the minimum time possible following farrowing. Where the farrowing crate incorporates a design that can be opened up to allow the sow to turn freely, this should be carried out as soon as practicable and usually within four days of farrowing, unless there is an overriding health or welfare reason to alter this.

159. Owners/keepers and any staff should be experienced and competent in the techniques of farrowing and the farrowing system being used (free or crate). Cleaning, disinfection and hygiene at farrowing are essential and procedures for assisted farrowing should be documented in a health and welfare plan.

Fostering

160. When cross fostering is practiced, agreed procedures should be included in a health and welfare plan to ensure that both piglet and sow welfare needs are carefully considered. This should include suitable measures to reduce piglet mortality risks and prevent disease introduction and spread. Piglets should have received sufficient colostrum and be an appropriate size and age for cross fostering. The welfare of other piglets in the litter needs to be considered, including the need to avoid fighting and competition.
161. The sow should be in a suitable body condition and have sufficient functioning teats and milk to feed the piglets to avoid competition and teat injuries.
162. Where artificial fostering systems are used with the provision of artificial milk, stronger larger piglets may be better suited to the system. Strict hygiene measures should be followed in the use of automated milk machines for pigs and a high quality pig specific artificial milk should be used.

Weaners and rearing pigs

Paragraph 43 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 states:

43. The unobstructed floor area available to each weaner or rearing pig in a group must be at least –

- (a) 0.15 m² for each pig where the average weight of the pigs in the group is 10 kg or less;
- (b) 0.20 m² for each pig where the average weight of the pigs in the group is more than 10 kg but less than or equal to 20 kg;
- (c) 0.30 m² for each pig where the average weight of the pigs in the group is more than 20 kg but less than or equal to 30 kg;
- (d) 0.40 m² for each pig where the average weight of the pigs in the group is more than 30 kg but less than or equal to 50 kg;
- (e) 0.55 m² for each pig where the average weight of the pigs in the group is more than 50 kg but less than or equal to 85 kg;
- (f) 0.65 m² for each pig where the average weight of the pigs in the group is more than 85 kg but less than or equal to 110 kg;
- (g) 1.00 m² for each pig where the average weight of the pigs in the group is more than 110 kg.

163. The unobstructed floor areas in the box above are minimum requirements. The type of housing, its design and its management may mean that greater space allowances are necessary. Any ongoing changes in stocking density should be reviewed and recorded in a health and welfare plan. The lying area, excluding the dunging area, should be of sufficient size to allow all the pigs to lie down on their sides at the same time.
164. Where part of the unobstructed area is on a different level, for example, balcony systems for weaners, the design must comply with all other requirements of welfare legislation including:
- suitability of flooring for the age of pig;
 - avoidance of injury risks from all new fixtures and fittings including ramps;
 - minimum lighting requirements in the covered areas;
 - system design which avoids dung and urine falling on pigs underneath the balcony;
 - system design which allows all pigs to access all areas; and
 - ability for owners/keepers to inspect all pigs at all times and remove sick or injured pigs without further injury.
165. Where any new pen design is planned which requires advice on compliance with the law, it is recommended that this is in the first instance discussed with a veterinary surgeon or technical advisor. If there is any doubt it should be referred to APHA for an assessment.

Mixing of pigs and prevention of fighting

Paragraphs 39 to 42 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

39. As soon as possible after weaning, weaners and rearing pigs must be kept in stable groups, with as little mixing as possible.

40. If weaners and rearing pigs unfamiliar with one another have to be mixed—

(a) this must if possible be done before weaning or up to one week after weaning, or otherwise when the pigs are as young as possible; and

(b) they must be provided with adequate opportunities to escape and hide from other pigs.

41. The use of tranquillising medication in order to facilitate mixing must be limited to exceptional conditions and only after consultation with a veterinary surgeon.

42. If there are signs of severe fighting, the causes must be immediately investigated and appropriate measures taken.

166. The health and welfare plan should include a strategy for managing mixing and establishing groups of pigs and for isolation of aggressors, where necessary. The minimum amount of mixing should occur from weaning through to finishing. A passageway should not be used as permanent an isolation facility unless properly adapted. Aggressors must not be placed with sick or injured pigs.

167. For pigs being reared to heavier finish weights, owners/keepers should consider splitting by sex post-weaning, if there are concerns of unwanted sexual activity and increased aggression in finishing pigs as juvenile females start to come into oestrus.

168. Aggressiveness can present a severe problem where boars, sows or gilts are kept in groups. The temperament of individual animals should always be considered when managing groups. Adequate space and providing opportunities for pigs to move away from aggressors are particularly important at the time of mixing breeding pigs. The health and welfare plan should include measures to be taken in the recording of and solutions to address any persistent bullying. Any animal suffering persistent bullying or carrying out persistent bullying must be removed from the group See paragraphs 49 to 52.

Dry sows and gilts

Paragraphs 27 to 33 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

27. Sows and gilts must be kept in groups except during the period between seven days before the predicted day of farrowing and the day on which the weaning of piglets (including any piglets fostered) is complete.

28. The pen where the group is kept must have sides greater than 2.8 m in length, except when there are six or fewer individuals in the group, when the sides of the pen must be no less than 2.4 m in length.

29. The unobstructed floor area available to each gilt after service and to each sow when

gilts and/or sows are kept in groups must be at least 1.64 m² and 2.25 m² respectively. When these animals are kept in groups of six or fewer individuals, the unobstructed floor area must be increased by 10%. When these animals are kept in groups of 40 or more individuals, the unobstructed floor area may be decreased by 10%.

30. For gilts after service and pregnant sows, a part of the area required in paragraph 29 equal to at least 0.95 m² per gilt and at least 1.3 m² per sow must be of continuous solid floor of which a maximum of 15% is reserved for drainage openings.

31. Sows and gilts kept on holdings of 10 or fewer sows may be kept individually provided that their accommodation complies with the requirements of paragraphs 5 and 6 of this Schedule.

32. In addition to the requirements of paragraph 13 of this Schedule, sows and gilts must be fed using a system which ensures that each individual can obtain sufficient food even when competitors for the food are present.

33. All dry pregnant sows and gilts must be given a sufficient quantity of bulky or high-fibre food as well as high-energy food to satisfy their hunger and need to chew.

169. Many different feeding systems exist. The aim of any feeding system should be to reduce stress and aggression at feeding times, whilst supplying the correct amount of feed. Feeding time can be a catalyst for aggression if sows and/or gilts in the same building or group are not fed at the same time. The exception is a system which allows the sow to choose when to eat. When feeding groups of sows or gilts by hand it is important to try to reduce the time from

the first to the last animal being fed and also to distribute the food to ensure all members of the group can obtain their allocation at the same time, with reduced interference from other pigs.

170. Where self-locking individual feeding stalls are used, they can only be included in usable floor area if they are permanently accessible and not manually locked closed. There must be a separate place where the pigs can lie together as a group. See the box on accommodation following paragraph 72.

171. Mechanical and computerised feeding systems need to be maintained regularly. Regular checking of the amount of feed delivered is recommended.

172. Sow and gilt body condition assessment should also be undertaken regularly regardless of the system. See paragraphs 53, 54 and 152.

Boars

Paragraphs 19 to 21 of Schedule 8 to the Welfare of Farmed Animals (England) Regulations 2007 state:

19. Boar pens must be sited and constructed so as to allow the boar to turn around and to hear, see and smell other pigs, and must contain clean resting areas.

20. The lying area must be dry and comfortable.

21. (1) Subject to sub-paragraph (2), the minimum unobstructed floor area for a boar must be 6 m².

(2) When boar pens are also used for natural service, the floor area must be at least 10 m² and must be free of any obstacles.

**Paragraph 7 of Schedule 3 to the Mutilations
(Permitted Procedures) (England)
Regulations 2007 states:**

7. Tusk trimming

The procedure may only be carried out where there is evidence to show that it is necessary to prevent injury to other animals or for safety reasons.

173. Walls between pens should be high enough to prevent boars climbing and/or jumping into adjacent pens. Pens should be sited so that boars can see other pigs. Owners/keepers should not enter boar pens without a pig board and they should be able to escape easily from the pen if the boar becomes aggressive.
174. If the boar is kept with other boars or sows, measures need to be taken to prevent excessive fighting, especially during feeding. If signs of severe fighting appear the causes need to be immediately investigated and appropriate preventive measures taken. See paragraphs 166 to 168.
175. Boars are usually individually housed and need either plenty of bedding material or a closely controlled environmental temperature. Extremes of temperature can lead to temporary infertility and may affect a boar's willingness or ability to work satisfactorily. As a guide, individual accommodation for an adult boar should have a floor area of not less than 7.5 m², if used for living purposes only. In a pen intended for mating purposes, the whole floor area should be kept dry or sufficient bedding provided, to give adequate grip during service.

Pigs kept in outdoor husbandry systems

General

176. Independent of the number of pigs kept, outdoor systems are particularly susceptible to unpredictable environmental factors and risks of importation of disease outside the direct control of the owner/keeper. This will require additional contingency planning.

Paragraph 17 of Schedule 1 to the Welfare of Farmed Animals (England) Regulations 2007 states:

17. Animals not kept in buildings must, where necessary and possible, be given protection from adverse weather conditions, predators and risks to their health and must, at all times, have access to a well-drained lying area

177. When planning new sites or using existing buildings for new purposes, consideration should be given to providing the maximum possible distance between the proposed sites and existing sites as this will reduce airborne and local spread of infectious diseases.
178. Pigs selected for outdoor production must be suitable for outdoor conditions. Genotype; age; condition; previous housing; and management should be considered when switching stock to outdoors.
179. Sites for outdoor pig enterprises should be chosen carefully. Free-draining soils, in low rainfall areas, with lower frost incidence are most suitable for outdoor pig keeping. Expert advice is available to review sites prior to pig occupation, in terms of the environmental impact, suitability of site for pigs, and previous usage of land by livestock. A follow-on site/location should be identifiable.

180. Field stocking densities should reflect the suitability of the site and the system of management. A health and welfare plan should include a strategy for dealing with outdoor weather challenges, such as water provision in freezing or drought conditions and feed provision to the site and to the paddocks in snow or severe wet weather.

Accommodation

181. All outdoor accommodation used, including arcs, huts and tents, should be provided with bedding appropriate to the time of year and have a warm, draught-free lying area. This is especially important for the sow and litter at farrowing, during the suckling period and for newly weaned pigs.
182. Owners/keepers should properly maintain outdoor accommodation and equipment and ensure that there are no sharp edges that may injure the animals.
183. Adequate shelter must be provided to protect pigs from extreme weather conditions. Outdoor accommodation should be secured to the ground if its construction is susceptible to high winds and should be sited so that the doorways can be adjusted to allow for changing wind direction.
184. Effort should be made to avoid wet conditions inside the accommodation through better siting and bedding management.
185. Adequate shelter must also be provided to protect against sunburn, for example, through the provision of shade and or wallows. The accommodation should have shutters at the opposite end to the door to provide through ventilation.

186. In hot conditions, lactating sows may be prompted to leave the farrowing accommodation to seek more comfortable conditions outside, effectively abandoning their litters for long periods of the day. Owners/keepers should consider how to allow the sow to comfortably feed piglets in a cooler environment. Farrowing accommodation should be able to manage higher or lower temperature variations through various options, which may include extra ventilation, insulation or bedding.
187. Farrowing accommodation should be sited on level ground with appropriate bedding. Suitable fenders should be used to prevent very young piglets from straying during the post-farrowing period.
188. Where pigs are held at a collection area prior to transport, the accommodation should be clean, rested, operate on an 'All In - All Out' basis and have adequate water provision.

Feed and water

189. Feed and water should be made available to allow individual animal's needs to be met. Owners/keepers should carefully monitor the body condition of pigs and adjust feed provision if necessary. Extra care is needed during extremes of weather.

Fences

190. Electric fencing should be designed, constructed, used and maintained properly, so that when the animals come into contact with them they do not feel more than momentary discomfort. All power units for electric fences must be properly earthed to prevent short circuits or electricity being conducted anywhere it should not, for example, gates and water troughs.

191. Incoming stock that have not been trained to electric fencing should be kept in a training paddock with secure fencing to ensure that they cannot escape from the unit.
192. A predator control programme, which is regularly reviewed, and fox fencing should be considered. See paragraph 19.

Nose ringing

Paragraph 4 of Schedule 3 to the Mutilations (Permitted Procedures) (England) Regulations 2007 states:

4. The procedure may only be carried out on an animal that is not kept continuously in an indoor husbandry system.

193. Nose ringing is used in some circumstances to help maintain grass cover that can have both welfare and environmental benefits. However, ringing is a mutilation and should be avoided wherever possible, as it interferes with a pig's natural rooting behaviours and may inhibit access to feeders. Nose rings should not be placed in boars. Where it is necessary to nose ring pigs, it should only be carried out by a suitably trained and competent person. Equipment should be cleaned and disinfected.

Annex 1: Legislation

The main requirements are summarised below. This does not represent an exhaustive list and note that some legislation is regularly updated and/or amended. All UK legislation can be found at: <http://www.legislation.gov.uk>

The Animal Welfare Act 2006: <https://www.legislation.gov.uk/ukpga/2006/45/contents>

The Welfare of Farmed Animals (England) Regulations 2007: <http://www.legislation.gov.uk/uksi/2007/2078/contents>

The Mutilations (Permitted Procedures) (England) Regulations 2007: <http://www.legislation.gov.uk/uksi/2007/1100/contents>

Specific sections:

Introduction:

Dangerous Wild Animals Act 1976: <https://www.legislation.gov.uk/ukpga/1976/38>

The Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018: <https://www.legislation.gov.uk/uksi/2018/486/contents/made>

Disease control and biosecurity:

Pigs (Records, Identification and Movement) Order 2011 SI No. 2154: <http://www.legislation.gov.uk/uksi/2011/2154/contents>

The Trade in Animals and Related Products Regulations 2011: <http://www.legislation.gov.uk/uksi/2011/1197/contents>

Animal Health Act 1981: <https://www.legislation.gov.uk/ukpga/1981/22>

Contingency planning for disease and other emergencies:

Diseases of Swine Regulations 2014/1894 (GB wide) – covers disease controls for the three main diseases: <http://www.legislation.gov.uk/uksi/2014/1894/contents>

Aujeszky's Disease Order 1983: <http://www.legislation.gov.uk/uksi/1983/344/contents/made>

Loading, unloading and transport:

The Welfare of Animals (Transport) (England) Order 2006: <http://www.legislation.gov.uk/uksi/2006/3260/contents> (Council Regulation (EC) No 1/2005 (the protection of animals during transport and related operations))

Marking:

The Pigs (Records, Identification and Movement) Order 2011. See article 6: <http://www.legislation.gov.uk/uksi/2011/2154/contents>

(Also see legislation in connection to mutilations/ permitted procedures below)

On farm killing:

The Welfare of Animals at the Time of Killing (England) Regulations 2015: <http://www.legislation.gov.uk/uksi/2015/1782/contents> provides the legal basis in England for the requirements under Council Regulation (EC) No 1099/2009 on the protection of animals at the time of killing and also contains additional national rules.

(Council Regulation (EC) No 1099/2009 (on the protection of animals at the time of killing). Also see Chapter II article 3 paragraphs 1 and 2 (General requirements for killing and related operations) and Chapter III article 19 (Emergency killing)).

The Animal By-Products (Enforcement) (England) Regulation 2013: <https://www.legislation.gov.uk/ukxi/2013/2952/contents> provides the legal basis in England for the requirements of EU regulation EC1069/2009 which covers the controls on disposal and Commission Regulation (EU) No 142/2011 for the EU requirements for storage, transport and disposal of animal by-products such as dead carcasses, manure and litter.

Responsible medicines usage and record keeping:

The Veterinary Medicines Regulations 2013 require keepers of food-producing animals to keep records on medicine acquisition, usage/administration and disposal. Records concerning the acquisition of a product must be kept for at least 5 years following the administration or disposal of that product. The Regulations also describes the 'cascade' system, the duties on suppliers of medicines and records that they are required to keep, including a private veterinary surgeon (see paragraphs 19 (1 to 3) and 20 of the Veterinary Medicines Regulations): <http://www.legislation.gov.uk/ukxi/2013/2033/contents>

Additional record keeping requirements are set out in the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 1997, regulation 32: <http://www.legislation.gov.uk/ukxi/1997/1729/contents/made>

(Commission Regulation (EU) No 37/2010 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin).

Mutilations:

The Mutilations (Permitted Procedures) (England) Regulations 2007 permit, by way of exception to the general prohibition in the Animal Welfare Act 2006, veterinary surgeons or other persons permitted

to carry out the procedures under the Veterinary Surgeons Act 1966 or the Veterinary Surgeons (Exemptions) Order 1962, to carry out certain procedures on specified animals, including pigs.

Veterinary Surgeons Act 1966: <https://www.legislation.gov.uk/ukpga/1966/36>

The Veterinary Surgeons (Exemptions) Order 1962: <https://www.legislation.gov.uk/ukxi/1962/2557/made>

The Mutilations (Permitted Procedures) (England) Regulations 2007: <http://www.legislation.gov.uk/ukxi/2007/1100/contents>

Annex 2: Permitted procedures

Mutilations of pigs are generally prohibited by the Animal Welfare Act 2006. The exceptions to that prohibition are set out in the Mutilations (Permitted Procedures) (England) Regulations 2007: <http://www.legislation.gov.uk/ukxi/2007/1100/contents> and are reproduced below (insofar as relevant). The list is correct at the point of publication.

Identification procedures:

- Ear clipping.
- Ear notching.
- Ear tagging.
- Micro-chipping.
- Tattooing.
- Other methods of identification involving a mutilation required by law.

Procedures for the control of reproduction:

- Castration.
- Implantation of a subcutaneous contraceptive.
- Vasectomy.

Other management procedures:

- Nose ringing.
- Tail docking.
- Tooth reduction.
- Tusk trimming.

Excepted procedures must be carried out:

- a) in accordance with any relevant requirement in Schedule 3 to the Regulations (see below);
- b) in such a way as to minimise the pain and suffering it causes to the animal;

- c) in hygienic conditions;
- d) in accordance with good practice;
- e) in the case of certain procedures, by a person permitted to do so by regulation 5 of the Regulations.

Procedure-specific requirements in relation to pigs are set out in Schedule 3 to the Regulations, and are set out below. The following definitions (taken from regulation 2 of the Regulations) apply:

- “farmed” means, in relation to an animal, bred or kept for the production of food, wool or skin or for other farming purposes;
- “prohibited procedure” means a procedure which involves interference with the sensitive tissues or bone structure of an animal, otherwise than for the purpose of its medical treatment;

The procedure-specific requirements are:

• **Castration**

The method used must not involve the tearing of tissues.

An anaesthetic and additional prolonged analgesia must be administered where the animal is aged 7 days or over.

• **Implantation of a subcutaneous contraceptive**

The procedure may not be carried out on a farmed animal.

The procedure may only be carried out as part of a conservation breeding programme.

• **Vasectomy**

An anaesthetic must be administered.

- **Nose ringing**

The procedure may only be carried out on an animal that is not kept continuously in an indoor husbandry system.

- **Tail docking**

The procedure may only be carried out where measures to improve environmental conditions or management systems have first been taken to prevent tail-biting, but there is still evidence to show that injury to pigs' tails by biting has occurred.

The method used must involve quick and complete severance of the tail.

An anaesthetic and additional prolonged analgesia must be administered where the animal is aged 7 days or over.

- **Tooth reduction**

The procedure may only be carried out on an animal that is aged not more than 7 days.

The procedure must consist only of the uniform reduction of the corner teeth by either grinding or clipping so as to leave an intact smooth surface.

The procedure may only be carried out where measures to improve environmental conditions or management systems have first been taken to prevent tail-biting and other vices, but there is still evidence to show that injury to sows' teats or to other pigs' ears or tails by biting has occurred.

- **Tusk trimming**

The procedure may only be carried out where there is evidence to show that it is necessary to prevent injury to other animals or for safety reasons.

Sources of further information

These sources of further information are for information only and should not be considered to be part of the Code of Practice. These sources of information are current on the date that this Code is published (please see the final page for the date of publication). Any of the sources of information listed here could change.

Council of Europe

https://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/Rec%20pigs%20rev%20E%202004.asp

EU Commission information on pig welfare, including guidance on tail docking:

https://ec.europa.eu/food/animals/welfare/practice/farm/pigs_en

Specific sections:

Preface

Pigs kept as companion animals

The Animal Welfare Act 2006 will apply to pigs kept in a domesticated state including so called “micro pigs”, “teacup piglets” and “mini-pigs”. Owners/keepers should ensure they know what type of pig they are buying so it can be provided with a suitable living environment. Owners/keepers should understand and be able to meet all the needs of their pig before purchase.

Anyone who keeps a pig needs a county parish holding (CPH) number supplied by the Rural Payments Agency (RPA). The place where the pigs are to be kept must be registered with the APHA within one month of the first pig’s arrival. Upon registration, APHA will provide a herd mark specific to the CPH. This herd mark must, subject to a small

number of exceptions, be used to identify the pig if it is moved off the premises. A licence is required from APHA for anyone wanting to walk their pigs (which must be identified with a tag or tattoo) along specific approved routes outside of the premises. This licence needs to be renewed annually. An owner/keeper moving a pig to a veterinary practice for emergency treatment need not notify the movement. For detailed information on all these aspects see:

<https://www.gov.uk/government/publications/pig-movement-general-licence-for-the-movement-of-pigs>

<https://www.gov.uk/guidance/keeping-a-pet-pig-or-micropig>

AHDB’s new pig keepers guide for small-scale production:

<https://ahdb.org.uk/knowledge-library/new-pig-keepers-guide?cldee=c3Rld2FydEBtcHNhZ3JpLmNvLnVr&recipientid=contact-bb33f63d68dfe311b7c50050569b73fc-618348345aba4cd08c59f56649692103&esid=62075503-4ec3-e911-80e4-005056b864bf>

“Pet” pigs are not exempt for any of the legislation applying to the use of medicines in animals. See Annex 1 for the legislation on the responsible use of medicines.

“Pet” pigs must not be fed waste food or scraps from the home kitchen or any other catering establishment, including from restaurants and commercial kitchens producing vegan food, and they must never be fed meat or products containing meat of any kind. <https://www.gov.uk/guidance/supplying-and-using-animal-by-products-as-farm-animal-feed>. This is for disease control reasons. If owners/keepers are not sure of the restrictions on the type of food products which they are permitted to feed to pigs then they should

contact APHA for further advice. See specific advice issued for all owners of pigs, even those kept as pets: <http://apha.defra.gov.uk/documents/surveillance/diseases/african-swine-fever-poster.pdf>

Disease control and biosecurity:

APHA guidance on registering before keeping pigs: <https://www.gov.uk/guidance/pig-keepers-register-your-holding-and-animals>

Movements: <https://www.gov.uk/guidance/pig-keepers-report-and-record-movements-to-or-from-your-holding>

The Animal By-Products (Enforcement) (England) Regulation 2013. For further information on animal by-products, see: <https://www.gov.uk/guidance/animal-by-product-categories-site-approval-hygiene-and-disposal>

<https://www.gov.uk/guidance/supplying-and-using-animal-by-products-as-farm-animal-feed>

AHDB's rodent control on farm guide which includes the responsible use of pest control, both inside and outside units: <https://www.growtrain.co.uk/wp-content/uploads/2016/01/AHDB-Rodent-Strategy-Guide-2015-Final.pdf>

National Pig Association's information 'MuckFreeTruck': http://www.npa-uk.org.uk/MuckFreeTruck_campaign_launched_to_encourage_better_lorry_washing.html

Loading, unloading and transport:

<https://www.gov.uk/government/publications/welfare-of-animals-during-transport>

Marking:

<https://www.gov.uk/guidance/pig-keepers-identify-animals-before-moving-them>

Fighting and aggressive behaviours:

There are readily available protocols available through industry bodies and academic institutes advising how best to record and monitor aggressive behaviours/body marks, such as AssureWel: <http://www.assurewel.org/pigs.html>

Managing sick and injured animals:

The Casualty Pig Guide, produced by the Pig Veterinary Society, provides further guidance: <https://www.pigvetsoc.org.uk/files/document/192/Casualty%20Pig%20-%20April%202013-1.pdf>

On-farm killing:

<https://www.gov.uk/guidance/knackers-yards-and-farms-restraining-stunning-killing-animals>

<https://www.gov.uk/government/collections/welfare-of-animals-at-the-time-of-killing>

<https://www.gov.uk/guidance/supplying-and-using-animal-by-products-as-farm-animal-feed>

<https://www.gov.uk/government/collections/guidance-for-the-animal-by-product-industry>

Guidance on the home slaughter of livestock and food safety legislation: <https://www.food.gov.uk/sites/default/files/media/document/home-killguide.pdf>

Responsible medicines usage and record keeping:

Veterinary Medicines Directorate: <https://www.gov.uk/government/organisations/veterinary-medicines-directorate>

The Cascade: Prescribing unauthorised medicines <https://www.gov.uk/guidance/the-cascade-prescribing-unauthorised-medicines>

For further guidance on responsible use of antimicrobials and vaccines for pigs see Responsible Use of Medicines in Agriculture: <http://www.ruma.org.uk/pigs/>

The AHDB Pork and the VMD have created an on line version of the paper medicines records book on the e-MB-Pigs website: <https://pork.ahdb.org.uk/health-welfare/health/antimicrobial-usage/e-medicine-book-emb-pigs/>

<https://emb-pigs.ahdb.org.uk/>

Accommodation – Floors:

Information on the relevant standard for the manufacture of concrete floors used in pig housing BS EN 12737:2004 + A1: 2007 can be found in the following table:

Type	Minimum Beam width (slat)	Maximum Opening width (gap/slot)	Tolerance: Maximum permitted deviation
Piglet	50mm	11mm	No tolerance
Weaner	50mm	14mm	+/- 2mm
Rearer	80mm	18mm	+/- 3mm
Gilt	80mm	20mm	+/- 3mm
Sow	80mm	20mm	+/- 3mm
Boar	80mm	20mm	+/- 3mm

Enrichment:

AHDB Pork has produced additional guidance for pig keepers that can be accessed on the AHDB Pork website. <https://pork.ahdb.org.uk/media/273607/enrichment-guide-2017.pdf>

The AHDB tail biting WebHAT online tool also provides guidance on assessing tail biting risks and gives possible solutions to resolve: <https://webhat.ahdb.org.uk/>

Advice is available from the Farewell Dock Project: <https://farewelldock.eu/>

Automated and mechanical equipment

HSE advice including Farmwise – guide to health and safety: <http://www.hse.gov.uk/agriculture/hsagriculture.htm>

Feed water and other substances:

AHDB RAFT 2017 report on water: https://pork.ahdb.org.uk/media/274247/51510014_ft014RAFT-solutions-ltd-water-report-approved-september-2017.pdf

Managing and reducing the risk of tail biting:

Pen structure and cleanliness
AssreWel has produced a guide on ‘manure on the body’
<http://www.assurewel.org/pigs/manureonthebody.html>

Pigs kept in outdoor husbandry systems:

CRRU guidelines on rodent control: <https://www.thinkwildlife.org/code-of-best-practice/>

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