

Pigs



Code of Recommendations for the Welfare of Livestock: Pigs

Note

After consultation, this Code, (which consists of paragraphs 1 to 127), has been put before both Houses of Parliament for authority to issue it under Section 3 of the Agriculture (Miscellaneous Provisions) Act 1968.

This Section allows "the Ministers" to produce codes of recommendations for the welfare of livestock and to issue such codes once they have been approved in draft by both Houses of Parliament. However, the original definition of "the Ministers" (see Section 50 of the 1968 Act) has been changed to reflect devolution for Scotland and Wales and the creation of the Department for Environment, Food and Rural Affairs. In England, the powers of "the Ministers" were first transferred to the Minister of Agriculture, Fisheries and Food by the Transfer of Functions (Agriculture and Food) Order 1999 (S.I. 1999/3141) and then transferred to the Secretary of State by the Ministry of Agriculture, Fisheries and Food (Dissolution) Order 2002 (S.I. 2002/794).

In Scotland, the powers of "the Ministers" had previously been transferred to the Scottish Ministers by Section 53 of the Scotland Act 1998 (1998 c.46) and, in Wales, the powers of "the Ministers" had previously been transferred to the National Assembly for Wales by article 2 (a) of the National Assembly for Wales (Transfer of Functions) Order 1999 (S.I. 1999/672).

Any reference in this Code to advisory publications is for information only and does not form part of this Code.

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Preface

This preface is not part of the Code, but is intended to explain its purpose and to indicate the broad considerations upon which it is based. Similarly, the legislation quoted in the boxes throughout the document is not part of the Code but is intended to highlight the relevant legal requirements. The law, as quoted in these boxes, is that in force on the date of publication or reprinting of the Code (please turn to the back cover for this information). You should be aware that any of the legal requirements quoted might be subject to change - you should seek confirmation before assuming that these are an accurate statement of the law currently in force. (See the Appendix for a list of relevant legislation).

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Regulation 10, provides that:

- Any person who employs or engages a person to attend to animals shall ensure that the person attending to the animals:

- is acquainted with the provisions of all relevant statutory welfare codes relating to the animals being attended to;
- has access to a copy of those codes while he is attending to the animals; and
- has received instruction and guidance on those codes.

- Any person who keeps animals, or who causes or knowingly permits animals to be kept, shall not attend to them unless he has access to all relevant statutory welfare codes relating to the animals while he is attending to them, and is acquainted with the provisions of those codes.

In Regulation 2 it states that "statutory welfare code" means a code for the time being issued under Section 3 of the Agriculture (Miscellaneous Provisions) Act 1968.

To cause unnecessary pain or unnecessary distress to any livestock on agricultural land is an offence under Section 1 (1) of the Agriculture (Miscellaneous Provisions) Act 1968. The breach of a code provision, whilst not an offence in itself, can nevertheless be used in evidence as tending to establish the guilt of anyone accused of causing the offence of causing unnecessary pain or unnecessary distress under the Act (Section 3 (4)).

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Regulation 3 (1), states that owners and keepers of animals shall take all reasonable steps:

- to ensure the welfare of the animals under their care; and
- to ensure that the animals are not caused any unnecessary pain, suffering or injury.

In Regulation 3 (3), it states that:

- In deciding whether the conditions under which animals are being bred or kept comply with the requirements set out in Schedule 1 of the Regulations, the owner and keeper of the animals shall have regard to their species, and to their degree of development, adaptation and domestication, and to their physiological and ethological needs in accordance with established experience and scientific knowledge.

In Regulation 11, it states that:

- Where an authorised person considers that animals are being kept in a way which is likely to cause unnecessary pain, suffering or injury, or in any other way in contravention of any provision of these Regulations, he may serve a notice on the person appearing to him to be in charge of the animals requiring that person within the period stated in the notice, to take any action that the authorised person considers to be reasonably necessary to ensure compliance with these Regulations and the authorised person shall give his reasons for requiring that action to be taken.

In Regulation 13 (2), it states that:

- In any proceedings against an owner or keeper of animals for a failure to comply with Regulation 3 (1) or 3 (2), the owner or keeper as the case may be, may rely on his compliance with any relevant recommendations contained in a statutory welfare code as tending to establish his compliance with the relevant Regulation.

The Code aims to encourage all those who care for farm animals to adopt the highest standards of husbandry. Without good stockmanship, animal welfare can never be adequately protected. If stock-keepers follow this code it will help them to meet the necessary welfare standards. No matter how acceptable a system may be in principle, without competent, diligent stockmanship, the welfare of the animals cannot be adequately catered for.

The welfare of pigs is considered within a framework that was developed by the Farm Animal Welfare Council and known as the "Five Freedoms". These form a logical basis for assessing animal welfare within any husbandry system, together with the actions necessary to safeguard animal welfare within the limitations of an efficient livestock industry.

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 by rapid diagnosis and treatment;
4. **Freedom to express most 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.

In acknowledging these freedoms, those people who care for livestock should demonstrate: -

- caring and responsible planning and management;
- skilled, knowledgeable and conscientious stockmanship;
- appropriate environmental design (for example, of the husbandry system);
- considerate handling and transport;
- humane slaughter.

The Protection of Animals Acts 1911 – 2000 contain the general law relating to cruelty to animals. Broadly it is an offence (under Section 1 of the 1911 Act) to be cruel to any domestic or captive animal by anything that is done or omitted to be done.

Section 12 (2) of the 1911 Act empowers a police constable to place, in safe custody, animals in the charge of persons apprehended for an offence under the Act until the end of proceedings or the court orders the return of the animals. The reasonable costs involved, including any necessary veterinary treatment, are recoverable by the police from the owner upon conviction.

Under Section 1 of the Protection of Animals (Amendment) Act 1954, as amended by the 1988 Act, the court has the power to disqualify a person convicted under those Acts from having custody of any animal. The ban can specify a particular kind of animal or all animals for such period as the court thinks fit.

The Protection of Animals (Amendment) Act 2000 supplements the 1911 Act by allowing a court to make an order relating to the care, disposal or slaughter of animals kept for commercial purposes that are the subject of a prosecution brought under the 1911 Act by a "prosecutor". A "prosecutor" is defined in the 2000 Act to include certain bodies that conduct prosecutions (Crown Prosecution Service, Government departments and local authorities) and any person or bodies approved by the Department for Environment, Food and Rural Affairs (Defra). The 2000 Act then allows reasonable costs to be recovered from the owner by the "prosecutor".

This Code applies in England only and has been issued by the Secretary of State for Environment, Food and Rural Affairs (following its approval in draft by both Houses of Parliament). It replaces (also only in England) the existing Code, which was issued in 1983.

Similar Codes are being produced in Scotland, Wales and Northern Ireland. Until these new Codes are issued, the existing Code will continue to apply in Scotland and Wales. Separate arrangements exist in Northern Ireland.

THIS WELFARE CODE WAS ISSUED ON 11 MARCH 2003.

Introduction

1 This Code (which only applies in England) covers all pigs. The word "pigs" refers to all porcine stock, and includes wild boar kept for farming purposes. A piglet refers to a pig from birth to weaning.

2 The Code's recommendations apply to pigs under all husbandry systems. Section 1 of the Code gives the recommendations that apply to all ages and types of pig. Section 2 covers the recommendations that apply to specific categories of pigs (such as boars or pigs kept outdoors). If these recommendations are followed, they will help to protect the stock's welfare. The Code's recommendations are not a complete list and they are not meant to replace expert advice such as from a veterinary surgeon.

3 The husbandry system that is used and the number of pigs kept at any one time, should depend on:

- the suitability of the farm environment;
- how many animals the farm can accommodate at one time;
- the competence of the stock-keeper; and
- how long the stock-keepers have to carry out their duties.

4 Organic pig farming is conducted according to additional, legally enforced standards. However, nothing in those standards affects the legal responsibilities of organic farmers regarding positive animal welfare. Any matters which appear to conflict with organic standards, should be discussed with your organic certifying body. In addition, you should seek expert advice, such as from a veterinary surgeon.

5 No changes should be made to husbandry, equipment or production until the possible effects on animal welfare have been considered. In particular, the possible effect on animal welfare should be considered before installing more

complex or elaborate equipment than has previously been used. In general, the greater the restriction imposed on the animal and the greater the complexity of the overall system, the less the animal is able to use its behaviour to modify the effect of unfavourable conditions. Systems involving a high degree of control over the environment should only be installed where conscientious staff skilled in both animal husbandry and the use of the equipment will always be available.

6 The relevant animal welfare legislation applies to owners as well as to anyone looking after pigs on their behalf, wherever the pigs are – either on the farm or during transport. A written contract can be useful in making sure that everyone involved is clear about his or her 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.

Stockmanship

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870) define a “keeper” as any person responsible for or in charge of animals whether on a permanent or temporary basis.”

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 1, states that:

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

General

7 The stock-keeper has the most significant influence on the welfare of pigs. In general, the larger the size of the unit the greater the degree of skill and care needed to safeguard welfare. The size of a unit should not be increased, nor should a large unit be set up, unless it is certain that the level of stockmanship will be sufficiently high to safeguard the welfare of each individual pig.

8 The stock-keeper should draw up a written health and welfare plan with the herd’s veterinary surgeon and, where necessary, other technical advisers. You should review and update your health and welfare plan at least once a year. This plan should set out health and husbandry activities that cover the cycle of production and include strategies to prevent, treat or limit existing disease problems. The plan should include enough records for you to assess the basic output of the herd and monitor the welfare of the pigs.

9 Those responsible for managing the farm should make sure that the pigs are cared for by enough well motivated and competent staff. These staff need to be aware of the welfare needs of pigs and be capable of protecting them from all expected problems before they are given any responsibility. This means that the staff need specific knowledge

and skills, which they should develop on-farm by working with a skilled stock-keeper who is experienced in the relevant system. Wherever possible, staff should also attend relevant courses run by a suitable training organisation. Ideally, the training should lead to formal recognition of competence. Any contract or casual labour used on the farm should be trained and competent in the relevant activity.

10 Stock-keepers should be knowledgeable and competent in a wide range of animal health and welfare skills, which should include:

- handling skills (see paragraphs 14 – 17);
- preventing and treating lameness (see paragraphs 30 – 32);
- preventing and treating internal and external parasites (see paragraphs 33 – 34);
- giving medicines by injection (see paragraph 35);
- providing appropriate care to sick and injured pigs (see paragraphs 38 - 44)
- care of the sow and her litter (see paragraphs 93 – 99); and
- management of pigs to minimise aggression (see paragraph 101).

If the stock-keeper is expected to perform specific tasks on-farm (for example, artificial insemination or teeth clipping/grinding), then they should be trained and competent.

Inspection

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299) Schedule 6, Part II, paragraph 2, requires that:

All pigs shall be inspected by the owner or keeper of the pigs at least once a day to check that they are in a state of well being.

11 The health and welfare of animals depends on them being regularly inspected. Adequate lighting must be available to enable thorough inspection of the stock. All stock-keepers should be familiar with the normal behaviour of pigs. Badly managed and unhealthy pigs will not thrive, and it is essential that the stock-keeper should watch for signs of distress, disease or aggression towards an animal by other pigs in the group. To do this, it is important that stock-keepers have enough time to:

- (a) inspect the stock;
- (b) check equipment; and
- (c) take action to deal with any problem.

12 The stock-keeper should always be looking out for signs of ill health in pigs, which include:

- (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) discolouration or blistering of the skin;
- (h) loss of body condition;
- (i) sneezing;
- (j) lameness (inspection of the feet and legs is particularly important);
- (k) lack of co-ordination;
- (l) constipation;
- (m) diarrhoea;
- (n) poor appetite; and
- (o) vomiting.

13 You should be able to anticipate problems or recognise them in their earliest stages and, in many cases, you should be able to identify the cause and put matters right immediately. Always consider the

possibility that the pigs may be affected by a notifiable disease (see paragraphs 36 - 37). If the cause is not obvious, or if your immediate action is not effective, a veterinary surgeon or other expert should be called in immediately – failure to do so may cause unnecessary suffering.

Handling

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 30, states that:

No person shall apply an electric current to any animals for the purposes of immobilisation.

14 Pigs should be moved at their own pace. You should encourage them gently – especially around corners and where it is slippery underfoot. You should avoid too much noise, excitement or force. You must not put pressure on or strike at any particularly sensitive part of the body. Anything you use, such as pig boards and flat slap sticks, to guide the animals should only be used for that purpose and slap sticks must not have a sharp or pointed end. The use of electric goads on adult pigs should be avoided as far as possible. If goads are used you should always ensure that there is sufficient space for the pigs to move forward.

15 You should make sure that all floors and walkways are well maintained and provide a non-slip surface. The floor should not slope too steeply, as steeper slopes can cause leg problems.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraphs 4 and 5 state that:

4. No person shall tether or cause to be tethered any pig except while it is undergoing any examination, test, treatment or operation carried out for any veterinary purpose.

5. (1) Where the use of tethers is permitted in accordance with paragraph 4, they shall not cause injury to the pigs and shall be inspected regularly and adjusted as necessary to ensure a comfortable fit.

(2) Each tether shall be of sufficient length to allow the pigs to move as stipulated in paragraph 6 (2) [see the box above paragraph 47] and the design shall be such as to avoid, as far as possible, any risk of strangulation, pain or injury.

16 All stock-keepers must have access to easy to use and efficient handling systems. This is to allow you to routinely manage and treat the animals, and make sure that they are quietly and firmly handled.

Transport off- farm

The Welfare of Animals (Transport) Order 1997 (S.I. 1997 No. 1480) Schedule 2, Part II, paragraph 15, states that:

1. Animals shall not be suspended by mechanical means, nor lifted or dragged by the head, horns, legs or tail.
2. No person shall use excessive force to control animals.
3. No person shall use:
 - (a) any instrument which is capable of inflicting an electric shock to control any animal;
 - (b) any stick (other than a flat slap stick or a slap marker) non-electric goad or other instrument or thing to hit or prod any pigs.
4. The prohibition in paragraph (a) above shall not apply to the use of any instrument on the hindquarters of adult pigs which are refusing to move forward when there is space for them to do so, but the use of any such instrument shall be avoided as far as possible.

5. Nothing in this provision shall prevent the suspension by mechanical means of a receptacle in which an animal is being carried.

The Welfare of Animals (Transport) Order 1997 (S.I. 1997 No. 1480) Schedule 2, paragraph 10 states that:

- Animals shall be loaded and unloaded in accordance with this paragraph.
- Save as provided in sub-paragraphs (6) and (7) below they shall be loaded and unloaded using suitable ramps, bridges, gangways or mechanical lifting gear, operated so as to prevent injury or unnecessary suffering to any animal.
- The flooring of any loading equipment shall be constructed so as to prevent slipping.
- Subject to sub-paragraph (6) below, ramps, bridges, gangways and loading platforms shall be provided on each side with protection which is –
 - a. of sufficient strength, length and height to prevent any animal using the loading equipment from falling or escaping; and
 - b. positioned so that it will not result in injury or unnecessary suffering to any animal.

(6) An animal may be loaded or unloaded by means of manual lifting or carrying if the animal is of a size that it can be easily lifted by not more than two persons and the operation is carried out without causing injury or unnecessary suffering to the animal.

(7) An animal may be loaded or unloaded without equipment or by manual lifting or carrying provided that, having regard to the age, height and species of the animal, it is unlikely to be caused injury or unnecessary suffering by being loaded or unloaded in this manner.

17 You should have the facilities on-farm to load and unload pigs onto and from a vehicle, with as little stress as possible. Stock-keepers should know how to handle animals during loading and unloading, including when and how to use pig boards to guide the animal.

Marking

18 Permanent marking of pigs by, for example, ear or body tattooing or ear tagging, should be carried out only by a trained and competent operator using properly maintained instruments and under hygienic conditions. Ear tags should be suitable for use in pigs. Slap marking is an acceptable method where identification is required immediately prior to transporting the pigs to slaughter. Where, for herd management purposes, ear marking is by notching or punching, you should use appropriate equipment.

19 When ear tagging, notching or tattooing, you must properly restrain the animals. Take care to position and insert tags correctly by following the manufacturer's instructions, avoiding main blood vessels and ridges of cartilage.

20 If you are using aerosols or paints for temporary marking, make sure only non-toxic substances are used.

Health

General

21 Maintenance of good health is the most basic requirement affecting the welfare of the pig. Measures to protect health include good hygiene, good husbandry and effective ventilation. Vaccinations may be appropriate against certain diseases. You should ensure that only authorised veterinary medicinal products, including vaccines, are used. Useful information on the health status of the herd can be obtained from feedback at meat inspection in the abattoir.

22 The written health and welfare plan (see paragraph 8) should also, as a minimum, look at:

- (a) biosecurity arrangements on-farm and during transport;
- (b) purchased stock procedures;
- (c) any specific disease control programmes, such as salmonella, erysipelas, E. coli, mycoplasma and parvo virus;
- (d) vaccination policy and timing;
- (e) isolation procedures;
- (f) mixing and grouping of pigs;
- (g) external and internal parasite control;
- (h) lameness monitoring and foot care;
- (i) routine procedures, such as ear tagging; and
- (j) prevention and control of vices such as tail biting.

The health and welfare plan should make sure that animals get any necessary medical treatment at the correct time and in the correct dose.

Biosecurity

23 Biosecurity means reducing the risk of disease occurring or spreading to other animals. Good biosecurity can be obtained through:

- good management/husbandry;
- good hygiene;
- reducing stress in the herd; and
- effective disease control systems such as vaccination and worming programmes.

Biosecurity results in:

- farm units being more secure from the introduction of new infectious diseases; and
- the spread of any diseases on the unit itself being kept to a minimum.

If you and your stock-keepers take proper precautions when you move within the farm or you move animals and equipment, you can greatly reduce the chance of spreading any disease.

24 Incoming stock presents the greatest risk to the health of the herd as regards infectious disease. You should ask the vendor to provide you with information on the health status of the herd and the herd's routine vaccination and other treatments (e.g. worming) or disease prevention measures. You should have isolation facilities so that you can isolate and observe/test incoming stock for a suitable period when they arrive, before they join the rest of the herd.

25 Only essential visitors should be allowed onto the unit and they should follow disinfection procedures and wear unit clothing and footwear. A visitor book should be provided and visitors asked to sign to say they have not been near other pigs or livestock for an agreed period, as stipulated in your herd health and welfare plan. A system should be provided to alert staff of visitors at the gate.

26 Loading facilities and, where possible, feed bins should be sited at the unit perimeter. Vehicles, which visit other pig units, should be kept off the unit wherever possible but where entry is essential, wheels and footwear should be cleansed and disinfected thoroughly.

27 A programme of pest control should be in place for, for example, rodents. Every effort should be made to make housing proof against birds, such as starlings. Domestic pets, feral cats and other wild animals should be discouraged.

28 It is not possible to prevent all airborne infections from entering a unit, but when planning new units these should be sited as far as is practicable from other pig units, as this will reduce the risk of spread of airborne infectious diseases. You can find more information in the Defra publication 'Better biosecurity provides peace of mind, healthy stock and a more viable business' (see the Appendix).

Condition Scoring

29 Body condition scoring can contribute greatly to good husbandry and help to avoid costly welfare problems. Condition scoring is an easy technique to learn. Basically, it means that you can quickly assess the body reserves (i.e. fat) of individual animals. The technique will be of benefit if you use it as a routine management tool to check that sows are in the target body condition for the various stages of the breeding cycle. This will be particularly useful at:

- (a) mid-pregnancy;
- (b) farrowing/early lactation; and
- (c) at weaning/drying off.

You should adjust feeding as necessary for animals that have become too fat or too thin. You will find more information in the Defra booklet "Condition scoring of pigs" (see the Appendix).

Lameness

30 Lameness in any animal is usually a sign that they are in pain. Lameness in pigs is a sign of ill health and discomfort. It clearly affects an animal's welfare, as well as their performance and production. If a

significant percentage of your pigs have severe lameness, this is a sign of disease or poor overall welfare standards within the herd. In these circumstances, you should seek urgent veterinary advice. You can find more information in Defra's booklet "Lameness in pigs" (see the Appendix).

31 If lame pigs do not respond to treatment, you need to call a veterinary surgeon immediately. Lameness can have a number of causes and early and accurate diagnosis of the specific type of lameness affecting the herd will enable you to take rapid and appropriate action.

32 If a lame animal does not respond to the veterinary surgeon's treatment, you should have it culled rather than leave it to suffer. If you cannot transport lame animals without causing them more pain, you should slaughter them on the farm (see paragraphs 40 - 42). Also, you must not transport any pig off-farm that cannot stand up unaided or cannot bear their weight on all four legs when standing or walking.

External Parasites

33 You should control diseases caused by external parasites – especially where the animal's skin is irritated and it is rubbing the area – with the appropriate parasiticides. You should treat your animals for parasites in accordance with veterinary advice and ensure that control and treatment regimes form part of your herd health and welfare plan.

Internal Parasites

34 You should control internal parasites by using effective anthelmintics (drugs to treat parasites) or vaccines. As part of your herd health and welfare plan, you should ensure that treatment is based on the life cycle of the particular parasites you are

tackling. You should treat your animals for parasites in accordance with veterinary advice. Organic producers, in particular, should seek veterinary advice on this aspect of their herd health and welfare plan.

Equipment for Vaccination and Treatment

35 You must make sure that all the equipment you use for vaccinating and treating the animals is in good working order. You should regularly clean and sterilise any equipment you use for injections, to avoid infections and abscesses and, ideally, use disposable needles. Any dangerous objects should be disposed of safely.

Notifiable Diseases

36 If you suspect that any animal is suffering from a notifiable disease, you have a legal duty to notify a Divisional Veterinary Manager (DVM) of Defra as soon as possible.

37 The following are the main notifiable diseases which affect pigs (please note that this is not a complete list):

African swine fever

Anthrax

Aujeszky's disease

Classical swine fever

Foot-and-mouth disease

Rabies

Swine vesicular disease

Teschen disease

Vesicular stomatitis

For more information on these diseases contact your veterinary surgeon or local Animal Health Divisional Office.

Sick and Injured Animals

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 5 states that:

- any animals which appear to be ill or injured -
- shall be cared for appropriately without delay; and
- where they do not respond to care, veterinary advice shall be obtained as soon as possible.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299) Schedule 6, Part II, paragraph 3 states that: -

- where necessary, sick or injured pigs shall be temporarily isolated in suitable accommodation with dry comfortable bedding.

38 You should take action immediately if any pigs are injured or appear ill or distressed. It is important to exclude the possibility of notifiable diseases. If you are in any doubt about the cause of the ill health or the most effective treatment, consult your veterinary surgeon without delay. Likewise, if an animal you have treated does not respond to treatment, seek your veterinary surgeon's advice.

39 Your 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. These pens should be easily reached so that you can regularly check on the animal. When moving sick or injured pigs to the hospital pens, you should ensure that unnecessary suffering does not occur. In these hospital pens, you should make sure that drinking water is freely available, and that there are feeding facilities. Particular care is needed where recumbent animals are isolated to ensure that there is easy access to water and feed and that the animals are eating and drinking.

40 If an unfit animal does not respond to treatment, it should be humanely killed on-farm (culled). You should cull any animals suffering from painful and incurable conditions immediately.

The Welfare of Animals (Transport) Order 1997 (S.I. 1997 No. 1480), Articles 4 (1) and 6 respectively, provide that: -

- No person shall transport any animal in a way which causes or is likely to cause injury or unnecessary suffering to that animal.
- No person shall transport any animal unless:
 - it is fit for the intended journey; and
 - suitable provision has been made for its care during the journey and on arrival at the place of destination.

For these purposes an animal shall not be considered fit for its intended journey if it is ill, injured, infirm or fatigued, unless it is only slightly ill, injured, infirm or fatigued and the intended journey is not likely to cause it unnecessary suffering, likely to give birth during transport, has given birth during the previous 48 hours or is a new born animal in which the navel has not completely healed.

41 You can **only** transport an unfit animal if you are taking it to a veterinary surgeon for treatment or diagnosis, or to the nearest available place of slaughter – and then, only provided they are not likely to be subject to unnecessary suffering during the journey by reason of their unfitness. More information can be found in Defra's booklet, "Guidance on the transport of casualty farm animals" (see the Appendix).

42 In an emergency, you may have to slaughter an animal immediately to prevent its suffering. In such cases, you should destroy the animal humanely and, where possible, it should be done by someone who is suitably trained and competent both in slaughter methods and use of the equipment. Under these emergency circumstances a slaughter licence is not required.

It is a general offence under the Welfare of Animals (Slaughter or Killing) Regulations 1995 (S.I. 1995 No. 731) as amended by the Welfare of Animals (Slaughter or Killing) (Amendment) Regulations 1999 (S.I. 1999 No. 400), to cause or permit any avoidable excitement, pain or suffering to any animal during slaughter or killing (regulation 4 (1)).

The general offence applies in all cases, but the detailed provisions in respect of the method of slaughter or killing do not apply when an animal has to be killed immediately for emergency reasons (regulation 13 (2)).

43 If you have to slaughter the animals on-farm in a non-emergency situation, you must do so using a permitted method that is in line with current welfare at slaughter legislation (see box below).

The Welfare of Animals (Slaughter or Killing) Regulations 1995 (S.I. 1995 No. 731) as amended by the Welfare of Animals (Slaughter or Killing) (Amendment) Regulations 1999 (S.I. 1999 No. 400) state that when an animal is slaughtered or killed on-farm, this must be done using a permitted method. The animal could be:

- stunned using a captive bolt pistol, concussion stunner or electrical stunner after which it must be followed by bleeding - or pithed - without delay (regulation 14 and Schedules 5 (Part II) and 6). If the animal is stunned and bled, the operation must be carried out by a slaughterman licensed for these operations (Schedule 1), unless the owner is slaughtering an animal for his own consumption; or
- killed by a free bullet (regulation 15 and Schedule 5 Part III); the animal should be killed with a single shot to the head.

44 After slaughter, you must dispose of the carcass by a suitable method (see box below):

Article 5 of the Animal By-Products Order 1999 (S.I. 1999 No. 646) requires that fallen stock are disposed of by:

- despatch to a knackers yard, hunt kennel or similar premises;
- incineration;
- rendering;
- in certain circumstances, burial in such a way that carnivorous animals cannot gain access to the carcass, or burning.

This provision applies to the disposal of stillborn piglets and fetuses, as well as to older pigs.

The Dogs Acts 1906 - 28 include provisions making it an offence for a person knowingly to permit a carcass to remain unburied in a place to which dogs could gain access.

At present, burial or burning is only permitted in very limited circumstances. If you plan to bury the carcass on-farm, you should first check that the local authority allows this under the Animals By-Products Order 1999. However, from 30 April 2003, new EU legislation, the Animal By-Products Regulation, will ban the routine burial and burning of animal carcasses.

Record Keeping

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 7 states that:

A record shall 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.

Schedule 1, paragraph 8 states that:

- The record referred to in paragraph 7 shall 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, as the case may be, and shall be made available to an authorised person when carrying out an inspection or when otherwise requested by such person.

45 Only authorised veterinary medicinal products should be used. You must keep full records of all medicines used, including where it was bought. You must also keep records for at least three years of:

- the date you treated the animals;
- the identity and quantity of medicine used; and
- which animal or group of animals you treated.

It is a requirement under the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 1997 (S.I. 1997 No. 1729), Part V, paragraph 32, that you keep a record of:

The name and address of the supplier of the veterinary medicinal product.

You will find more information in the Code of Practice on responsible use of animal medicines on the farm (see the Appendix).

46 In terms of individual animal management, you may find it useful, as part of the health and welfare plan, to note specific cases of mastitis, lameness and other disorders, and where appropriate, the relevant treatment given.

Accommodation

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraphs 6 and 7 state that:

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

(2) The accommodation used for pigs shall 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, unless the pig is isolated for veterinary reasons;
- (d) maintain a comfortable temperature; and
- (e) have enough space to allow all the animals to lie down at the same time.

7. (1) The dimension of any stall or pen used for holding individual pigs in accordance with these regulations shall 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) Paragraph 7 (1) shall not apply to a female pig for the period between seven days before the predicted day of farrowing and the day on which the weaning of her piglets (including any fostered by her) is complete.

General

47 You should seek appropriate welfare advice when new buildings are to be constructed or existing buildings modified. 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.

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraphs 11 and 12 state that:

- materials used for the construction of accommodation, and, in particular for the construction of pens, cages, stalls and equipment with which animals may come into contact, shall not be harmful to them and shall be capable of being thoroughly cleaned and disinfected.

- accommodation and fittings for securing animals shall be constructed and maintained so that there are no sharp edges or protrusions likely to cause injury to them.

48 The internal surfaces of housing and pens should be made of materials that you can easily clean and disinfect regularly, and easily replace when necessary.

49 If you are going to treat these surfaces, use paints or wood preservatives that are safe to use with animals. There is a risk of lead poisoning from old paintwork, especially if you use second-hand building materials.

Floors

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraphs 12 and 13 state that:

12. Where pigs are kept in a building, floors shall –

- (a) be smooth but not slippery so as to prevent injury to the pigs;
- (b) be so designed, constructed and maintained 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.

13. When 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;

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

The minimum slat width must be:

(e) 50 mm for piglets and weaners;

(f) 80 mm for rearing pigs, gilts after service and sows.

50 Good floor design and adequate maintenance is essential. Poorly constructed floors, slats that are not properly matched to the weight/size of pig and surfaces that are worn and/or damaged, can cause injury to the feet and legs of pigs. Excessive gaps should be avoided as they can trap the feet/claws and may cause physical damage. Damaged floors must be repaired immediately.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 11 requires:

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

51 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 and dry, regularly topped up or changed, and not detrimental to the health of the pigs.

Ventilation and Temperature

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 13 states that:

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

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 17 states that:

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

52 All new buildings should be designed with the animals' comfort in mind, and with the aim of preventing respiratory diseases. The buildings should provide enough ventilation throughout the year for the type, size and number of stock to be housed in them. In addition to meeting the ventilation requirements, the system should be designed to avoid draughts affecting the pigs' living space.

53 Effective ventilation is essential to the well-being of the stock as it provides fresh air, removes noxious gases and aids in controlling temperature. Excessive heat loss should be prevented either by the structural insulation of the external walls, roof and the floor in the lying area, or by the provision of adequate bedding. Heat gain to buildings in hot conditions will be minimised by the insulation in the walls and roof.

54 Pigs have a very limited ability to sweat and are acutely susceptible to heat stress. Possible cooling methods, including blowing air over the pigs in a part of the pen, providing water spray/misting systems or simply wetting part of the floor with a hosepipe, can be used to ensure that pigs in buildings do not become overheated in hot weather. There should always be some dry lying area available as a matter of choice so that the pigs can move away from the cooler conditions.

55 Liveweight, group size, floor type, air speed and feed intake markedly affect temperature requirements and you must take these factors into account when determining the minimum temperature appropriate in each case. Slatted floors and low feed levels generally increase temperature requirements whilst straw bedding, high feed levels and higher body weights decrease requirements. For most circumstances, an appropriate minimum temperature can be found within the range given below:

Category of Pig	Temperature	
	(°C)	(°F)
Sows	15 - 20	59 - 68
Suckling pigs in creepers	25 - 30	77 - 84
Weaned pigs (3 - 4 weeks)	27 - 32	81 - 90
Later weaned pigs (5 weeks +)	22 - 27	71 - 80
Finishing pigs (porkers)	15 - 21	59 - 70
Finishing pigs (baconers)	13 - 18	55 - 64

56 You should avoid wide or abrupt fluctuations in temperature in housing systems within any 24-hour period. Wide fluctuations in the daily temperature regime can create stress that may trigger outbreaks of vice, such as tail biting, or disease such as pneumonia. You should maintain a higher than normal level of vigilance at these times.

57 When pigs are moved to new accommodation, the possibility of cold stress occurring as a result of sudden changes in the thermal environment should

be reduced. This can be done by ensuring that the pen is dry, by the provision of bedding, such as straw, or by preheating the building.

58 When you are removing slurry from under slats, you must take special care to avoid fouling the air with dangerous gases (such as ammonia), which can kill both humans and animals. Buildings should either be empty or very well ventilated during this procedure.

Lighting and Noise Levels

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraphs 3 and 16 state that:

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

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

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraphs 8 and 18 state that:

8. Where pigs are kept in an artificially lit building then lighting with an intensity of at least 40 lux shall be provided for a minimum period of 8 hours per day subject to paragraph 16 of Schedule 1 to these regulations [see box above].

18. Pigs shall not be exposed to constant or sudden noise. Noise levels above 85 dBA shall be avoided in that part of any building where pigs are kept.

59 You should have enough fixed or portable lighting available at any time if you need to inspect any animals, for example, during farrowing.

60 The siting of machinery such as feed milling units should be appropriate to minimise the noise impact

on housed stock. Any bell or buzzer which is likely to occur erratically, for example, a visitor to the site, should be sufficiently loud to attract human attention but without causing undue alarm to the stock.

Automated and Mechanical Equipment

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraphs 18 - 21, state that:

- 18. All automated or mechanical equipment essential for the health and well being of the animals shall 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 above are discovered, these shall be rectified immediately, or if this is impossible, appropriate steps shall be taken to safeguard the health and well-being of the animals pending the rectification of such 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 shall 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) shall be provided to give warning of any failure of the system.
- 21. The back-up system shall be thoroughly inspected and the alarm system shall each be tested at least once every seven days in order to check that there is no defect in the system and,

if any defect is found (whether when the system is inspected or tested in accordance with this paragraph or at any other time) it shall be rectified immediately.

- 61 All mains electrical equipment should meet relevant standards and be properly earthed, safeguarded from rodents and out of the pigs' reach.
- 62 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.
- 63 All automatic equipment used in intensive systems should be thoroughly inspected by the stock-keeper, or other competent person, not less than once each day to check that there are no defects. Any defect must be rectified immediately.

Fire and Other Emergency Precautions

- 64 There should be plans in place to deal with emergencies at your farm, such as fire, flood or disruption of supplies. The owner should make sure that all the staff are familiar with the appropriate emergency action. You will find more information in the Defra booklets, "Emergencies on livestock farms" and "Farm fires: advice on farm animal welfare" (see the Appendix).
- 65 It is important that you get advice about design when you are building or modifying a building. You need to be able to release and evacuate livestock quickly if there is an emergency. You should consider installing fire alarms that can be heard and responded to at any time of day or night.
- 66 You can get expert advice on all fire precautions from fire prevention officers at your local fire brigade and from the Fire Prevention Association.

Feed, water and other substances

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraphs 22 - 24 and 26 state that:

- 22. Animals shall 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 and to satisfy their nutritional needs and to promote a positive state of well-being.
- 23. No animals shall be provided with food or liquid in a manner, nor shall such food or liquid contain any substance, which may cause them unnecessary suffering or injury.
- 24. All animals shall 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.
- 26. Feeding and watering equipment shall be designed, constructed, placed and maintained so that contamination of food and water and the harmful effects of competition between animals are minimised.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299) Schedule 6, Part II, paragraph 14 states that:

- 14. (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.

- 67 All pigs need a balanced daily diet to maintain full health and vigour. You should plan any changes in the diet and introduce them gradually.
- 68 When introducing pigs to unaccustomed housing, you 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.

69 Where pigs are fed on a rationed feed level to control intake, you should ensure that adequate trough space is provided to ensure that all pigs can receive their allocation. 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

70 Good hygiene is necessary for storage and feeding systems as moulds can develop in stale feed which can have a detrimental effect on pigs. Feed bins should be cleaned out regularly.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 15 states that:

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

71 There are several factors you should take into consideration when looking at the provision of water to pigs:

- the total volume available;
- the flow rate (pigs will not spend a long time taking water);
- the method of provision e.g. the type of drinker; and
- its accessibility to all stock.

72 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

73 Waste water and excessive flow rates can be detrimental, particularly for sows in farrowing accommodation and very young pigs.

74 You should carefully consider the height at which water nipples and bowls are placed. All pigs must be able to access the drinking point. This might require height-adjustable, or 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.

75 Where nipple drinkers are used, a drinking point should be available for each ten pigs on rationed feeding. On unrestricted feeding, one nipple drinker should provide adequate supply for 15 pigs given sufficient flow rates. 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

76 If you use a wet feeding system, pigs must have access to a separate fresh water supply.

77 Feed and water should not be completely withdrawn from sows which are being dried off.

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 27 states that:

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

Management

General

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 17 states that:

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

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 10 states that:

10.(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.

78 You should keep all buildings, fields and paddocks clear of debris, such as wire, plastic and sharp objects, that could injure the pigs or rip out their ear tags and damage their ears.

79 You should take all practical measures to remove all pigs from areas that are in imminent danger of flooding.

Environmental Enrichment

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 16 states that:

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.

80 Environmental enrichment provides pigs with the opportunity to root, investigate, chew and play. Straw is an excellent material for environmental enrichment as it can satisfy many of the pigs' behavioural and physical needs. It provides a fibrous material which the pig can eat; the pig is able to root in and play with long straw; and, when used as bedding, straw can provide the pig with physical and thermal comfort.

81 Objects such as footballs and chains can satisfy some of the pigs' behavioural needs, but can quickly lose their novelty factor. The long-term use of such items is not, therefore, recommended unless they are used in conjunction with materials such as those listed above, or are changed on a weekly basis.

Castration

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraphs 22 and 23 (2) state that:

22. Male pigs may be castrated provided the means employed do not involve tearing of tissues.

23.(2) If castration is carried out after the seventh day of life it shall only be performed by a veterinary surgeon in accordance with the provisions of the Protection of Animals (Anaesthetics) Act 1954.

82 Stock-keepers should consider carefully whether castration is necessary. Castration is a mutilation and should be avoided wherever possible. If it cannot be avoided, it must be carried out in accordance with the law by a trained and competent operator or a veterinary surgeon.

Tail Docking

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraphs 21 and 23 (1) state that:

21. The following procedure shall not be carried out routinely but only where there is evidence that injuries to sows' teats or to other pigs' ears or tails have occurred:

- docking of a part of the tail;

but no tail docking may be carried out unless other measures to improve environmental conditions or management systems have been taken in order to prevent tail biting or other vices.

23.(1) If docking of tails is carried out after the seventh day of life it shall only be performed under anaesthetic and additional prolonged analgesia by a veterinary surgeon.

83 Tail biting and other vices, such as ear and flank biting, are associated with some form of stress. They can be triggered by a wide range or combination of factors, including: overstocking, feed deficiencies, incorrect temperature levels, fluctuating temperature levels, inadequate ventilation, draughts, high levels of dust and noxious gases (i.e. ammonia) and lack of environmental enrichment. Sometimes changes in external weather conditions can also trigger an outbreak.

84 If tail biting does occur, it can spread quickly through the pen and the degree of injury increases very quickly. You should ensure that affected pigs are removed to a hospital pen and treated without delay. If possible, you should try to identify the instigator and remove the animal to a separate pen.

85 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. 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. All equipment used must be cleaned and disinfected between pigs.

86 As part of your herd health and welfare plan (see paragraphs 8 and 22), you should have a strategy for dealing with outbreaks of vice such as tail biting. Although much has been learnt from research and practical on-farm experience, it is not possible to produce a definitive solution suitable for all cases. A thorough assessment and planned approach is therefore recommended to identify the particular cause of an outbreak on the unit and to find the appropriate solution to the problem.

- Quantify the problem
 - note the position of pens and numbers of pigs affected, check records of previous incidents.
- List possible causes
 - such as interruption or inadequate supply of feed or water, lack of environmental enrichment, inadequate ventilation, draughts, incorrect temperature levels, overstocking, competition at feeding, excessive light levels, elevated dust/noxious gas levels. Different causes may be found in different pens on the same unit.
- Modify health and welfare plan
 - having identified areas for improvement, in consultation with the herd's veterinary surgeon and other technical advisers, modify your health and welfare plan to implement the necessary changes with a view to preventing future outbreaks of tail biting.

Teeth Clipping/Grinding

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 21 states that:

The following procedure shall not be carried out routinely but only where there is evidence that injuries to sows' teats or to other pigs' ears or tails have occurred:

- uniform reduction of corner teeth of piglets by grinding or clipping not later than the seventh day of life of the piglets leaving an intact smooth surface;
- but no tooth reduction may be carried out unless other measures to improve environmental conditions or management systems have been taken in order to prevent tail biting or other vices.

87 Routine clipping or grinding of teeth is not permitted. Tooth reduction to the upper and lower corner teeth ("eye" or canine teeth) of piglets should only be used as a last resort. Your health and welfare plan should identify circumstances where tooth reduction may be necessary. These might include large litter size, cross fostering, gilts and poor milk let down such as mastitis.

88 Where tooth reduction is to be carried out, it may not always be necessary for the whole litter. Where it is necessary, it should be carried out before the seventh day of life, in accordance with the law, by a trained and competent operator or by a veterinary surgeon. Suitable sharp, clean clippers or an appropriate grinder should be used. All equipment used should be cleaned and disinfected between pigs. Teeth grinders are recommended as there is a reduced risk of shattering the teeth.

Natural Service

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 28, states that:

28.(1) Subject to sub-paragraph (2), natural or artificial breeding or breeding procedures which cause, or are likely to cause, suffering or injury to any of the animals concerned shall not be practised.

(2) Sub-paragraph (1) shall 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.

89 All boars should have good and safe service conditions. Slatted floors and slippery conditions underfoot are not suitable for mating animals. As part of your health and welfare plan, you should discuss with the herd's veterinary surgeon how to avoid injury to boars and sows through excessive mating activity.

Artificial Insemination, Vasectomy and Electro-ejaculation

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 7 (3) lists certain exemptions from the requirement that a pig shall be free to turn round without difficulty at all times, including:

- 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.

90 You should keep the sows 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.

91 Sows should be left undisturbed, to allow uterine contractions, for up to thirty minutes after artificial insemination (and natural service), but they should then rejoin their group in order to minimise bullying within the group hierarchy. When double insemination is used, sows may be penned separately until 30 minutes after the second insemination, but pens must allow the animal to turn round easily.

The Veterinary Surgeons Act 1966, as amended by the Veterinary Surgeons Act 1966 (Schedule 3 Amendment) Order 1988 (S.I. 1988 No. 526) prohibits the performance of a vasectomy or the carrying out of electro-ejaculation by anyone other than a veterinary surgeon.

92 Semen collection and artificial insemination should only be carried out by a trained, competent and experienced operator. Vasectomy or electro-ejaculation may only be carried out by a veterinary surgeon.

Farrowing sows and piglets

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part IV, paragraphs 30 to 35 state:

30. Pregnant gilts and sows shall, where necessary, be treated against external and internal parasites.
31. If they are placed in farrowing crates, pregnant sows and gilts shall be thoroughly cleaned.
32. 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.
33. During farrowing, an unobstructed area behind the sow or gilt shall be available for the ease of natural or assisted farrowing.
34. Farrowing pens where sows are kept loose must have some means of protecting the piglets, such as farrowing rails.
35. In the week before the expected farrowing time and during farrowing, sows and gilts may be kept out of the sight of other pigs.

93 You should manage the feeding of sows and gilts so that they are in a suitable body condition at the time of farrowing. A target score of 3.5 - 4 should be aimed at just prior to farrowing. You should then gear the feeding regime to minimising any loss in body condition during lactation.

94 Nesting material should be provided, whenever possible, particularly in the 24 hours prior to farrowing to satisfy the sow's need to nest-build and therefore minimise stress.

95 The environmental requirements of the sow and litter are considerably different. In an environmentally controlled farrowing house a heated creep area - up to 32°C – should be provided for the piglets. This can be by artificial heating, for example, overhead infra-red lamps, a heat pad, underfloor heating or alternatively by providing a well-bedded lying area. The sow, however, has different environmental

requirements. The temperature in the farrowing room as a whole should be around 18°C - 20°C. High temperatures for the sow can impair feed intake and her milking ability.

96 Where overhead lamps/heaters are used they should be securely fixed and should be protected from interference by the sow or piglets.

97 Farrowing accommodation should be so constructed and sufficiently big enough to allow the sow to rise up and lie down again without difficulty. You should be experienced and competent in the techniques of farrowing and should pay particular attention to hygiene, especially at assisted farrowings. Mechanical farrowing aids should only be used by a trained, competent operator.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part V, paragraphs 43 to 47 state:

43. If necessary, piglets shall 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.
44. A part of the total floor where the piglets are 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 any other suitable material.
45. Where a farrowing crate is used the piglets must have sufficient space to be able to be suckled without difficulty.
46. Piglets shall not be weaned from the sow at an age of less than 28 days unless the welfare or health of the dam or piglets would otherwise be adversely affected.
47. Piglets may be weaned up to seven days earlier if they are moved into specialised housings which are emptied and thoroughly cleaned and disinfected before the introduction of a new group and which are separate from housing where other sows are kept.

98 Problems associated with weaning are related to the age at weaning. The earlier the weaning age the better must be the system of management and nutrition if welfare problems are to be avoided. Piglets should not be weaned from the sow at less than 28 days, although orphaned, sick and surplus piglets requiring special attention are obvious exceptions. The all-in-all-out system of managing pig housing maximises opportunities to prevent disease introduction or spread on a unit. Where these conditions are met, weaning may occur up to seven days earlier. At weaning, piglets should be moved into a specialised house which has previously been completely emptied of pigs, cleaned and disinfected.

99 It is particularly important that you watch piglets carefully for signs of diarrhoea or respiratory disease, such as coughing or rapid or laboured breathing, both of which can spread rapidly. If the piglets do not respond to treatment promptly or properly, you should seek advice from your veterinary surgeon.

Weaners and rearing pigs

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part VI, paragraph 52 states:

The unobstructed floor area available to each weaner or rearing pig reared in a group shall 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.

100 The figures in the box above are minimum requirements, the type of housing and its management may mean that greater space allowances are necessary. The total floor space should be adequate for sleeping, feeding and exercising. The lying area, excluding the dunging and exercise areas, should be of sufficient size to allow all the pigs to lie down on their sides at the same time.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part VI, paragraphs 48 to 51 state:

- 48. Pigs shall be placed in groups as soon as possible after weaning. They shall be kept in stable groups with as little mixing as possible.
- 49. If pigs unfamiliar with one another have to be mixed, this should be done at as young an age as possible, preferably before or up to one week after weaning. When pigs are mixed they shall be provided with adequate opportunities to escape and hide from other pigs.
- 50. The use of tranquillising medication in order to facilitate mixing shall be limited to exceptional conditions and only after consultation with a veterinary surgeon.
- 51. When signs of severe fighting appear, the causes shall be immediately investigated and appropriate measures shall be taken.

101 Your herd health and welfare plan should include a strategy for managing mixing and establishing groups of pigs. Plenty of space, sufficient environmental enrichment and using shower sprays/sprinklers can all help to minimise aggression at mixing. Wherever possible, pigs for fattening should be in same sex groups to avoid unnecessary sexual activity as gilts come into oestrus.

Dry sows and gilts

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part IV, paragraphs 36 to 42 state:

- 36. Sows and gilts shall 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.
- 37. The pen where the group is kept must have sides greater than 2.8 m in length, except where there are less than 6 individuals in the group, when the sides of the pen must be no less than 2.4 m in length.
- 38. The total 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 less than 6 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%.
- 39. For gilts after service and pregnant sows a part of the area required in paragraph 38 equal to at least 0.95 m² per gilt and 1.3 m² per sow must be of continuous solid floor of which a maximum of 15% is reserved for drainage openings.
- 40. Sows and gilts kept on holdings of fewer than 10 sows may be kept individually provided that their accommodation complies with the requirements of paragraphs 6 and 7 of Part II of this Schedule [see the box above paragraph 47].
- 41. In addition to the requirements of paragraph 14 of Part II of this Schedule [see the box above paragraph 67], 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.
- 42. 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.

102 Innate aggressiveness can present a severe problem where sows and gilts are kept in groups. Much depends on the temperament of individual animals. Adequate space is particularly important at the time of mixing sows so that animals can escape from aggressors. First parity sows and sows that have lost body condition should be managed as separate groups. Stock-keepers should ensure that persistent bullying, which could lead to severe injury or deprivation of food, does not take place. You should remove any animal suffering persistent bullying to different accommodation.

103 Feeding facilities in which animals can be fed individually and thereafter released are recommended. However, if you feed sows using a system that does not include some form of protection during feeding, such as floor feeding, then you must distribute the feed widely and in such a way to ensure that all members of the group can obtain their allocation.

104 Breeding sows and gilts should be fed simultaneously wherever possible to avoid undue excitement. Some feeding systems have been designed to feed animals sequentially without interference from pen-mates. You need to pay special attention to the proper functioning of such equipment and also make sure that all members of the group can obtain their allocation.

105 The provision of bedding in loose housing systems for sows and gilts is strongly recommended.

Boars

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part III, paragraphs 27 to 29 state that:

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

28. The lying area shall be dry and comfortable.

29. (1) The minimum unobstructed floor area for an adult boar shall be 6 m² save as set out in paragraph 29 (2) herein.

(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.

106 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. You should not enter boar pens without a pig board and you should be able to escape easily from the pen if the boar becomes aggressive.

107 Boars are generally 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.

108 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. Bedding should be provided in the lying area. 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. The use of small quantities of coarse sand on floors will reduce the risk of slipping.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II paragraph 24 states that:

Boars' tusks may be reduced in length where necessary to prevent injuries to other animals or for safety reasons.

Pigs kept in outdoor husbandry systems

General

The Welfare of Farmed Animals (England) Regulations 2000 (S.I. 2000 No. 1870), Schedule 1, paragraph 17 states that:

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

109 Sites for outdoor pig enterprises must be chosen carefully. Land prone to flooding, poorly drained sites, stony (especially flinty) soils and sites with heavy soils (especially in areas with high rainfall), are generally unsuitable for outdoor systems. Free-draining soils, in low rainfall areas, with low frost incidence are most suitable.

110 Field stocking densities must reflect the suitability of the site and the system of management. A guideline of 25 sows per hectare overall is reasonable for suitable sites. You may need to reduce stocking densities on less ideal sites or in extreme circumstances during periods of adverse weather. More information can be found in Defra's booklet, "Site suitability for outdoor pig farming" (see the Appendix).

111 Stock selected for outdoor production must be suitable for outdoor conditions. Most breeding companies provide lines that have been developed for outdoor use.

112 Your herd health and welfare plan should include a strategy for dealing with emergency situations such as, water provision in freezing conditions and feed provision to the site and to the paddocks in snow or severe wet weather.

Biosecurity

113 If you take proper precautions when you move within the farm or you move animals and equipment, you can greatly reduce the chance of spreading disease (see paragraphs 23 - 28). Incoming replacement stock will also need to be acclimatised to outdoor conditions. It is especially important to provide warm comfortable accommodation for these animals.

114 To prevent the build-up and transfer of disease organisms, you should re-site arcs between batches of pigs and the straw bedding etc. should be removed. More information on biosecurity can be found in the Defra publication 'Better biosecurity provides peace of mind, healthy stock and a more viable business' (see the Appendix).

Accommodation

115 All arcs and huts used should be liberally provided with bedding 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.

116 You should properly maintain arcs and huts, especially to ensure that damage through handling or by the pigs does not produce sharp edges that may injure the animals.

117 Adequate shelter must be provided to protect the animals from extreme weather conditions. Arcs should be well fixed to the ground, particularly in cold windy conditions and should be sited so that the doorways can be adjusted to allow for changing weather circumstances. Wet conditions create greater welfare problems than the cold, as moisture is easily carried into the arcs on feet and bodies, causing chilling in piglets, and provides the ideal environment for micro-organisms to flourish.

118 Adequate shelter must also be provided to protect the animals from the sun in summer. Wallows should be provided for breeding stock to allow them to cool themselves and to produce mud that can help prevent sunburn. More information can be found in Defra's booklet, "Heat stress in pigs" (see the Appendix).

Feed and water

119 Food should be distributed widely and evenly to minimise aggression between animals, unless an alternative method is used to ensure even consumption.

120 You should carefully monitor the body condition of pigs during extremes of weather and adjust feed provision if necessary.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 15 requires:

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

121 Arrangements should be in place to ensure the supply of water to stock in all weathers. Particular attention is needed at times of freezing conditions.

Fences

122 Electric fencing should be designed, constructed, used and maintained properly, so that when the animals touch them they only feel slight 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.

123 New breeding animals are unlikely to have been trained to electric fencing. You should have a training paddock with secure fencing, such as pig netting, outside the electric fencing to help the animals see the fencing and to ensure that they cannot escape from the unit.

124 Every effort should be made to protect pigs, particularly young piglets, from predation. Steps such as a predator control programme and possibly fox fencing should be considered.

Farrowing sows and piglets

125 In hot conditions, lactating sows may be prompted to leave the arc to seek more comfortable conditions outside, effectively abandoning her litter. Farrowing arcs should be insulated and have provision for some degree of extra ventilation such as manually controlled flaps.

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part IV, paragraph 35 states that:

Farrowing pens where sows are kept loose must have some means of protecting the piglets, such as farrowing rails.

126 Farrowing arcs should be sited on level ground to reduce the risk of overlying. Suitable restrainer boards should be used to prevent very young piglets from straying during the post-farrowing period.

Nose ringing

The Welfare of Farmed Animals (England) (Amendment) Regulations 2003 (S.I. 2003 No. 299), Schedule 6, Part II, paragraph 25 states that:

Nose rings may not be put in animals kept continuously in indoor husbandry systems.

127 Nose ringing is a mutilation and should be avoided wherever possible. It is usually carried out to deter excavation of the paddocks and damage to the cover vegetation through excessive rooting. Nose ringing can reduce the risk of environmental pollution, where there is a risk of soil erosion and leaching of nutrients from faeces. Where it is necessary to nose ring pigs, it should only be carried out by a suitably trained and competent operator. All equipment should be cleaned and disinfected between pigs.

Useful publications

A. Useful Publications related to pig welfare as at February 2003

PB number	Title
0409	Code of Practice – the welfare of animals in livestock markets
0621	Farm fires: advice on farm animal welfare
1147	Emergencies on livestock farms
1148	Lameness in Pigs
1316	Heat Stress in Pigs - Solving the problem
1381	Guidance on the transport of casualty farm animals
2594	Explanatory guide to the Welfare of Animals (Slaughter or Killing) Regulations 1995
3480	Condition scoring of pigs
3575	Assessment of practical experience in the handling, transport and care of animals: guide to employers
3766	Guidance on the Welfare of Animals (Transport) Order 1997
4444	Site suitability for outdoor pig farming
7350	Better biosecurity provides peace of mind, healthy stock and a more viable business

Code of practice on the responsible use of animal medicines on the farm (2001)
(Veterinary Medicines Directorate)

You can get copies of all these publications, free of charge, from:

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These publications are updated regularly. For more information on the most current versions and new publications, please contact Defra's Animal Welfare Division on: Tel no. 020 7904 6521

B. Legislation related to pig welfare as at February 2003

S.I. number	Title
	Dogs Acts 1906 – 1928
	Protection of Animals Acts 1911 – 2000
	Protection of Animals (Anaesthetics) Act 1954, as amended
	Veterinary Surgeons Act 1966
	Agriculture (Miscellaneous Provisions) Act 1968
S.I. 1974 No. 798	The Docking of Pigs (Use of Anaesthetics) Order 1974
S.I. 1982 No. 1884	Welfare of Livestock (Prohibited Operations) Regulations 1982
S.I. 1990 No. 2627	Welfare of Animals at Markets Order 1990
S.I. 1995 No. 731	Welfare of Animals (Slaughter or Killing) Regulations 1995
S.I. 1997 No. 1480	Welfare of Animals (Transport) Order 1997
S.I. 1997 No. 1729	Animals and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 1997
S.I. 1998 No. 2537	Welfare of Animals (Staging Points) Order 1998
S.I. 1998 No. 463	The Specified Animal Pathogens Order 1998
S.I. 1999 No. 1622	Welfare of Animals (Transport) (Amendment) Order 1999
S.I. 1999 No. 400	Welfare of Animals (Slaughter or Killing) (Amendment) Regulations 1999
S.I. 1999 No. 646	Animal By-Products Order 1999
S.I. 2000 No. 1870	Welfare of Farmed Animals (England) Regulations 2000
S.I. 2000 No. 1618	Transport of Animals (Cleansing and Disinfection) (England) (No.2) Order 2000
S.I. 2003 No. 299	Welfare of Farmed Animals (England) (Amendment) Regulations 2003

You can get copies of the legislation quoted in this Code from the Stationery Office at:

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If you would like any more information or advice about this Code, please contact your local Animal Health Divisional Office or Defra's Animal Welfare Division on Tel no: 020 7904 6521.