

# PIGS

Code of practice  
for  
pigs  
in  
Western Australia

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## **PREFACE**

The **Code of practice for the transport of pigs in Western Australia** is based on *The Australian Model Code of Practice for the Welfare of Animals - Pigs* and has been adapted for use in Western Australia. The original *Model Code* was prepared for the Standing Committee on Agriculture and Resource Management (SCARM) and endorsed by the Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) for use as a national code. It was prepared in consultation with the relevant industry organizations and State agencies.

This code has been prepared to assist all persons handling or using pigs in Western Australia, and reference to this code is made in Regulations provided under Section 25 of the *Animal Welfare Act 2002* for the purposes of a defence against cruelty. It is not intended to be used for either audit or compliance purposes.

This Western Australian version of the code is supported by the livestock industries and the Department of Agriculture. It is based on current knowledge and technology. It will be reviewed in the future on a needs basis, to take account of advances in the understanding of animal physiology and behaviour, technological changes in animal husbandry and their relationship to the welfare of animals.

For anyone using animals for scientific purposes, as defined in the *Animal Welfare Act 2002*, this code should be read and used in conjunction with the “scientific use code”.

Further copies of this code are available from the Department of Local Government and Regional Development or from the internet at: <http://www.dlgrd.wa.gov.au>

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## **1 INTRODUCTION**

### **1.1**

This Code of Practice is intended as a guide for all people responsible for the welfare of pigs under both intensive and extensive systems. It recognises that the basic requirement for the welfare of pigs is a husbandry system appropriate to their physiological and behavioural needs.

The basic needs of pigs are:

- readily accessible food and water to maintain health and vigour;
- freedom of movement to stand, stretch and lie down;
- light during the daylight hours;
- visual and social contact with other pigs;
- accommodation that provides protection from extremes of weather and which neither harms nor causes distress;
- rapid identification and treatment of vice, injury and disease.

### **1.2**

The Code of Practice emphasises that, whatever the form of husbandry, managers and others responsible for the day-to-day needs of pigs have a responsibility to care for animals under their control.

### **1.3**

The importance of competent stockpersonship in pig welfare cannot be over-emphasised and those responsible should seek expert opinion when pigs show signs of illness. Managers and staff are expected to treat their animals efficiently and with consideration. It is important for management purposes that stockpersons should have ample time for the inspection of stock and the checking of equipment.

### **1.4**

Although very large herds can be managed successfully, a large unit should not be set up unless the stockperson in charge will be able to safeguard the welfare of each animal.

### **1.5**

Systems involving a high degree of control over the environment should be installed only where conscientious staff skilled in both pig husbandry and the use of equipment will be available at all times.

### **1.6**

Assistance with the establishment of piggeries and advice on the management of and disease control in pigs can be obtained from qualified advisers in private or government employment.

**1.7**

This Code of Practice is based on the knowledge and technology available at the time of publication and may need to be varied in the light of future knowledge. It does not replace the need for experience and commonsense in the husbandry of animals.

**1.8**

Loading of pigs for transport can present special problems. Patience is essential and proper design of yards, loading ramps and transport facilities is essential to facilitate loading with minimum distress and bruising. More comprehensive details on the factors to consider in the transportation in pigs are included in the Code of Practice for the Transport of Pigs in Western Australia.

## **2 ACCOMMODATION**

Anyone who intends to erect new housing or re-design old housing should seek advice from the Department of Agriculture and others with expert knowledge in this field. Well designed and constructed buildings can provide an ideal environment for pigs, and are often more economic to operate and less expensive to maintain.

### **2.1 Space**

This code accepts pigs are intensively raised under three housing designs:

- special farrowing crates;
- pens — where a number of animals are held in groups;
- stalls — where individual animals are held.

2.1.1 Accommodation for pigs should be designed and constructed so that it does not cause injury or predispose them to disease, and to provide a clean dry place on which to lie.

2.1.2 Pigs kept in groups in pens require sufficient space for each to sleep, feed and dung. They should have a clean dry place on which to lie (see Appendix 2). Where sows and gilts are kept in groups, aggressiveness can present a severe problem. Group size, feeding method, condition and stockpersonship are important in management of such problems. Much depends on the temperament of individual animals and the stockperson should ensure that persistent bullying leading to severe injury or deprivation of food does not take place. Separate penning may be required when persistent bullying takes place.

2.1.3 Pigs accommodated individually in stalls should be able to stand normally, lie with limbs extended, to stretch and move freely. They should have sufficient space in which to feed and sleep and a clean dry place on which to lie (see Appendix 2). To minimise the incidence of leg problems in pigs, housing in conventional stalls followed by housing in farrowing crates should be avoided. Practicable alternatives to current conventional stalls (e.g. turnaround stalls or use of group housing) should be considered as they are developed.

2.1.4 Farrowing systems should allow sufficient room for piglets. Practicable alternatives to the current farrowing crates should be considered as they are developed.

2.1.5 The space allowance and facilities provided for suckling sows should aim to avoid overlaying of piglets.

2.1.6 Good design and adequate maintenance of floors are of particular importance in minimising the risk of injury and to allow pigs to stand normally.

2.1.7 All surfaces and bedding materials to which pigs have access should be made of materials that may be readily cleaned and disinfected.

## **2.2 Equipment**

2.2.1 All equipment to which pigs have access should be designed and maintained so as to avoid both injury and pain.

2.2.2 Mechanical equipment essential to meeting the basic requirements of pigs should be inspected regularly and kept in good working order.

2.2.3 In case of breakdown of mechanical equipment, alternative ways of providing feed and water and of maintaining a satisfactory environment should be available.

2.2.4 An alarm system should be installed to warn the stockperson of failures of any automated ventilation equipment in sealed sheds.

2.2.5 All electrical installations at mains voltage should be inaccessible to pigs, and properly earthed.

## **2.3 Environment**

2.3.1 Shivering and cold-stress in newborn piglets should be avoided by maintaining the temperature through the provision of bedding, insulation and/or supplementary heating.

2.3.2 In intensive housing systems, wide or abrupt temperature fluctuations within any 24-hour period should be avoided. Extremes of air temperature or of humidity, particularly those liable to cause heat stress, should be avoided.

2.3.3 In enclosed houses, the level of air exchanges should provide fresh air for respiration, remove excess heat and waste gases, and minimise the effects of dust and excess moisture. Efficient ventilation is particularly important when effluent is held in storage under slatted floors for more than one day.

2.3.4 Sufficient lighting should be available when required to enable the proper inspection of all pigs.

## **2.4 Protection**

2.4.1 Pigs should be protected from predators and, where injury from bullying or fighting may occur, from other pigs. Where unfamiliar pigs must be mixed, this should be done in a manner that minimises aggression, for example, use of a new pen, provision of feed on the floor, or use of a pen with room for escape.

2.4.2 In partial stall systems in which groups of dry sows and gilts are kept, action should be taken to prevent bullying or deprivation of food. Stalls in which dry sows and gilts can feed individually are strongly recommended.

2.4.3 When individual quarters are provided for dry sows and gilts, the animals should be able to feed and lie down normally. Partitions should prevent aggressive behaviour but enable them to see each other.

2.4.4 Appropriate fire-fighting equipment should be available in all pig houses.

2.4.5 When planning new buildings, consideration should be given to the use of construction materials with a high fire resistance, and all electrical and fuel installations should be planned and fitted so as to minimise the fire risk.

2.4.6 New buildings should incorporate sufficient exits to facilitate the quick evacuation of pigs in emergencies.

2.4.7 Pig housing should be located so as to be far from the effects of fires and floods.

## **2.5 Waste control**

2.5.1 The frequency of cleaning of pig accommodation will depend on the system of housing used, the type of flooring and stocking density. As a guide, pens with solid floors should be cleaned daily. Faeces and urine should not be permitted to accumulate to the stage where they pose a threat to the health and well being of pigs, or disrupt the normal instinct of pigs to have separate dunging and sleeping areas.

## **3 FOOD AND WATER**

### **3.1 Food**

3.1.1 Pigs should be fed at least once each day and the diet should be nutritionally adequate to maintain health and vitality and take account of the requirements of growth, pregnancy and lactation.

3.1.2 Medicated food should only be used on competent professional advice as the overuse or mixing of medication, or the medication itself, may cause toxic injury.

3.1.3 Food provided should be fresh and palatable, and free of any gross contaminants, mould, mycotoxins etc.

3.1.4 There should be enough food on hand, or ready means of obtaining food, in case supply fails or is delayed.

### **3.2 Water**

3.2.1 Clean, fresh water or other wholesome liquid should be available in sufficient quantities to meet the physiological needs of the pigs.

3.2.2 Medicated water should only be used on competent professional advice as the overuse or mixing of medication, or the medication itself, may have adverse effects.

3.2.3 Water provided should be fresh, palatable and cool. Drinker allocation per pen group and drinker design and flow rates should be such that water requirements of different classes of pig are met without undue effort, taking into account normal expected wastage rates.

3.2.4 When a piggery is first established, or a new water source obtained, the water should be tested for salt content and microbiological contamination, and advice obtained on its suitability for pigs. Information on water testing can be obtained from the local office of the Department of Agriculture.

3.2.5 The daily consumption of water by a pig can vary according to environmental temperature and liveweight. The table below shows the range of daily water consumption by various classes of pig.

**Water requirements per pig**

	AVERAGE WATER CONSUMPTION (litres per day)*
Boar or dry sow	12–15
Sow and litter	25–45
Grower pig: 25 kg	3–5
45 kg	5–7
65 kg	7–9
90 kg	9 – 12
<p>* Conversion factor: 1.0 litre = 0.22 gallon  <b>Footnote:</b> Net requirements for animals excluding wastage.                      The piggery should be serviced by an adequate reserve water supply in case of breaks, repairs or failure of the pumping equipment.</p>	

## **4 SPECIAL REQUIREMENTS**

### **4.1 Inspections**

4.1.1 The frequency and level of inspection should be related to the likelihood of risk to the welfare of pigs, but should be at least once each day.

4.1.2 Under certain circumstances more frequent inspections may be required, for example during hot weather, during outbreaks of disease or vice, when farrowing is expected, or when groups of pigs have been mixed. Checks should also be made of the effectiveness of any automated feeding or watering systems, where these have been installed.

### **4.2 Health**

4.2.1 Those responsible for the care of pigs should be aware of the signs of ill health. These include separation from other pigs, refusal to eat, changes in faeces or urine, reduced production or fertility, vomiting, skin discolouration, shivering, sneezing, coughing, panting, lameness, and swellings on the body. If the person in charge is not able to identify the causes and correct them, they should seek advice from those with training and experience in such matters. Such persons may be specialist pig veterinarians or other qualified advisers in private practice or Government employment.

4.2.2 Pig producers should also operate an effective program to prevent infectious disease including internal and external parasitism. Vaccinations and other treatments applied to pigs should be undertaken by people skilled in such procedures and in accordance with the manufacturer's directions. Sick and injured pigs should be treated as soon as possible. They should be isolated if necessary.

4.2.3 Dead pigs should be removed promptly and, if not required for post-mortem examination, should be disposed of in a hygienic manner such as incineration or deep burial.

4.2.4 Records of sick animals, deaths, treatment given and response to treatment should be maintained to assist disease investigations.

4.2.5 Pigs with either an incurable sickness or a painful deformity should be slaughtered humanely as soon as possible. The recommended method of destruction is described in Appendix 3.

### **4.3 Farrowing**

4.3.1 Sows should be placed in farrowing quarters before the litter is due to allow them to become accustomed to their surroundings.

### **4.4 Boars**

4.4.1 The floor of the serving area should be well maintained and should not be slippery.

### **4.5 Additional requirements for pig keeping under extensive conditions**

4.5.1 The welfare standards applicable to housed pigs should be also observed where pigs are kept outdoors.

4.5.2 Huts for farrowing and rearing should be warm and draught free.

4.5.3 Adequate shelter in winter and shade in summer should be available to all pigs.

4.5.4 Pigs should not be raised on land which is grossly contaminated with poisonous plants or organisms that may either cause or transmit disease to such an extent that the health of pigs is affected. Consideration should be given to methods of reducing the build up of such pathogens by the use of herd health programs such as routine vaccinations, parasite control and regular pasture rotation and spelling.

4.5.5 Fire breaks should be established around pasture or open-range systems where the risk of fires is high.

4.5.6 When large groups are kept outdoors, adequate feeding space and watering points are essential. Operators should ensure that younger or more timid pigs, which may be subject to bullying, have access to feed or are confined with more evenly matched groups of pigs.

## **APPENDIX 1 - MINOR SURGICAL PROCEDURES**

### **1. General**

Managers or employees should not carry out minor surgical operations unless they are competent in such procedures. If necessary, advice should be sought on how minor surgical procedures should be performed. They should understand that minor surgery causes little distress if carried out efficiently and with minimal restraint. Strict attention should be paid to:

- suitability of the area in which the operation is to be performed;
- the catching facilities;
- the type and amount of restraint;
- the selection and maintenance of instruments;
- hygiene, particularly of syringes and needles and of the site of injections;
- after-care of the animals.

Restraint used on pigs should be the minimum necessary to complete the procedures. The use of goading devices for moving and handling pigs should be minimised to avoid distress.

### **2. Castration**

Current marketing practices indicate that castration is rarely required. Castration should be avoided wherever possible. If, however, castration is considered necessary, it should be performed by a competent operator as early as management practices will allow. Castration using a knife is recommended provided the animal is adequately restrained. Good post-operative drainage is essential. Castration of boars older than 6 weeks should be performed by a veterinarian using either local or general anaesthetic.

### **3. Tail docking**

Where tail biting is a problem, all aspects of the environment, feeding and management should be investigated to identify the contributing factors so that remedial action can be taken. Where tail docking is being performed as a routine preventive measure, it should be carried out before pigs are 7 days of age. Tail docking of pigs over 7 days of age should be performed only in an emergency.

### **4. Clipping of 'needle' teeth**

When performed, this procedure should be carried out within two days of birth to protect littermates and to prevent damage to the sow's udder.

## **5. Nose ringing**

This may need to be performed when pigs are kept on pasture. The ring should be placed through the cartilage of the top of the snout or the tissues separating the nostrils.

## **6. Identification**

Where it is necessary to mark pigs for permanent identification, the ear may be tattooed, tagged, notched or punched, or the body may be tattooed or a micro-chip implanted. Wherever possible, ear notching should be carried out before the piglets are 7 days of age.

## **7. Backfat measurement**

The preferred method uses ultrasonic equipment. The use of mechanical probes is unacceptable.

## **8. Tusk trimming**

Tusk trimming of boars is advisable where injury to humans or animals is likely to occur. Acceptable methods of tusk trimming involve the use of bolt cutters, hack saw or embryotomy wire. The boar should be appropriately restrained and, if necessary, administered a sedative. No anaesthetic is required as the tusk lacks sensory nerves. Tusks should be severed cleanly and skilfully above the level of the gums without causing damage to other tissues.

## APPENDIX 2 - ACCOMMODATION

### 1. Stocking density

It is not possible to relate stocking density to welfare in a simple manner. Adequate welfare involves consideration of group size, pen size, age, breed, temperature, ventilation, lighting and other husbandry factors. The observance of any particular stocking density on its own cannot ensure the welfare of pigs. The suggested minimum space allowances for housed pigs, based on contemporary husbandry, are shown in Table 1. It should be noted that a higher space allowance should be provided when less favourable shed design and environment factors are present.

TABLE 1: Minimum Space allowance for pigs

System	Minimum Space Allowance (m <sup>2</sup> per pig)*	Comments	
Growing pigs up to 10 kg in groups	0.11	Approximately 20 to 30 per cent of space allowance provides for a dunging area	
11–20 kg	0.18		
21–40 kg	0.32		
41–60 kg	0.44		
61–80 kg	0.56		
81–100 kg	0.65		
Adult pigs in groups	1.4		
Adult pigs in individual stalls	0.6 m x 2.0 m	2.0 m length means 2.0 m clear space, not including feed and water facilities	
Sows in farrowing crates	0.5 m width x 2.0 m minimum length		
Boars in pens used for mating	6.25	Minimum length of shortest side 2 m	
Lactating sows and litters:			
	• stalls	3.2	With piglets up to 4 weeks of age
	• individual pens	5.6	With piglets up to 4 weeks of age
• multisuckling groups	5.6	For each sow and litter	
* Conversion factors: 1.0 m <sup>2</sup> = 10.8 ft <sup>2</sup> ; 1.0 kg = 2.2 lb; 1 m = 39.4 in			

## 2. Temperature

Pigs, except the very young, are able to tolerate a wide range of temperatures without detriment to their well being, provided temperature changes do not occur abruptly. During very hot weather (38°C or more) adult pigs are very susceptible to heat stress, and steps should be taken to alleviate distress and avoid deaths. Pigs may die if transported in very hot weather. The ranges of temperature that afford optimum comfort for different classes of pigs are:

Piglets — newborn	27–35°C
Piglets — 3 weeks of age	24–30°C (reducing to 21°C at 5 weeks of age)
Farrowing house	20–30°C
Weaners	20–30°C
Growers	15–30°C
Finishers	15–30°C
Sows and boars	15–30°C

## 3. Ventilation

It is necessary to strike a balance between the need to provide fresh air and prevent the build-up of noxious gases and the need to protect pigs from draughts. In general, if the level of irritant or toxic gases within a building is uncomfortable to humans, it is also uncomfortable to pigs and may predispose them to respiratory disease. The presence of ammonia is usually a reliable indicator of the build up of noxious gases; it should not be allowed to exceed 20 parts per million (ppm) of air in an enclosed pig house without immediate corrective action being taken. (A level of 10–15 ppm ammonia in the air can be detected by smell. An ammonia level of 25–35 ppm will cause eye and nasal irritation in people). It is important to maintain an adequate airflow during hot weather to ensure housed pigs do not become overheated.

## 4. Tethering

The restraint of sows by tethers is considered an unacceptable practice. Piglets — newborn

## **APPENDIX 3 – HUMANE DESTRUCTION OF PIGS**

Previous sections of this code have drawn attention to those circumstances when, for humane reasons, pigs may need to be humanely destroyed, e.g. injury or disease. While this task is aesthetically unpleasant to most people, the method of slaughter should be effective and cause a sudden and painless death for the animal. It is equally important that the animal be handled quietly beforehand to ensure it is not unnecessarily distressed or alarmed. The methods recommended here are those which are considered the most suitable for a farm situation.

### **1. Use of the firearm**

This is the preferred method of humanely destroying older pigs on the farm, or following emergencies. The use of firearms on public property, e.g. roads or in built-up areas, may be illegal, and under those circumstances assistance should be sought from veterinary practitioners, the RSPCA or the Police. The effectiveness of shooting is dependent upon the destruction of major centres at the back of the brain near the spinal cord. A common mistake is to direct the bullet too low, damaging frontal areas. Partial recovery may then occur.

#### *a) Safety*

The following aspects of firearms safety should be borne in mind:

A .22 calibre rifle or .32 calibre humane killer pistol are adequate for humane destruction of most pigs. Where old, large boars are to be destroyed, the .32 calibre pistol is preferred.

Persons other than the marksman and an animal handler should be cleared from the area or should stand well behind the marksman.

Never fire while the animal is moving its head; wait patiently for a quiet interval before firing.

To provide maximum impact and the least possibility of misdirection the range should be as short as circumstances permit.

While the humane killer pistol and captive-bolt pistol are designed to be pressed firmly on the head prior to being discharged, it is not safe to do this with a standard rifle or pistol.

#### *b) Methods*

Temporal method: The pig is shot from the side of the head so that the bullet enters the skull at a point midway between the eyes and the base of the ear on the same side. The bullet should be directed horizontally into the skull. This method is preferred for adult pigs because of the heavier bone structure of the front of the skull.

Frontal method: The firearm should be aimed horizontally into the skull at a point midway across the forehead and (for adult pigs) about 2 cm above the level of the eyes.

## 2. Use of the captive-bolt pistol

The captive-bolt pistol uses a blank cartridge and is a safe alternative to the firearm. The operator does not have to be a marksman as the pistol's muzzle is firmly pressed against the skull before firing. It must, however, be assumed that the animal has only been stunned and a follow-up method of ensuring death, such as bleeding-out, is required. Blank cartridges for the captive-bolt pistol are colour-coded according to the amount of charge they contain. For best results, the manufacturer's directions should be followed as to the most appropriate blank cartridge for pigs. Regular maintenance of the captive-bolt pistol is essential for efficient stunning.

### *a) Method*

When using the frontal method, the captive-bolt pistol can be used in the same position as that recommended for the firearm. To ensure death, pigs should be bled out as soon as possible after collapse.

## 3. Stunning by clubbing

A hammer or other blunt, but heavy, object may be used to make a blow to the skull to render unconscious small, easily controlled piglets. The blow should be aimed at the centre of the forehead in the position indicated for shooting in Figure 1. The unconscious piglet should be immediately bled out to ensure death.

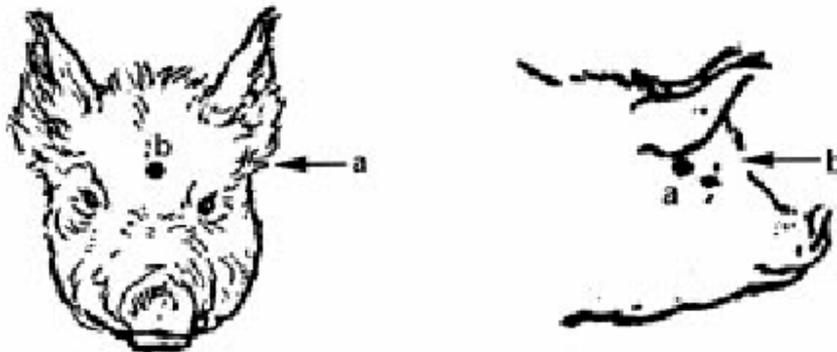


Figure 1: Humane destruction of pigs

'a' indicates recommended position for temporal method (Suitable for firearm only).

'b' indicates recommended position for frontal method (Suitable for firearm or captive-bolt pistol).