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# PIG WELFARE REQUIREMENTS

*On Farm  
and In Transit*



European Communities (Welfare of Calves and Pigs) Regulations, 2003. (S.I. No. 48 of 2003).  
European Communities (Protection of Animals kept for Farming Purposes) Regulations, 2000.  
Diseases of Animals (Protection of Animals during Transport) Orders 1995, 1997, 2001

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# INTRODUCTION

Market changes within the European Union are influenced by changes in thinking of consumers and their demands. Changes in legislation follow to reflect this evolving process. Consequently, change within pig farming practices become necessary to keep a foothold within this evolving market place. The strongest focus on change falls on food safety, animal welfare and the environment.

The key to good welfare of pigs is good health and the ability to express natural behavior. These two basic criteria form the logic and foundation on which pig welfare legislation is built. Good pig health stems simply from the provision of food and water within a clean environment. Pigs, as all animals, possess an internal drive to express their behaviour in a natural way. Depressing this internal drive negatively affects the capacity of pigs to cope. Ultimately, excessive pressure on natural behaviour over-stretches their coping capacity. This causes undue stress on pigs within the farm environment (e.g. high stocking densities, poor ventilation, dim light, lack of rooting material, elevated chronic disease levels). Such stress levels lead to a breakdown in health and welfare. This in turn slows daily liveweight gain and negatively affects achievement of targets on farm.

Promotion of the good welfare of pigs, through minimum standards for pig health and expression of natural behaviour, is at the core of recent amendments in European and Irish legislation. These amendments come into force from the 1<sup>st</sup> of January 2003, with some derogations until 2006 and 2013 as explained below.

The obligation on pig farmers to ensure the welfare of pigs in their care fall under three broad categories. These are:

1. Pig health and behaviour.
2. The environment in which the pigs are kept.
3. The management and husbandry systems on the farm.

# 1. PIG HEALTH AND BEHAVIOUR

The welfare of pigs can be ensured by maintaining a good standard of health and by providing an environment which allows for the expression of natural behaviours. The responsibility for the care and welfare of pigs kept on farms lies with the herd owner or with the person in charge of the pigs. A flexible 'Health and Welfare Programme', dedicated to the unit, is the best method of achieving the required standards. The requirements in this section are outlined below.

**1.1 All pigs** All pigs must be able to lie down, rest and stand up without difficulty. All pigs must have a clean area to rest. All pigs must be able to see other pigs.

**1.2 Boars** Boars must be able to turn around. They must be able to see, smell and hear other pigs. Their pen must provide them with at least 6m<sup>2</sup> unobstructed floor area, including a clean resting area. If the pen is used for natural service it must be larger. From 1.1.2003 any such new or renovated service pens must be at least 10m<sup>2</sup>. From 1.1.2005 all such pens for natural service must be at least this size.



**1.3 Sows and gilts** Sows and gilts must be treated for internal and external parasites and be clean before moving to the farrowing area. Sufficient space must be provided behind the sow or gilt to allow natural or assisted farrowing.

**1.4 Piglets** Piglets must be provided with a source of heat. The lying area must be solid and comfortable and allow all the piglets to rest at the same time. Piglets must be protected from over-lying by the sow.



Suckling access to the sow must be unhindered. Tail and tooth clipping may only be performed where either of two situations arise i.e. (a) where damage to sows' teats or (b) tail biting of other pigs cannot otherwise be prevented. Where practiced, such procedures must be done before 7 days of age.

**1.5 Weaning age** Piglets may not be weaned before 28 days of age, unless the health or welfare of the sow or piglets would otherwise be affected. An exception to this rule allows for earlier weaning which must be no younger than 21 days of age. In this situation separate specialised accommodation must be provided for the weaned pigs. This accommodation must be fully cleaned and disinfected prior to the introduction of each new group of weaners.

**1.6 Weaners** Weaners must be grouped as soon as possible after weaning to form stable groups. Subsequent mixing must be minimised to avoid risk of aggression.

## **2. ENVIRONMENT**

The standard of accommodation also has a significant bearing on the welfare of pigs. A minimum level of safety, design and maintenance is required.



**2.1 Housing materials** All housing materials (especially crates, feed and water supply equipment and electric circuits) must be made of materials and maintained so that they are not harmful to the pigs. Such materials must be easy to clean and disinfect (except electrics).

**2.2 Floors** Floors must be smooth and non-slippery. They must be adequately drained and suitable for the age, weight and type of pig. From 1.1.2003, any new or renovated systems must be designed to meet extra specific technical requirements (see 3.6, 3.9 – 3.13 below).

**2.3 Lighting** All pig accommodation must be well lit (at least 40 lux) for 8 continuous hours a day. The light source may be either natural or artificial.

This may be achieved by windows or by artificial light connected to a timer. It is illegal to keep pigs in continuous darkness. An adequate source of light must be available to inspect the pigs at any time.



**2.4 Ventilation** The ventilation, heating and insulation system must ensure adequate air circulation. These systems must ensure that the temperature, dust levels, relative humidity and gas concentrations are not harmful to the pigs.

**2.5 Noise** Pigs must not be exposed to continuous noise which is louder than 85 decibels.

**2.6 Fire alarm** A fire alarm is required which must be tested at least once a month and maintained in proper working order.

### **3. MANAGEMENT**

The factor which links a good standard of environment with pig health and welfare is management. The stockman must inspect the pigs daily and ensure that the basic welfare needs of the pigs are met (e.g. adequate feed and water supply, ventilation, hygiene, care of sick pigs and correct stocking density).



The requirements of this section are outlined as follows:

**3.1 Experienced personnel** There must be a sufficient number of experienced personnel to look after the pigs. Any person who employs staff on a pig farm is legally obliged to ensure that the staff have been given instruction and guidance on pig welfare and that they are familiar with the pig welfare legislation.

**3.2 Feed and water** Pigs must be fed an adequate and nutritional diet at least once a day. The diet must be adapted to the age, weight and behavioural and physiological needs of the pigs to promote a positive state of well-being. To reduce aggression and bullying, each pig kept in a group must have access to feed at the same time, unless the group is fed ad lib or by an electronic sow feeding system. All pigs over 2 weeks of age must have permanent access to a sufficient supply of fresh water. This equally applies to sick pigs.



### 3.3 Cleaning and disinfection

Accommodation and equipment with which the pigs come in contact must be cleaned and disinfected with an approved disinfectant to prevent cross-infection and the build up of disease causing organisms. Faeces, urine and uneaten or spilt food must be removed, as necessary, to prevent a fly or rodent problem developing.

### 3.4 Health and welfare inspection

The health and welfare of all pigs must be inspected at least once a

day. Any sick or injured pigs or victims of aggression, must be treated appropriately without delay. If necessary, such pigs should be isolated and receive veterinary attention. Specific hospital pens should be available with dry, comfortable bedding. Water must be provided even if the pigs are normally wet fed, as sick or injured pigs may be off their food, but yet need to drink.

**3.5 Sick and injured pigs** Terminally sick and severely injured pigs must be euthanased humanely. They must not be allowed to linger indefinitely when treatment has not been successful. Pigs should be euthanased by a

veterinary practitioner or by a stockman using an approved method. The stockman must be trained and competent in any such procedure adopted on farm.

**3.6 Pens for sick, injured or bullied pigs** Sick, injured or bullied pigs may be transferred temporarily from group pens to individual pens. From 1.1.2003 such pigs must be able to turn around easily in the pen in any newly built or renovated holding. From 1.1.2013 all such pens must allow pigs to turn around easily.

**3.7 Inspection of automated or mechanical equipment** All automated or mechanical equipment essential for the well-being of the pigs must be inspected at least once a day. Any defects must be rectified immediately or an alternative backup employed. This particularly applies to the feed and water supply and to ventilation. Where pigs are dependant on mechanical ventilation, a back-up system must be in place to maintain a supply of fresh air. The housing must be alarmed to inform the owner or person in charge of a breakdown. The alarm must be tested at least once a month and maintained in proper working order.

**3.8 Tethers** It is essential, where tethers are still used, that they must be inspected regularly and closely. Tethers that become tight can cause serious injury and chronic pain. The introduction of tethers into new houses has been banned since 1.1.1996. Their routine use will be completely prohibited from 1.1.2006. From this date, buildings already used to house sows and gilts in tethers prior to 1.1.2003, may convert to stalls or group pens. After 1.1.2006 tethers may be used for a brief period e.g. treatment administration; A.I. service.

**3.9 Stalls and group housing of sows and gilts after service** New rules apply from 1.1.2003 in any houses which are newly built or rebuilt or brought into use for the first time. Sows and gilts must be kept in groups during the period starting from 4 weeks after service to 1 week before the expected time of farrowing. Buildings already used to house sows





and gilts in stalls prior to 1.1.2003 may continue as they are until 1.1.2013.

Ultimately, all sows and gilts must be group housed during the period starting from 4 weeks after service to 1 week before the expected time of farrowing by 1.1.2013.

**3.10 Dimensions of group pens for sows and gilts after service** Group pens must have sides greater than 2.8 metres in length. However, if the group is smaller than 6, the pen side length must be at least 2.4 metres.

**3.11 Space requirements in group pens for sows and gilts after service** (See Tables 1-3 below). The total unobstructed floor area available in a group pen must be at least 1.64 m<sup>2</sup> for each gilt and 2.25 m<sup>2</sup> for each sow. However, if the group is comprised of fewer than 6 gilts the minimum space must be increased by 10% to 1.81m<sup>2</sup> for each gilt. Similarly, if the group is comprised of fewer than 6 sows the minimum space must be increased by 10% to 2.5m<sup>2</sup> for each sow.

If, on the other hand, the groups size is greater than 40, there is the option of decreasing the space for each pig by 10%, i.e. 1.48m<sup>2</sup> for each gilt and 2.025m<sup>2</sup> for each sow, which takes account of the space shared by pigs.

**3.12 The lying area in group pens for sows and gilts after service** (See also Tables 1-3 below). Part of the floor space within group pens must be a designated lying area in the form of a continuous solid floor i.e. the drainage openings must be no more than 15%. There must be at least 0.95m<sup>2</sup> of this flooring available to each gilt in a group pen. Similarly, there must be at least 1.3m<sup>2</sup> of this flooring available to each sow in a group pen. The remainder of the floor may be either solid or slatted.

*Table 1: Group pens for 5 sows /served gilts or less*

Minimum pen-side length	Area	m2
2.4 m	Minimum total floor area /sow	2.5
	Minimum total floor area /gilt	1.81
	Minimum exercise area /sow	1.2
	Minimum exercise area /gilt	0.86
	Minimum lying area /sow	1.3
	Minimum lying area /gilt	0.95

*Table 2: Group pen for 6 to 39 sows/served gilts*

Minimum pen-side length	Area	m2
2.8 m	Minimum total floor area /sow	2.25
	Minimum total floor area /gilt	1.64
	Minimum exercise area /sow	0.95
	Minimum exercise area /gilt	0.69
	Minimum lying area /sow	1.3
	Minimum lying area /gilt	0.95

*Table 3: Group pen for 40 or more sows / served gilts*

Minimum pen-side length	Area	m2
2.8 m	Minimum total floor area /sow	2.025
	Minimum total floor area /gilt	1.48
	Minimum exercise area /sow	0.725
	Minimum exercise area /gilt	0.53
	Minimum lying area /sow	1.3
	Minimum lying area /gilt	0.95

**3.13 Details of concrete slats for all pigs** If floors are made with concrete slats, then the following dimensions must be used:

*Table 4: The maximum width of the slat opening must be no more than:*

Pig category	Maximum slat opening
Piglets	11mm
Weaners	14mm
Finishers	18mm
Sows and gilts	20mm

*Table 5: The minimum slat width must be at least:*

Pig category	Minimum slat width
Piglets and weaners	50mm
Finishers, sows and gilts	80mm

**3.14 Stocking densities for finishing pigs** Finishing pigs must not be kept in overcrowded conditions.



*Table 6: The current minimum space requirements for growing pigs. (These figures are to be reviewed in a Commission report following research in 2008):*

Average weight	Min. space/pig (m <sup>2</sup> )
Up to 10 kg	0.15
10 – 20 kg	0.2
20 – 30 kg	0.3
30 – 50 kg	0.4
50 –85 kg	0.55
85 –110 kg	0.65
More than 110 kg	1.0

**3.15 Environmental enrichment** From 1.1.2003 all pigs in holdings which are newly built or rebuilt or brought into use for the first time must be provided with manipulable material. This includes boars, dry and lactating sows and gilts. However, this requirement does not apply to sows and gilts until 1.1.2013 in those houses which have been in use since before 1.1.2003.

Manipulable material has two functions: (a) to satisfy the rooting and investigatory behaviour of pigs and (b) to reduce the risk of injuries due to vices (e.g. tail biting). Examples of manipulable material are chopped straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such materials. Whatever material is used, it must not affect the health of the pigs.

**3.16 High fibre food for sows and gilts** From the 1.1.2003, all dry pregnant sows and gilts must be given sufficient quantity of bulky or high-fibre food in addition to their normal energy food. This requirement is to prevent these animals from suffering from hunger throughout pregnancy and to satisfy their need to chew. This is a separate and quite different requirement from manipulable material, unless the manipulable material is edible e.g. sows group housed on straw, where the straw both serves as manipulable material and satisfies their hunger. (The requirement for added fibre does not apply to lactating sows as they are fed enough to prevent hunger developing).

*Table 7: Exceptions to the legislation on pig welfare which applies from the 1<sup>st</sup> January 2003.*

REQUIREMENT	OPERATIONAL DATE
Installation of new tethers for sows/gilts	Prohibited since 1.1.1996
Complete prohibition on tethers for sows/gilts. (This includes lactating sows).	1.1.2006
Group housing of pregnant sows and gilts from 4 weeks after service and 1 week prior to farrowing	1.1.2003 in any houses built or rebuilt or brought into use for the first time
Houses with tethered sows or gilts in use prior to 1.1.2003	Convert to stalls or group housing by 1.1.2006

Table 7 (contd.)

REQUIREMENT	OPERATIONAL DATE
Houses with pregnant sows or gilts in stalls in use prior to 1.1.2003	Convert to group housing from 4 weeks after service and 1 week prior to farrowing by 1.1.2013
All pregnant sows and gilts in group housing from 4 weeks after service and 1 week prior to farrowing	1.1.2013
Pens for sick, injured or bullied pigs	From 1.1.2003 such pigs transferred to individual pens must be able to turn around easily in any newly built or renovated holding. From 1.1.2013 all such pens must allow pigs to turn around easily.
<i>Permanent access to manipulable material</i>	
(i) for all growing pigs	1.1.1995
(ii) for sows, gilts and boars	1.1.2003 in any houses built or rebuilt or brought into use for the first time
(iii) for all sows, gilts and boars	1.1.2013
New details for concrete slatted floors	1.1.2003 in any houses built or rebuilt or brought into use for the first time
All concrete slatted floors	1.1.2013
Boar pens 6m <sup>2</sup> unobstructed floor area	1.1.1995
Boar pens used for natural service must provide 10m <sup>2</sup>	1.1.2003 in any houses built or rebuilt or brought into use for the first time
All boar pens used for natural service must provide 10m <sup>2</sup>	1.1.2005

# THE WELFARE OF PIGS DURING TRANSPORT

## 1. PIG HANDLING

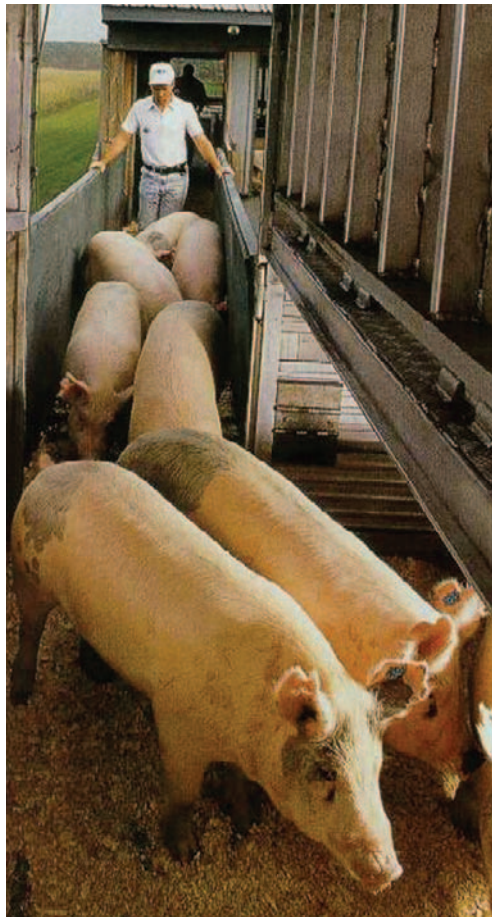
Any person involved in the transport of pigs is legally obliged to handle them with care and not to mistreat them. Pigs must not be transported in such a way as is likely to cause injury or unnecessary suffering.

During transport, including at loading and unloading, pigs must not be suspended by mechanical means, nor lifted or dragged by the head, ears, legs or tail.

**1.1 Fitness to Travel** It is illegal for anyone to cause or permit the transport of pigs unless they are fit for the intended journey. Suitable provision must be made for their care during the journey and on arrival at their place of destination.

A pig may be unfit to travel if it is new-born, aged, diseased, ill, injured or fatigued. It is illegal to transport a pig if it has given birth within the preceding 48 hours or likely to give birth during transport. Navels of new-born pigs must be dry and fully healed.

However, it is permitted that pigs which are only slightly ill or injured may be transported, so long as the transport will not cause them unnecessary suffering.



**1.2 Segregation during Transport** Adult boars must be separated from females during transport.

**1.3 Space** The transporter must ensure that the vehicle is not overcrowded. Pigs must be accommodated in such a way as to avoid any risk of injury or unnecessary suffering.

Pigs must be provided with adequate space to stand in their natural position. Where necessary, partitions must be used to protect the pigs from injury due to vehicle motion. Pigs must be given sufficient space so that all can lie down at the same time. Finished pigs of 100 kg must be given at least 0.425m<sup>2</sup> each. Alternatively, the loading density on board must not exceed 235kg/m<sup>2</sup> for pigs of 100kg.

Pigs are particularly sensitive to heat stress. Consequently, the stocking density should be further reduced during hot weather, especially when transporting cull sows or boars.

Any means utilized to encourage the movement of pigs must not cause any unnecessary pain or suffering.

## **2. VEHICLE STRUCTURE AND MAINTENANCE**

The vehicle must be suitable to transport pigs. The vehicle must be escape-proof and sufficiently strong to bear the weight of the pigs it is to carry. The walls, partitions, floors and side-protection gates must be free of any sharp edges, protrusions, gaps, holes and spaces that are likely to cause injury. Slippery conditions on floors must be avoided.

**2.1 Ventilation and Inspection** Sufficient apertures must be provided in the walls of the transport vehicle to provide adequate ventilation for the pigs.

Sufficient space must be provided inside the pigs' compartment and at each of its levels (tiers) to ensure that there is adequate ventilation above the pigs when they are in their natural standing position. Apertures suitable for the inspection of pigs during transport must be provided.

**2.2 Roofs** The vehicle should be fitted with a strong, weatherproof roof which protects all pigs on board. The roof must also prevent the pigs from escaping. Care must be exercised, however, as the placing of a roof on an existing vehicle may compromise ventilation requirements.

**2.3 Ramps** Suitable equipment for loading i.e. ramps including the slats; bridges; gangways and side-protection gates, must be used. Ramps must be sufficiently well maintained to prevent slipping, tripping or injuries. (It is highly recommended that pigs are unloaded on the level).

## **3. VEHICLE CLEANLINESS**

Vehicles must be thoroughly clean prior to loading and, where appropriate, disinfected.

In multilevel transport vehicles, floors must be impervious to excreta to prevent pigs below from becoming soiled.





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