Best Practice for the Welfare of Animals during TRANSPORT

For further information please contact:
The Secretary
Farm Animal Welfare Advisory Council
Animal Health and Welfare Division
Agriculture House
Kildare Street, Dublin 2
www.agriculture.gov.ie/fawac
September 2007
Farm Animal Welfare Advisory Council

BEST PRACTICE FOR THE WELFARE OF ANIMALS DURING TRANSPORT

CONTENTS

1. Introduction
   1.1 Guiding principles for animal welfare during transport
   1.2 The Five Freedoms Concept
   1.3 Responsibilities
   1.4 Competence

2. Planning the journey
   2.1 General considerations
   2.2 Preparation of animals for the journey
   2.3 Nature and duration of the journey
   2.4 Transport vehicle design and maintenance
   2.5 Space allowance
   2.6 Rest, water and feed
   2.7 Ability to observe animals during the journey
   2.8 Control of disease
   2.9 Emergency response procedures
   2.10 Other considerations
   2.11 Documentation
   2.12 Pre-journey period
   2.13 Selection of compatible groups
   2.14 Fitness to travel
   2.15 Specific species requirements

3. Loading
   3.1 Tips for handling animals
   3.2 Facilities
   3.3 Goads and other aids

4. Travel
   4.1 General considerations
   4.2 Methods of restraining or containing animals
   4.3 Regulating the environment within vehicles
   4.4 Care of sick or injured animals
   4.5 Water and feed requirements
   4.6 Rest periods and conditions including hygiene
   4.7 In-transit observations

5. Unloading and post-journey handling
   5.1 General considerations
   5.2 Sick or injured animals
   5.3 Addressing disease risks
   5.4 Cleaning and disinfection

Acknowledgements

Appendix I:
Link to Department of Agriculture, Fisheries and Food (DAFF) Website for EC and National legislation on animal transport
Link to DAFF Video on Animal Welfare During Transport
Link to World Organisation for Animal Health Website

Appendix 2:
1. An Introduction by Professor Patrick Fottrell

Chairperson of the Farm Animal Welfare Advisory Council

The Farm Animal Welfare Advisory Council was set up to allow representative groups with a variety of perspectives on animal welfare, meet and exchange views, seek consensus on various issues and developments relevant to the care of farm animals. These guidelines are the product of this consensus and have been adopted unanimously by the Council.


The “Best Practice for the Welfare of Animals During Transport” guidelines have been produced to encourage and assist all those involved in the transportation of live animals to adopt and maintain the highest standards of animal welfare prior to, during and post transport. These guidelines apply to the following live domesticated animals: cattle, sheep, goats, pigs, and equines.

The Council has adopted the best farm animal husbandry practices and welfare standards, which take account of the five basic needs:

1. Freedom from thirst, hunger and malnutrition
2. Freedom from discomfort
3. Freedom from pain, injury and disease
4. Freedom to express normal patterns of behaviour
5. Freedom from fear and distress

In maintaining these guidelines transporters, owners, managers, animal handlers and others can demonstrate Ireland’s prominence in the practice of farm animal welfare standards.

Professor Patrick Fottrell
Chairperson
1.1 Guiding Principles for Animal Welfare during National Transport

These guidelines apply to the following live domesticated animals: cattle, sheep, goats, pigs, and equines. Wild and partly domesticated animals may need different conditions. While these Guidelines generally apply to all transport situations there are additional requirements for journeys in excess of 65 KM which are denoted by means of * in this document.

1.2 The Five Freedoms Concept

In essence, animal transport guidelines are the application of sensible and sensitive animal husbandry practices to the transport of livestock present on the farm. Animal welfare is concerned with the well being of the animal and complements the objectives of assurance schemes that demonstrate the production of safe food to consumers and food chain stakeholders.

Welfare codes usually list five basic freedoms that should underpin animal welfare best practice at farm level. The five freedoms are listed below and provide an overall concept of animal welfare.

1. Freedom from thirst, hunger and malnutrition
2. Freedom from discomfort
3. Freedom from pain, injury and disease
4. Freedom to express normal patterns of behaviour
5. Freedom from fear and distress

Animals can be transported more effectively and with less stress if:

- Care is taken in the selection of animals prior to transportation;
- Care is taken in the loading/unloading of animals, using facilities well designed for animals;
- Well designed road transport vehicles are used;
- The trip is scheduled to minimise delays during transport or at the point of disembarkation of the animals.
1.3 Responsibilities

Once the decision to transport animals by road has been made the welfare of the animals during their journey is the paramount consideration in order to avoid illness and injury. It is the joint responsibility of all people involved, including:

- The owners and managers of the animals
- Business agents or buying/selling agents
- Animal handlers
- Transport companies, vehicle owners and drivers
- Managers of facilities at the start and at the end of the journey

1.4 Competence

All people responsible for animals during journeys should be competent according to their responsibilities. Competence may be gained through formal training and/or practical experience.

Best practice requires that all persons involved in transport are competent in the following areas:

- planning a journey, including appropriate space allowance, and feed, water and ventilation requirements;
- responsibilities for animals during the journey;
- sourcing of advice and assistance;
- animal behaviour, general signs of disease and indicators of poor animal welfare such as stress, pain and fatigue, and their alleviation;
- assessment of fitness to travel;
- relevant authorities and applicable transport regulations, and associated documentation requirements;
- general disease prevention procedures, including cleansing and disinfection;
- appropriate methods of driving;
- methods of inspecting animals, managing situations frequently encountered during transport such as adverse weather conditions and dealing with emergencies;
2. **PLANNING THE JOURNEY**

### 2.1 General Considerations

Adequate planning is a key factor affecting the welfare of animals during a journey. Before the journey starts, plans should be made in relation to:

- preparation of animals for the journey;
- nature and duration of the journey;
- vehicle design and maintenance, including roll-on roll-off vessels;
- required documentation;
- space allowance;
- rest, water and feed;
- observation of animals en route;
- control of disease;
- emergency response procedures.

### 2.2 Preparation of Animals for the Journey

- When animals are to be provided with a novel diet or method of water provision during transport, an adequate period of adaptation should be planned. For animals such as pigs, which are susceptible to motion sickness and, in order to reduce urine and faeces production during the journey, a short period of feed deprivation prior to loading may be desirable.

- Animals more accustomed to positive contact with humans and with being handled are likely to be less fearful of being loaded and transported. People handling animals should handle and load animals in a manner that reduces their fearfulness and improves their approachability.

- Behaviour-modifying compounds (such as tranquillisers) should not be used routinely during transport. Such compounds should only be administered when a problem exists in an individual animal and should be administered by a veterinarian.
2.3 Nature and Duration of the Journey

The maximum duration of a journey should be determined according to factors such as:

- the ability of the animals to cope with the stress of transport (such as very young, old, lactating or pregnant animals);
- the animals’ previous transport experience;
- the likely onset of fatigue;
- the need for special attention;
- the need for feed and water;
- the increased susceptibility to injury and disease;
- space allowance, vehicle design, road conditions and driving quality;
- weather conditions.

2.4 Transport Vehicle Design and Maintenance

- Vehicles used for the transport of animals should be designed, constructed and fitted as appropriate to the species, size and weight of the animals to be transported; special attention should be paid to the avoidance of injury to animals through the use of secure smooth fittings free from sharp protrusions. The avoidance of injury to drivers and animal handlers while carrying out their responsibilities should be emphasised.

- Vehicles should be designed with the structures necessary to provide protection from adverse weather conditions and to minimise the opportunity for animals to escape.

- In order to minimise the likelihood of the spread of infectious disease during transport, vehicles should be designed to permit thorough cleansing and disinfection and, the containment of faeces and urine during a journey.

- Vehicles should be maintained in good mechanical and structural condition.

- Vehicles should have adequate ventilation to meet variations in climate and specific needs of the animal species being transported; the ventilation system (natural or mechanical) should be effective when the vehicle is stationary.

- Vehicles should be designed so that the faeces or urine from animals on upper levels do not soil animals on lower levels, nor their feed and water.

- When vehicles are carried on board roll-on roll-off ferries, facilities for adequately securing them must be available.
• If feeding or watering while the vehicle is moving is required, adequate facilities on the vehicle should be available.

• When appropriate, suitable bedding should be added to vehicle floors to assist absorption of urine and faeces, to minimise slipping by animals and to protect animals (especially young animals) from hard flooring surfaces and adverse weather conditions.

• It is important to facilitate the partitioning of a vehicle when necessary.
2.5 **Space Allowance**

- The number of animals which should be transported on a vehicle and their allocation to compartments should be determined before loading.
  
  *(See Table page 9)*

- The space required on a vehicle depends upon whether or not the animals need to lie down (for example, pigs and young animals), or to stand (horses). Animals that will need to lie down often stand when first loaded or when the vehicle is driven with too much side-to-side movement or sudden braking.

- When animals lie down, they should all be able to adopt a normal lying posture which prevents heat stress.

- When animals are standing, they should have sufficient space to adopt a balanced position as appropriate to the climate and species transported.

- The amount of headroom necessary depends on the species of animal. Each animal should be able to assume its natural position for transport (including during loading and unloading) without coming into contact with the roof or upper deck of the vehicle.

- Other factors that may influence space allowance include:
  - vehicle design;
  - length of journey;
  - need to provide feed and water on the vehicle;
  - quality of roads;
  - expected weather conditions, especially transporting pigs in hot weather.
### A. Domestic equidae: Transport by road

<table>
<thead>
<tr>
<th>Category</th>
<th>Approximate weight in kg</th>
<th>Area in m²/animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult horses</td>
<td>1,75 m² (0,7 × 2,5 m)</td>
<td></td>
</tr>
<tr>
<td>Young horses (6 — 24 months)</td>
<td>1,2 m² (0,6 × 2 m)</td>
<td></td>
</tr>
<tr>
<td>Ponies (under 144 cm)</td>
<td>1 m² (0,6 × 1,8 m)</td>
<td></td>
</tr>
<tr>
<td>Foals (0 — 6 months)</td>
<td>1,4 m² (1 × 1,4 m)</td>
<td></td>
</tr>
</tbody>
</table>

Note: During long journeys, foals and young horses must be able to lie down.

These figures may vary by a maximum of 10% for adult horses and ponies and by a maximum of 20% for young horses and foals, depending not only on the horses' weight and size but also on their physical condition, the meteorological conditions and the likely journey time.

### B. Bovine animals: Transport by road

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight in kg</th>
<th>Area in m²/animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small calves</td>
<td>50kg</td>
<td>0,30 to 0,40</td>
</tr>
<tr>
<td>Medium sized calves</td>
<td>110kg</td>
<td>0,40 to 0,70</td>
</tr>
<tr>
<td>Heavy calves</td>
<td>200kg</td>
<td>0,70 to 0,95</td>
</tr>
<tr>
<td>Medium sized cattle</td>
<td>325kg</td>
<td>0,95 to 1,30</td>
</tr>
<tr>
<td>Heavy cattle</td>
<td>550kg</td>
<td>1,30 to 1,60</td>
</tr>
<tr>
<td>Very heavy cattle</td>
<td>&gt; 700kg</td>
<td>&gt; 1,60</td>
</tr>
</tbody>
</table>

These figures may vary, depending not only on the animals' weight and size but also on their physical condition, the meteorological conditions and the likely journey time. Pregnant animals must be allowed 10% more space.

### C. Sheep/Goats: Transport by road

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight in kg</th>
<th>Area in m²/animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shorn sheep and lambs of 26 kg and over:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 55kg:</td>
<td>0,20 to 0,30</td>
<td></td>
</tr>
<tr>
<td>&gt; 55</td>
<td>&gt; 0,30</td>
<td></td>
</tr>
<tr>
<td>Unshorn sheep:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 55</td>
<td>0,30 to 0,40</td>
<td></td>
</tr>
<tr>
<td>&gt; 55</td>
<td>&gt; 0,40</td>
<td></td>
</tr>
<tr>
<td>Heavily pregnant ewes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 55kg:</td>
<td>0,40 to 0,50</td>
<td></td>
</tr>
<tr>
<td>&gt;55</td>
<td>&gt; 0,50</td>
<td></td>
</tr>
<tr>
<td>Goats:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 35</td>
<td>0,20 to 0,30</td>
<td></td>
</tr>
<tr>
<td>35 to 55</td>
<td>0,30 to 0,40</td>
<td></td>
</tr>
<tr>
<td>&gt; 55</td>
<td>0,40 to 0,75</td>
<td></td>
</tr>
<tr>
<td>Heavily pregnant goats:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 55</td>
<td>0,40 to 0,50</td>
<td></td>
</tr>
<tr>
<td>&gt; 55</td>
<td>&gt; 0,50</td>
<td></td>
</tr>
</tbody>
</table>

The surface area indicated above may vary depending on the breed, the size, the physical condition and the length of fleece of the animals, as well as on the meteorological conditions and the journey time. As an indication: for small lambs, an area of under 0.2 m² per animal may be provided.

### D. Pigs: Transport by rail and by road
- All pigs must at least be able to lie down and stand up in their natural position.
- In order to comply with these minimum requirements, the loading density for pigs of around 100 kg should not exceed 235 kg/m².
- The breed, size and physical condition of the pigs may mean that the minimum required surface area given above has to be increased; a maximum increase of 20% may also be required depending on the meteorological conditions and the journey time.

*(Council Regulation (EC) 1/2005 Refers)*
2.6 **Rest, Water and Feed***

There should be planning for the availability of suitable water and feed as appropriate and needed for the species, age, and condition of the animals, as well as the duration of the journey, climatic conditions, etc.

*In general the maximum journey time for Cattle, Sheep, Pigs and non-registered horses/donkeys is 8 hours. This maximum journey time can only be exceeded where certain additional requirements are met. These additional requirements include additional vehicle specifications, ventilation requirements, satellite tracking systems and the completion of a journey log. (See Appendix 1)*

2.7 **Ability to Observe Animals During the Journey**

Animals should be positioned to enable each animal to be observed regularly during the journey to ensure their safety and good welfare.

2.8 **Control of Disease**

As animal transport is often a significant factor in the spread of infectious diseases, journey planning should take the following into account:

- mixing of animals from different sources in a single consignment should be minimised;
- contact at resting points between animals from different sources should be avoided;
- when possible, animals should be vaccinated against diseases to which they are likely to be exposed at their destination;

2.9 **Emergency Response Procedures**

There should be an emergency management plan that identifies the important adverse events that may be encountered during the journey, such as punctures or road traffic accidents, the procedures for managing each event and the action to be taken in an emergency. The plan should document the actions to be undertaken and the responsibilities of all parties involved, including emergency contact numbers and record keeping.
2.10 Other Considerations

Extreme weather conditions are hazardous for animals undergoing transport and require appropriate vehicle design to minimise risks. Special precautions should be taken for animals, especially pigs, that have not been acclimatised or which are unsuited to either hot or cold conditions. In some extreme conditions of heat or cold, animals should not be transported at all.

In some circumstances, transportation during the night may reduce thermal stress or the adverse effects of other external stimuli.

2.11 Documentation

Animals should not be loaded until all the documentation required is completed.

(See Appendix 1 for legal requirements in relation to documentation)

2.12 Pre-journey Period

It should be noted that loading and unloading represent the most stressful events during the transport of animals. Therefore, every effort should be made to apply best practice during these procedures. Prior to the journey appropriate feed and water should be provided for the animals and they should be fully rested.

2.13 Selection of Compatible Groups

Compatible groups should be selected before transport to avoid adverse animal welfare consequences. The following guidelines should be applied when assembling groups of animals:

- animals reared together should be maintained as a group; animals with a strong social bond should be transported together;
- animals of the same species can be mixed unless there is a significant likelihood of aggression; aggressive animals should be segregated; for some species, animals from different groups should not be mixed because poor welfare occurs unless they have established a social structure;
- young or small animals should be separated from older or larger animals, with the exception of a nursing mother with young at foot;
- animals with horns should not be mixed with animals lacking horns unless judged to be compatible;
animals of different species should not be mixed unless they are judged to be compatible.

(See Appendix 1 in relation to Regulations)

2.14 Fitness to Travel

No animal shall be transported unless it is fit for the intended journey and all animals shall be transported in conditions guaranteed not to cause them injury or unnecessary suffering.

Each animal should be inspected by an animal handler to assess fitness to travel. If its fitness to travel is in doubt, the animal should be examined by a veterinarian. Animals found unfit to travel should not be loaded onto a vehicle, except for transport to receive veterinary treatment. (See Appendix 1)

Humane and effective arrangements should be made by the owner or agent for the handling and care of any animal rejected as unfit to travel.

Unfitness to travel includes animals if for example;

- they are unable to move independently without pain or to walk unassisted
- they have a severe open wound, or prolapse
- they are pregnant females for whom 90% or more of the expected gestation period has already passed, or females who have given birth in the previous week

(For a complete list see Annex 1, Chapter 1 of Council Regulation (EC) No 1/2005)

Sick or injured animals may be considered fit for transport if they are;

- slightly injured or ill and transport would not cause additional suffering; in cases of doubt, veterinary advice shall be sought
- transported under veterinary supervision for or following veterinary treatment or diagnosis. However, such transport shall be permitted only where no unnecessary suffering or ill treatment is caused to the animals concerned

(For a complete list see Annex 1, Chapter 1 of Council Regulation (EC) No 1/2005)

Risks during transport can be reduced by selecting animals best suited to the conditions of travel and those that are acclimatised to expected weather conditions.

Animals ‘at risk’ which require special conditions (such as in the design of facilities and vehicles, and the length of the journey) and additional attention during transport, may include:
• vulnerable animals such as young calves or animals which have recently been ill;
• large, obese or old animals;
• excitable or aggressive animals or animals which have had little contact with humans;
• animals subject to motion sickness;
• females in late pregnancy or heavy lactation, dam and offspring;

2.15 Specific Species Requirements

Transport procedures should be able to take account of variations in the behaviour of the species. Flight zones, social interactions and other behaviour vary significantly among species and even within species. Facilities and handling procedures that are successful with one species are often ineffective or dangerous with another.

3. Loading

• Loading should be carefully planned as it has the potential to be the cause of poor welfare in transported animals.
• Loading should be supervised and/or conducted by animal handlers. These animal handlers should ensure that animals are loaded quietly and without unnecessary noise, harassment or force, and that untrained assistants or spectators do not impede the process.
3.1 Tips for Handling Animals
(http://www.grandin.com/references/new.corral.html)

- Keep animal calm – Calm animals are easier to move and load. When animals become agitated, it takes up to 30 minutes for them to calm down.

- Move animal at a walk or a trot – Injuries from falls and bruising increases when animals run into gates and fences.

- Reduce noise – Animals have very sensitive ears and shouting and whip cracking stresses them. Handlers should not shout or constantly whistle.

- Eliminate Electric Prods – In most facilities animals can be loaded and unloaded without electric prods. A flag or paddle stick or other non-electric aid should be a person’s primary handling tool. Truckers and handlers must not constantly carry around electric prods. Several feedlots have greatly reduced costly dark cutting carcasses by eliminating electric prods during truck loading.

- Use Behavioural Principles – Handlers should be trained so that they understand the behavioural principles of flight zone and point of balance (Figure 1).

To keep animals calm and move them easily, the handler should work on the edge of the flight zone. He penetrates the flight zone to make the animals move and he backs up if he wants them to stop moving. The best positions are shown on the diagram. The handler should avoid the blind spot behind the animal’s rear. Deep penetration of the flight zone...
should be avoided. Animals become upset when a person is inside their personal space and they are unable to move away. If animals turn back and run past the handler while they are being driven down a drive alley in the stockyard, overly deep penetration of the flight zone is a likely cause. The animals turn back in an attempt to get away from the handler. If the animals start to turn back, the handler should back up and increase the distance between him and the animals. Backing up must be done at the first indication of a turn back. If a group of animals balk at a smell or a shadow up ahead, be patient and wait for the leader to cross the shadow. The rest of the animals will follow. If cattle rear up in a loading chute, back away from them (Figure 2). Do not touch them or hit them. They are rearing in an attempt to increase the distance between themselves and the handler. They will usually settle down if you leave them alone.

The point of balance is at the animal's shoulder. Animals will move forward if the handler stands behind the point of balance. They will back up if the handler stands in front of the point of balance. Many handlers make the mistake of standing in front of the point of balance while attempting to make an animal move forward in a chute. Groups of animals in a chute will often move forward without prodding when the handler walks past the point of balance in the opposite direction of each animal in the chute. It is not necessary to prod every animal. If the animals are moving through the chute by themselves, leave them alone.

Walking quickly past the point of balance at the animal's shoulder in the opposite direction as desired movement is an easy way to induce an animal to move forward. The principle is to walk inside the flight zone in the opposite direction of desired movement and to return to the starting position by walking outside the flight zone. The animal has to be able to see you to make this movement pattern work. In chute (race) systems with completely solid sides you may need to make a small slit at animal eye level along the inner radius. In curved systems the handler should work along the inner radius and the outer radius should have a completely solid fence. In systems with catwalks alongside the chute the animals will be able to see you and the chute (race) sides should be completely solid.

- **Make Animal Flow** – Animals will move up a ramp and onto a truck more easily if they are quietly driven up to the ramp and immediately loaded. Do NOT allow animals to stand and turn around in the crowd pen that leads to a loading ramp. Animals should not be brought up to the loading ramp until the truck is ready to load.

- **Remove Distractions** – If animals refuse to move up a loading ramp or down an alley, remove distractions that cause them to balk. Some common distractions are seeing people up ahead, reflections off puddles, vehicles parked near the chute, dogs, or a piece of chain hanging down. Painting the facility one colour to reduce contrast and installing solid fences on ramps and around pens will often improve animal movement. Solid sides improve movement because they prevent animals from seeing distractions outside the fence.
3.2 Facilities

a. The facilities for loading including the collecting area, races and loading ramps should be designed and constructed to take into account the needs and abilities of the animals with regard to dimensions, slopes, surfaces, absence of sharp projections, flooring, etc.

Figure 1. Flight zone and point of Balance

Figure 2. Point of balance diagram

Handler movement pattern to keep cattle moving into a squeeze chute or restrainer.
b. Loading facilities should be properly illuminated to allow the animals to be observed by the animal handler(s), and to allow the animals’ ease of movement at all times. Facilities should provide uniform light levels directly over approaches to sorting pens, chutes, loading ramps, with brighter light levels inside vehicles, in order to minimise baulking. Artificial lighting may be required. As a result in the change of Mart times with the move to part time farming, adequate internal lighting should be provided in the trailers thereby facilitating easy loading.

c. Ventilation during loading and the journey should provide for fresh air, the removal of excessive heat, humidity and noxious fumes (such as ammonia and carbon monoxide), and the prevention of accumulations of ammonia and carbon dioxide. Under warm and hot conditions, ventilation should allow for the adequate convective cooling of each animal. In some instances, adequate ventilation can be achieved by increasing the space allowance for animals.

3.3 Goads and Other Aids

The following principles should apply:

- Animals, which have little or no room to move, should not be subjected to physical force or goads and other aids which compel movement.
- Useful and permitted aids include panels, flags, plastic paddles, flappers (a length of cane with a short strap of leather or canvas attached), plastic bags and metallic rattles; they should be used in a manner sufficient to encourage and direct movement of the animals.
- Painful procedures (including whipping, tail twisting, use of nose twitches, pressure on eyes, ears or external genitalia), or the use of unsuitable goads or other aids (including sticks with sharp ends, lengths of metal piping, fencing wire or heavy leather belts), should not be used to move animals.
- The use of instruments which administer electric shocks shall be avoided as far as possible. In any case, these instruments shall only be used for adult bovine animals and adult pigs which refuse to move and only when they have room ahead of them in which to move. The shocks shall last no longer than one second, be adequately spaced and shall only be applied to the muscles of the hindquarters. Shocks shall not be used repeatedly if the animal fails to respond.
- The use of well-trained dogs to help with the loading of some species may be acceptable.
- The throwing or dropping of animals, or their lifting or dragging by body parts such as their tail, head, horns, ears, limbs, wool or hair should not be permitted. The manual lifting of small animals is permissible.
- Shouting at animals or making loud noises should be avoided.
4. TRAVEL

4.1 General Considerations

- Drivers and animal handlers should check the load immediately before departure to ensure that the animals have been properly loaded. Each load should be checked again early in the trip and adjustments made as appropriate. Periodic checks should be made throughout the trip.

- Drivers should utilise smooth, defensive driving techniques, without sudden turns or stops, to minimise uncontrolled movements of the animals. Bad driving, taking bends too quickly, accelerating too quickly and changing gears abruptly can have serious adverse effects on animal welfare during transport. (Click on Links below for examples)

- Drivers should allow sufficient time for the journey
  
  
  http://www.agriculture.gov.ie/fawac/video/sheep_ex2.wvx

4.2 Methods of Restraining or Containing Animals

Methods of restraining animals should be appropriate to the species and age of animals involved and the training of the individual animal.

4.3 Regulating the Environment Within Vehicles

- Animals should be protected against harm from hot or cold conditions during travel. Effective ventilation procedures for maintaining the animals’ environment within vehicles will vary according to whether conditions are cold, hot and dry or hot and humid, but in all conditions a build-up of noxious gases should be prevented.

- The animals’ environment in hot weather can be regulated by the flow of air produced by the movement of the vehicle. In warm and hot weather, the duration of journey stops should be minimised and vehicles should be parked under shade, with adequate and appropriate ventilation.

- To minimise slipping and soiling, and maintain a healthy environment, urine and faeces should be removed from floors when necessary and disposed of in such a way as to prevent the transmission of disease and in compliance with all relevant health and environmental legislation.

4.4 Care of Sick or Injured Animals

- A driver or an animal handler finding sick or injured animals should act according
to a predetermined emergency response plan.

- If possible, sick or injured animals should be segregated.
- In order to reduce the likelihood that animal transport will increase the spread of infectious disease, contact between transported animals, or the waste products of the transported animals, and other farm animals should be minimised.
- When euthanasia is necessary, the driver or animal handler should ensure that it is carried out as quickly as possible and assistance should be sought from a veterinarian or other person(s) competent in humane euthanasia procedures.

4.5 Water and Feed Requirements

If the duration of the journey is such that feeding or watering is required or if the species requires feed or water throughout, access to suitable feed and water for all the animals (appropriate for their species and age) carried in the vehicle should be provided. There should be adequate space for all animals to move to the feed and water sources and due account taken of likely competition for feed. (See Appendix 1 for journeys over eight hours).

4.6 Rest Periods and Conditions Including Hygiene

- Animals that are being transported should be rested at appropriate intervals during the journey and offered feed and water, either on the vehicle or, if necessary, unloaded into suitable facilities (See Appendix 1 for journeys over eight hours).
- Suitable facilities should be used en route, when resting requires the unloading of the animals. These facilities should meet the needs of the particular animal species and should allow access of all animals to feed and water. (See Appendix 1)

4.7 In-Transit Observations

- Animals being transported by road should be observed soon after a journey is commenced and whenever the driver has a rest stop. After meal breaks and refuelling stops, the animals should be observed immediately prior to departure.
- During stops, it should be ensured that the animals continue to be properly confined, have appropriate feed and water, and their physical condition is satisfactory.
5. **UNLOADING AND POST-JOURNEY HANDLING**

5.1 **General Considerations**

- The required facilities and the principles of animal handling apply equally to unloading, but consideration should be given to the likelihood that the animals will be fatigued.

- Unloading should be supervised and/or conducted by an animal handler with knowledge and experience of the behavioural and physical characteristics of the species being unloaded. Animals should be unloaded from the vehicle into appropriate facilities as soon as possible after arrival at the destination but sufficient time should be allowed for unloading to proceed quietly and without unnecessary noise, harassment or force.

- Facilities should provide all animals with appropriate care and comfort, adequate space and ventilation, access to feed (if appropriate) and water, and shelter from extreme weather conditions.

5.2 **Sick or Injured Animals**

- An animal that has become sick, injured or disabled during a journey should be appropriately treated or humanely killed. When necessary, veterinary advice should be sought in the care and treatment of these animals. In some cases, where animals are non-ambulatory due to fatigue, injury or sickness, it may be in the best welfare interests of the animal to be treated or euthanased aboard the vehicle.

- At the destination, the animal handler during transit should ensure that responsibility for the welfare of sick, injured or disabled animals is transferred to a suitable person.

- There should be appropriate facilities and equipment for the humane unloading of animals that are non-ambulatory due to fatigue, injury or sickness. These animals should be unloaded in a manner that causes the least amount of suffering. After unloading, separate pens and other appropriate facilities should be available for sick or injured animals.

- Feed, if appropriate, and water should be available for each sick or injured animal.
5.3 **Addressing Disease Risks**

The following should be taken into account in addressing the greater risk of disease due to animal transport and the possible need for segregation of transported animals at the destination:

- increased contact among animals, including those from different sources and with different disease histories;
- increased stress facilitates the spread of disease;
- exposure of animals to infective agents which may contaminate vehicles, resting points, markets, etc.

5.4 **Cleaning and Disinfection**

- Vehicles used to carry the animals should be cleaned before re-use through the physical removal of manure and bedding by scraping, washing and flushing vehicles with water and detergent. This should be followed by disinfection when there are concerns about disease transmission.
- Manure, litter, bedding should be disposed of in such a way as to prevent the transmission of disease and in compliance with all relevant health and environmental legislation.
- Establishments like livestock markets, slaughterhouses, resting sites, etc. where animals are unloaded should be provided with appropriate areas for the cleaning and disinfection of vehicles.

**Acknowledgements:**

Dr. Temple Grandin, 
Professor of Animal Science

Cover photograph of Goats ©2007 by Hauke Steinberg (www.haukesteinberg.com)

Video Clips of Sheep in Transit: Funded by DEFRA and produced by Mr Michael Cockram and the University of Edinburgh
APPENDIX 1:

http://www.agriculture.gov.ie/animal_health/transport_rules/Council%20Regulation%201%20of%202005.pdf
http://www.agriculture.gov.ie/animaltransport
http://www.agriculture.gov.ie/fawac/video/animal_transport_1.mpeg
http://www.oie.int/eng/normes/mcode/en_titre_3.7.htm
5. FARMERS

5. Farmers
Farmers transporting animals over 65km on a regular basis may have to register with the Department of Agriculture and Food. In relation to training, these farmers will be deemed to have the necessary competence based on agricultural training undertaken in Ireland, the approval process for herd numbers and the availability of a booklet on standards for animal transport.

6. VEHICLES

6. Vehicle Requirements
The design of the vehicle must be to a standard that it provides for the safety of animals during loading, transit and unloading and protect animals from unnecessary suffering, injury and from the weather.

The vehicle must be escape-proof and sufficiently strong to bear the weight of the species 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. There must be access, with sufficient lighting, to the animals in the vehicle to allow them to be inspected and cared for.

In addition, sufficient space should be provided inside the animals’ compartment and at each of its levels, to ensure that there is adequate ventilation above the animals when they are in a naturally standing position, without on any account hindering their natural movement.

Vehicles in which animals are transported must be clearly and visibly marked indicating the presence of live animals.

7. APPROVAL OF VEHICLES

7. Approval of vehicles used on long journeys (over 8 hours in duration).

Vehicles used for the transport of animals on long journeys must be inspected and approved by the Department of Agriculture and Food. Guidelines on the specifications required for vehicles to be approved are available from the Transport Section (contact details below).

SCOPE

These Regulations apply to the transport of all species of vertebrate animals, and to all transport vehicles.

REFERENCES


FOR FURTHER INFORMATION:

Please see our website:

www.agriculture.gov.ie/animaltransport

or contact:

Transport Section
National Beef Assurance Division
Department of Agriculture and Food
Maynooth Business Campus
Maynooth
Co.Kildare

Telephone: 01 5053400
Fax: 01 5053515
Email: transport@agriculture.gov.ie

* The guidelines do not purport to be an interpretation of the legislation
1. INTRODUCTION

1. The Regulation
Council Regulation (EC) No. 1 of 2005 on the protection of animals during transport and related operations lays down the welfare requirements and conditions for the transport, handling, loading and unloading of animals. It came into operation on 1 January 2007 (although some aspects apply from later dates). It applies to the transport of live vertebrate animals including cattle, sheep, goats, pigs, horses, dogs and poultry.

The Regulation introduces changes to improve animal welfare standards during transport and related operations. The new rules harmonise transport requirements throughout the Community and will apply directly to each Member State.

2. APPLICATION OF THE REGULATION

2. Who will the Regulation apply to?
The Regulation will apply to any person who transports animals in connection with an economic activity.

The Regulation provides that:

- All animals being transported must be fit to travel and be transported in a manner that is not likely to cause injury or undue suffering;
- A person transporting animals beyond 65km must be authorised and additional provisions apply in the case of transporting animals beyond 8 hours.

However, the Regulation does not apply to the transport of animals:

- Where the transport is not in connection with an economic activity (e.g., in connection with a hobby, movements to and from agricultural shows, gymkhanas) and
- Where the transport is directly to or from a veterinary practice or clinic under the advice of a veterinarian.

3. AUTHORISATION

3. Who will need to apply for authorisation?
Any person who transports live animals on journeys over 65km for commercial purposes.

There will be two levels of authorisation –

1. Type 1 Authorisation – where animals are transported on journeys over 65km but less than 8 hours in duration; and
2. Type 2 Authorisation – where animals are transported on long journeys (over 8 hours in duration).

3.1 Journeys over 65km but less than 8 hours in duration (transports undertaken within the island of Ireland).
A person who applies for a Type 1 Authorisation as a transporter for journeys over 65km but less than 8 hours in duration must:

(i) Be established within Ireland;
(ii) Demonstrate that he/she has a sufficient staff, equipment and operational procedures at his/her disposal to enable him/her to comply with the Regulation, including where appropriate Good Practice Guides; and
(iii) Not have been convicted of any serious animal welfare offences (under any welfare legislation) in the three years preceding the date of application.

3.2 Journeys over 8 hours in duration (Long Journeys – transports from Ireland)
A person who applies for a Type 2 Authorisation as a transporter for long journeys (over 8 hours in duration) must be able to satisfy the requirements in 3.1

(i) Furthermore the following documents set out below must be submitted to the Department of Agriculture and Food –
(a) A valid certificate of competence (applies from 5 January 2008) for each driver and attendant transporting live animals on journeys over 8 hours in duration,
(b) A valid certificate of approval for each road vehicle which will be issued subject to a satisfactory inspection of the vehicle,
(c) Details of procedures in place enabling the transporter (i) to trace and record the movements of road vehicles under his or her responsibility and (ii) to contact drivers at any time during a long journey,
(d) Contingency plans in the event of emergencies;

(ii) Demonstrate the use of a navigation system for all means of transport by road for the first time in service from 1 January 2007. This requirement will be extended to all road vehicles from 1 January 2009.

(iii) Demonstrate that he/she understands the requirements of the journey log (route plan) and be in compliance with its provisions. The requirements of (ii) and (iii) do not apply to the transport of registered horses.

Authorisations issued in accordance with the Regulation will be valid for 5 years unless otherwise specified.

Calves younger than 14 days and pigs less than 10 kg should not be transported on journeys in excess of 8 hours unless accompanied by its mother.

4. TRAINING

4. Training
The Regulation requires that a person who transports live animals on journeys over 65km for commercial gain to have received training in specific aspects of animal health and welfare.

A certificate of competence will be required for such drivers and attendants from January 2008 onwards.

There is also a requirement for staff that handle animals at Assembly Centres and Livestock Marts to receive training on animal welfare, including handling, loading and unloading practices.