



ANIMAL TRANSPORT GUIDES

Guide to good practices for the transport of horses destined for slaughter

2017



For more information:
www.animaltransportguides.eu



Acknowledgements



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DISCLAIMER

The positions expressed in this report do not necessarily represent in legal terms the official position of the European Commission.



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0. Introduction

Since 1991, the EU has provided a common legal framework on animal transport which was then updated by [Regulation \(EC\) 1/2005](#) on the protection of animals during transport, hereafter referred to as '**the Regulation**'. It came into effect on the 1st of January 2007, and aims to provide a level playing field for operators while ensuring sufficient protection for the animals being transported. The content and impact of the Regulation has been the subject of a Scientific Opinion from the European Food Safety Authority ([EFSA, 2011](#)), followed in 2011 by an impact report from the Commission to the European Parliament and the Council ([Anon., 2011](#)). In this report, three key recommendations were formulated:

1. The Regulation has had beneficial impact on the welfare of animals during transport, but there is **room for improvement** of the situation;
2. An **amendment** of the Regulation **is not the most appropriate approach** to address the identified problems;
3. As regards the gap between the requirements of the legislation and available scientific evidence the Commission sees that this is best addressed by **the adoption of guides to good practice**.

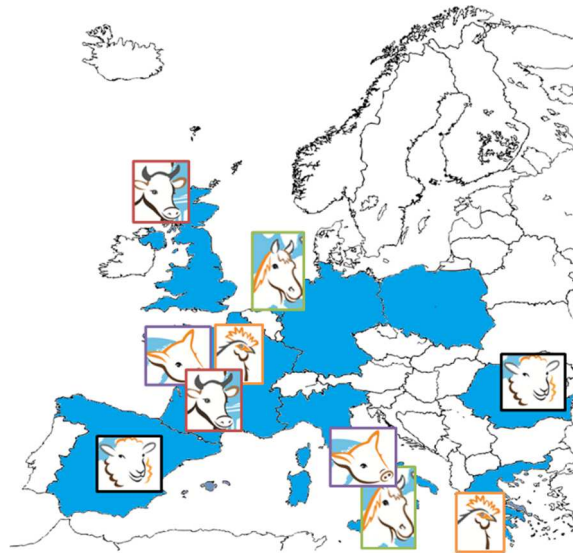
The European Commission has welcomed the production of "clear and simple guidelines to assess the fitness for transport" prepared by stakeholder groups for [bovines](#) in 2012, and [equidae](#) and [pigs](#) in 2016. It was then considered important to extend this approach to address all aspects of the welfare of livestock during transportation.

0.1 Approach and Acknowledgements

This Guide has been produced within the framework of the Animal Transport Guides project, commissioned by DG SANTE under contract SANCO/2015/G3/SI2.701422. The project started on the 10th of May 2015, **and its main aim was to develop and disseminate good and better practices for the transportation of livestock**. The foundation for this Guide was laid in the first project year, through an extensive literature search and resulting overview of a substantial number of available practices. These overviews of suggested practices can be found on the Animal Transport Guides website: <http://animaltransportguides.eu/>. There is one report for each of five livestock species (pigs, poultry, horses, sheep and cattle). In the second year, these very broad and diverse lists were discussed and largely rewritten, to develop the present five Guides to Good Practices. This involved an intensive process of stakeholder consultation.

The first step in moving from the collection of practices to a draft Guide of Good Practices was taken at member state level. Teams consisting of academic partners from two countries per species (the '**Duo Countries**') took the lead.

- ✓ Sheep: Spain and Romania
- ✓ Poultry: Greece and France
- ✓ Pigs: Italy and France
- ✓ Horses: Italy and the Netherlands
- ✓ Cattle: United Kingdom and France



The academic partners identified practices that are at the level of current EU legislation (**'Good Practices'**) and practices that are aspiring more ('Better Practices beyond EU legislation', or simply **'Better Practices'**). The partners then proceeded to ask national stakeholder groups in their own countries to reflect on these suggestions for good and better practices.

To support this process and work towards consensus, an iterative Delphi procedure of anonymised input collection was used. Well over 100 stakeholders were involved in this step, representing a variety of backgrounds. The largest number of stakeholders indicated they were farmers (19 individuals), transporters (27), slaughterhouse personnel (13), NGOs (12) and competent authorities (27). Representatives from animal trade, academia and vehicle manufacturers also took part in this consultation process. All discussions were carried out in the national language of the member state involved. The final results of this Delphi procedure were five "Draft Guides to Good Practice". These were not published, but used as the basis for the final Guides.

The final Guides for each of the five livestock species were developed through a second round of consensus building at European level, with the help of **'Focus Groups'**. These focus groups had an international basis: the delegates were asked to represent knowledge, experience and opinions beyond those of their own country. Table 0.1 below shows the composition of these five focus groups.

A first series of meetings of the five focus groups was organised at the end of May 2016. During these meetings, the draft guides were presented by the academic partners. A road map to turn the draft guides into the current final versions was then agreed with the stakeholders. All focus groups held subsequent meetings in Brussels, to discuss and reach consensus on the wording of each single practice to be included in the final Guides. Different species groups had different numbers of meetings, and the last ones were held in March 2017.

Table 0.1 Composition of international Focus Groups, involved in the production of the final Guides to Good Practice. The numbers indicate the number of representatives per stakeholder category.

	Sheep	Poultry	Pigs	Horses	Cattle	Total
Farmers	3	5	3	1		12
Vehicle manufacturers			2			2
Animal traders	1				2	3
Transporters		3	2	3	5	13
Slaughter-houses	2	5		1		8
Official veterinarians		2	1	2	2	7
Animal scientists	2	3	2	2	2	11
Animal welfare organisations	2	3	2	4	5	16
Total	10	21	12	13	16	72

To support and help guide the process of writing, the Animal Transport Guides project team set up a '**Stakeholder Platform**'. This group of people provided advice throughout the first two years of the project on how to tackle issues that affect all five species guides. The Platform was composed of representatives from 13 international organisations or stakeholder groups: the International Road transport Union (IRU), the Federation of Veterinarians of Europe (FVE), Eurogroup for Animals, Copa-Cogeca, Association of Poultry Processors and Poultry Trade (AVEC), the German Breeders Organisation (ADT), Eyes on Animals, the Irish Ministry of Agriculture, vehicle manufacturer Pezzaioli, Union Européenne du Commerce du Bétail et des Métiers de la Viande (UECBV), European Forum of Farm Animal Breeders (EFFAB), the German Transporters Organisation (BDT), and the Greek Ministry of Agriculture. The Platform met 5 times in Brussels over two years.

As part of the development of the five Guides, the species Focus Groups and the Stakeholder Platform choose 17 topic areas which deserved extra attention. The practices in these areas were collected in 17 so called '**Fact Sheets**', aiming to summarise and illustrate in an accessible way the most critical aspects of the journey or the most vulnerable categories of animals. Linked to the present Horse protocol, 3 Fact Sheets were produced: **Space allowance,**



Handling and **Feeding & Watering**. These three, and those related to the other Guides, are published in eight European languages.

The target audience for the fact sheets are farmers, drivers, local veterinarians and abattoir staff. The target audience for the Guides to Good Practice are transport organisers, competent authorities and policy makers. The Guides and the Fact Sheets can all be found on the project's website: <http://animaltransportguides.eu/>.

The development of the Fact Sheets and the Guides would not have been possible without the highly constructive discussions at national and international level with the many stakeholders mentioned above. **Their help with this process was essential, and the authors are grateful for the time and knowledge they contributed to the writing of the Guides.**

0.2 Aim of this guide

The present Guide to Good Practice has the objective to **improve the welfare of horses for slaughter during transportation** by providing practical tools to meet the requirements of the Regulation and to deliver practices which go beyond legislation.

The practices in this guide are only aimed at transport of horses destined for slaughter. It will not deal with sports horses, donkeys or other equids specifically, but many of the practices will be applicable to these animals too.

Transport is a stressful situation for animals. This guide lists practices which aim to support the stakeholders involved in horse transport in increasing the quality of horse transport in accordance with the Regulation, and thus limit stress to animals and promote animal welfare. The practices in this guide are based on scientific knowledge, scientific literature, experiences and information from stakeholders. No distinction is made by source, unless this is regarded as relevant for better understanding or checking of the background. They can be used to develop company specific guidelines or Standard Operating Procedures for transporters and other stakeholders, or as a reference source for dealing with aspects of transportation in a way which is practical and that supports animal welfare.

This document is not of legally binding nature and does not affect the requirements of the EU legislation on animal transport or other relevant pieces of legislation. Nor does it commit the European Commission. Only the Court of Justice of the European Union is competent to authoritatively interpret Union law. The reader is therefore invited to **consult this guide in connection with the relevant provisions of the legislation** and refer, when necessary, to the relevant competent authorities.

0.3 Main welfare risks during horse transport¹

The majority of potential hazards identified for transported animals is common for the species cattle, pigs, poultry, sheep and horses ([Van Reenen et al. \(2008\)](#)). EFSA identified the following main hazards for horses transported for slaughter ([EFSA, 2011](#)):

1. Poor inspection of horses prior to transport resulting in the transport of animals which are diseased, injured or otherwise unfit to travel;
2. Lack of appropriate individual penning, resulting in aggression between horses, injury and exhaustion;
3. Lack of appropriate penning, resulting in reduced ventilation leading to heat stress, exhaustion and disease;
4. Lack of appropriate penning, leading to inability to balance or maintain posture resulting in injury, exhaustion and disease;
5. Lack of appropriate penning, causing direct physical injury and exhaustion;
6. Poor watering provision at all stages in the transport process resulting in dehydration, heat stress and exhaustion;
7. Journey length with long duration resulting in disease, injury and exhaustion.
8. Poor driving and/or road/sea conditions causing continual postural adjustments resulting in disease, injury and exhaustion.

Practical observations ([World Horse Welfare, 2011](#)) have shown that horses sourced for slaughter often are not accustomed to transport (similar to other species but in contrast to many sports horses), making transport more stressful. Therefore the distinction between **broken and unbroken horses** is important. Unbroken horses, that cannot be led by a rope, will probably experience more stress than broken horses that have experience with transportation. It was also observed that the horses often are not completely physically fit. The latter stresses the need for critical assessment of fitness for travel at the place of departure. Horses intended for slaughter were frequently recognised to demonstrate **signs of poor welfare and health**, such as pre-existing disease, injury, exhaustion (based on behavioural indicators such as head resting, high motivation to rest in recumbency), dehydration (based on behavioural indicators such as those outlined in [World Horse Welfare et al., 2014](#)), pain or discomfort (based on behavioural indicators such as facial tension, stance, etc.) and stress (based on behavioural indicators). Underlying causes for the problems identified and thus also preventive measures are interlinked. Dehydration can be prevented by adequate water provision ([World Horse Welfare, et al., 2014](#)) and prevention of heat stress. The need to balance on a moving vehicle, requiring horses to expend a substantial amount of energy, can result in fatigue or even exhaustion. There are several recommendations to prevent this happening (see e.g. chapter [4.2 Driving](#)). Injuries can also be prevented by minimising stress through the right vehicle design ([2.3 Means of transport](#)) and good handling ([2.4 Animal related preparation](#)).

¹ Welfare risks specific for transport of horses for leisure purposes are not covered by this guide, because of the focus on transport for slaughter

Several other measures to prevent or reduce stress are outlined in this guide. Most transport related hazards should be mitigated by good preparation and planning. Thorough preparation and adequate competences are required when driving with live horses and for correct handling of the animals.

0.4 Animal Based Measures

The ultimate aim of providing the right conditions during driving should be to provide good welfare, **so that the animals are healthy and fit when they come off the truck** at the destination. The current legislation, existing guidelines on Fitness to Travel ([Eurogroup for Animals et al., 2012](#)), most quality assurance schemes and also the present guides offer many suggestions on what these conditions should be. They advise for instance on space allowances, frequency and duration of resting and the feed and water requirements of the animals. This advice is based on years of **experience** or thorough **research** which has identified the welfare risks associated with deviations from this advice: if space allowances are too low, animals may not get access to water, may get more easily injured, and may not be able to rest; if they do not rest enough, they will become exhausted, with detrimental effects for welfare and meat quality; etc.

It is important to realise that recommendations based on '**conditions**' (the resources on the truck or the handling and animal management by operators) **do not necessarily guarantee good welfare**: they merely offer advice to maximise the chance that the welfare of the animal will be good. The effect conditions have on the actual welfare status is influenced by other factors, as many of the (recommended) conditions are interacting with each other. Obvious examples are the interactive effects of a wet coat, and ambient temperature: if it is too hot then sprinkling may be desirable, but if it is freezing then you want to keep your animals dry. Another example is the relationship between the driving conditions and the length of the journey: following a rough journey, the benefits of resting the animals outside the vehicle outweigh the stress of offloading. However, if the journey has been smooth and on board conditions optimal, the benefits of offloading will be much lower and in some cases it may even be better to leave the animals on the truck.

Given these limitations of management and resource related practices, it is obvious that **animal based measures can be a useful monitoring tool** to help business operators to ensure welfare and, if necessary, take the appropriate corrective actions. Animal based measures (ABMs), such as injuries, panting, shivering, body and skin conditions, can be interpreted as direct indicators of animal welfare. The use of ABMs during live animal transport is not as novel and innovative as it may sound. Such indicators were included in tools for transporters for a long time and **good professional drivers and keepers already base their actions on the 'signals' they get from the animals** they work with. During routine checks they will not (just) look at the temperature gauge to see if ventilation is adequate: they will look at the animals for signs of panting or shivering. They don't judge tiredness by the length of the journey, but by looking at animal posture and resting behaviour.

Animal Based Measures can be of use **before, during and after** a journey. They can be used during routine checks to assess how the transport is going, and if action is necessary to improve animal welfare. They can also be used after a journey, when animals are

unloaded, to know how the animals have experienced the transportation. Knowing this will help the transporter (and others who handle the animals) to improve the conditions during the next journey with a different consignment.

To achieve the objective of 'good' transport regarding the welfare of horses, the following ABMs could be used in monitoring tools.

Table 0.1 Animal Based Measures relevant for horse transport

Parameter	Description
Abdominal discomfort	An animal kicking at its belly, repeatedly turning the head towards the belly or rolling. Abdominal discomfort can be caused by e.g. colic.
Body condition	Body Condition is scored on a scale of 0 - 5 (BCS 0 = very poor; BCS 5 = very fat, Ref 005). An animal with score 0 or 1 is considered too thin, an animal with score 5 is considered too fat.
Choking	Choking is an obstruction of the oesophagus: animals will retch and stretch, which looks very distressing.
Coughing	Coughing is defined as a sudden and noisy expulsion of air from the lungs.
Dead on arrival	An animal that has stopped breathing and has no pulse and no blink reflex on arrival. Check for at least 1 minute.
Disturbed equilibrium	An animal is considered to have disturbed equilibrium when it shows signs of stumbling or staggering while standing.
Falling	An animal showing a loss of balance during unloading causing other part(s) of the body (beside legs) to touch the floor.
Injured	An injury is defined as physical damage to the body. An animal with wounds through the skin which involve damage to deeper tissue (muscles, tendons), a cut through the skin so big that it would normally be stitched or with extensive and serious injuries that may cause loss of function over a long period of time (e.g. serious damage to a tendon or joint, fracture) is considered <i>severely injured</i> .
Laboured breathing	Excessively deep or rapid shallow breathing.
Lameness	Lameness is an abnormality in the way that an animal moves, reducing its ability to use one or more of its legs in a normal manner. An animal is considered <i>severely lame</i> when it shows inability to bear weight on one or more limbs while not lying, and <i>mildly lame</i> when it shows signs of pain (e.g. reluctance to bear weight on a limb) but uses all legs while walking.
Lethargy	When an animal holds its head down or resting on troughs or bars or is unresponsive.
Non-ambulatory	An animal is considered non-ambulatory when it cannot rise or is unable to stand and remain standing unaided, but is still alive.
Other severe health problems	Any severe clinical health problem that is easy visible and may have been initiated or impaired by transport (management) but is not already covered by the parameters above. Example: laminitis.
Slipping	An animal showing a loss of balance during unloading without a non-limbic part of the body touching the ground.
Sweating	An animal with visible signs of sweating on the skin during transport (wet skin, dried sweat spots, salt deposits).
Violent behavioural distress	When an animal is lashing out, kicking, or shows repeated severe pawing of ground whilst sweating.

0.5 Structure of the guide

Transport spans a **chain of events** from preparation to unloading. To facilitate the use of the guide in every day practice, it is structured according to six stages of the journey:

1. Administrative issues
2. Preparation and planning
3. Handling and loading animals
4. Travelling
5. Unloading animals
6. Stay at Control Posts, markets and assembly centres

Stages 2 – 6 follow transport activities in chronological order. The first 'stage' is added because administrative issues, including staff competence, training etc. are important for the execution of almost all activities during transport of animals. Each stage is subdivided into a number of aspects, and for each of them this guide presents 'good practices' as well as 'better practices beyond EU legislation'. See below for definitions.

The practices are not equally important in terms of their expected impact on animal welfare. Therefore, this guide suggests topic areas which are very important, and areas which are relevant but less important. The very important topics are 'boxed' throughout this guide.

The digital version of this Guide includes words or references with so called '**hyperlinks**'. Clicking on these links (usually with 'Control' + 'left mouse click') will lead to another related part in this Guide, or to background information in documents or on websites, providing of course the reader has internet access on his reading device.

0.6 List of definitions

For the purpose of this guide:

- '**Good practices**' are defined as: procedures and processes that ensure compliance with requirements of legislation or regulations, designed to protect the animals' welfare.
- '**Better practices beyond EU legislation**' are defined as providing additional guidance on how procedures and operations can be improved to exceed any legally defined minimum welfare requirement, and to increase the welfare status of the animals during the relevant periods and procedures. They will be abbreviated to '**better practices**' throughout the document.

In addition to the above operational definitions of good and better practices, below is a list of terms used in this document which may need a precise description to avoid confusion. Where appropriate, they have been taken from the Regulation.

Assembly centre	Places such as holdings, collection centres and markets, at which domestic Equidae or domestic animals of bovine, ovine, caprine or porcine species originating from different holdings are grouped together to form consignments.
Attendant	A person directly in charge of the welfare of the animals who accompanies them during a journey.
Competent authority	The central authority of a Member State competent to carry out checks on animal welfare or any authority to which it has delegated that competence.
Control post	Places where animals are rested for at least 12 hours or more pursuant to the rules for journey times and resting periods set up by the Regulation. They must be approved by the competent authorities.
Horses for slaughter	Horses transported, directly or after transit through a market or marshalling centre, to a slaughterhouse for slaughter.
Journey	The entire transport operation from the place of departure to the place of destination, including any unloading, accommodation and loading occurring at intermediate points in the journey.
Keeper	Any natural or legal person, except a transporter, in charge of or handling animals whether on a permanent or temporary basis.
Long journey	A journey that exceeds 8 hours, starting from when the first animal of the consignment is moved.
Navigation system	Satellite-based infrastructures providing global, continuous, accurate and guaranteed timing and positioning services or any technology providing services deemed equivalent for the purpose of this Regulation.
Official veterinarian	The veterinarian appointed by the competent authority of the Member State.
Organiser	The person responsible for the actual transportation from departure to destination (i) a transporter who has subcontracted to at least one other transporter for a part of a journey; or (ii) a natural or legal person who has contracted to more than one transporter for a journey; or (iii) a person who has signed Section 1 of the journey log (where applicable)
Place of departure	The place at which the animal is first loaded on to a means of transport provided that it had been accommodated there for at least 48 hours prior to the time of departure. However, assembly centres approved in accordance with Community veterinary legislation may be considered as place of departure provided certain conditions (see Article 2 r of the Regulation).
Place of destination	The place at which an animal is unloaded from a means of transport and accommodated for at least 48 hours prior to the time of departure; or slaughtered.
Stallions	All entire (uncastrated) male horses that have attained sexual maturity
Transporter	Any natural or legal person transporting animals on his own account, or for the account of a third party.
Unbroken horses	Horses that cannot be tied or led by a halter without causing avoidable excitement, pain or suffering.
Vehicle	A means of transport fitted with wheels which is propelled or towed.
Weaning weaned animals	Weaning is the process of (gradually) introducing a foal to what will be its adult diet and withdrawing the supply of its mother's milk. After this process the foal is a weaned animal.

1. Administrative issues

1.1 Introduction

A series of **documents are required by the EU legislation to transport live animals** which must accompany the consignments and might be required at all times by the competent authorities. Having properly prepared the documents required will **prevent unnecessary delays** and additional checks by the authorities.

In addition, **good record keeping** is the cornerstone of quality monitoring: it contributes to **transparency** and supports **quality evaluation**. Records can be used to highlight aspects that went well and to identify weaknesses that need to be addressed. Such evaluations can be done at the level of a specific event such as a single journey, and also by aggregating data at the level of multiple transports. Record keeping is indispensable for **maintaining and promoting adequate standards**.

It is important that data requested to be recorded are **clear and understandable** and easy and quick to log. They should be able to be assessed objectively, and be justified for and proportional to the intended goals, i.e. safeguarding the welfare of the transported animals. Records should not be longer than necessary and what is "needed to know" should prevail over what is "nice to know". Promoting and using **electronic records** facilitates meeting the administrative requirements. Furthermore, synergy can be obtained by linking animal welfare records with health and food safety records.

Transporters should carry the **appropriate documentation with them during the journey**. They are likely to be checked for these papers by the competent authorities either during transport or at any transfer or arrival.

In particular **certificates of competence** must be held by drivers or attendants responsible for transporting domestic Equidae, domestic animals of bovine, ovine, caprine or porcine species and poultry over 65 km. In the EU member states these are mainly independently assessed qualifications specific to the species and duration of journeys involved.

As is indicated in the Regulation, **professional drivers** and attendants should achieve **knowledge of the legislation** in relation to the following topics:

- Animal transport,
- Animal physiology (in particular drinking and feeding needs)
- Animal behaviour and the concept of stress,
- Practical aspects of handling of animals,
- The impact of driving behaviour on the welfare of the transported animals and on the quality of meat,
- Emergency care for animals and safety considerations for personnel handling animals.

Drivers and attendants need to be able to adequately translate this knowledge into practice. Insufficient knowledge of these issues is regarded as the main risk for impaired animal welfare during transport.

The competent authorities have to ensure that the requirements of Annex IV of the Regulation have been included in a **theoretical examination of applicants**. The content and duration of training courses, the professional qualifications which can be taken into account, and the type of examination are the responsibility of each member state.

1.2 Administration

Good practices regarding Administration

1. Everyone transporting animals carries **documentation on the means of transport** stating their origin and their ownership, their place of departure, the date and time of departure, their intended place of destination, and the expected duration of the intended journey.
2. Furthermore the following documents might be necessary to accompany the transport animals in the EU:
 - A **transporter authorisation** for transports exceeding 65 km and up to 8 hours (Type I) and over 8 hours (Type II),
 - **A certificate of approval for transport vehicles** for over 8 hours
 - **A certification of competence** of drivers and attendants transporting domestic Equidae, or domestic animals of bovine, ovine, caprine or porcine species or poultry,
 - **A journey log** for long journeys of domestic Equidae, or domestic animals of bovine, ovine, caprine or porcine species (not for poultry),
 - **Animal health certificates (where required e.g. trade between Member States or when exporting to non-EU countries)**
 - **Food chain information** regarding slaughter animals.
3. The transporter shall submit the journey log to the competent authority before the journey commences by the transporter and is held and fulfilled by the driver during the journey.
4. Animal health certificate and journey log shall be submitted via the electronic application TRACES.
5. On long journeys of domestic Equidae, or domestic animals of bovine, ovine, caprine or porcine species, transporters shall use a **navigation system** compliant with the current legislation.
6. Organisers archive all transport records, animal health certificates and journey logs of every transportation, for at least **three years**.

Better practices regarding Administration

7. Transport means provide information about the **net usable surface area** for each loading deck.
8. The data of the journey log are presented in an **electronic format** to be transmitted to the competent authorities.

9. The **categories of animals** within the species are indicated on top of the species (e.g. stallions, fowls, mares).
10. Transport organisers keep transport contracts and journey logs in an archive for **at least 5 years**.

1.3 Competence and training

In general, only skilled workers can complete animal transportation with minimal impact on animal welfare. The skills required ('competence'), obtained through training and work experience in the animal transport chain, enable each operator:

- To have the necessary knowledge about the **impact** of their work **on animal** stress, fear and related injuries,
- To know about the **impact** of their work on the **quality of the meat** of transported animals,
- To recognise the main physiological signs to **judge the state of the animals** before loading, during loading and transport phases and at unloading (e.g. posture, nervousness and stress, etc.),
- To **adapt the journey** to specific conditions (variable sensitivity of breeds transported to stress and mortality, weather conditions, events which can occur during the trip),
- To know the **biosecurity** rules.

Good practices regarding Competence and Training

11. Transport operators ensure that persons who handle livestock have a basic but detailed understanding of animals' behaviour and physical needs. For an overview of biological needs of horses whilst travelling see [Chapter 2.4 Animal related preparation](#).

12. Trainers impress upon keepers the potential **effects of their actions** upon animals in their charge.
13. Transport operators ensure that there is a **commitment to proper handling** from everyone, from the top down, involved with the livestock shipment.
14. Transport operators ensure compliance with the minimum legal training programme required for the Certificates of Competence in Europe according to the Regulation and national requirements if any.

Better practices on Competence and Training

15. A **Welfare Transport Officer** in charge of the training, certificates and check of the quality of the transport is appointed in the transport company.
16. The practical **abilities** of the transporter are **recorded and controlled** (e.g. through audits and checks in the field).
17. **Key parameters** are identified and **recorded** to assess the quality of the transport (e.g. the incidence of mortality, injuries and any animal based measures of animal welfare).

18. Transport companies ensure that drivers (and keepers) receive continuous and **updated training**.

1.4 Responsibilities

Good practices on Responsibilities

19. The **keepers and attendants** (including the owners and managers) of the animals are responsible for
 - a) The general **health**, overall **welfare** and **fitness** of the animals for the journey; these are assessed and recorded by **regular routine inspection**,
 - b) Ensuring compliance with any required certification, either veterinary or other,
 - c) The **presence of an animal keeper / attendant** competent for the species being transported during the journey and with the authority to take prompt action; in case of transport by individual trucks, the truck driver may be the sole animal keeper during the journey,
 - d) The presence of an adequate number of animal keepers during loading, and
 - e) Ensuring that **equipment and veterinary assistance** are provided as appropriate for the species and the journey.
20. **Business agents** or buying/selling agents are responsible for
 - a) Selection of **animals that are fit** to travel, and
 - b) Availability of suitable **facilities** at the start and at the end of the journey for the assembly, loading, transport, unloading and holding of animals, including for any stops at resting points during the journey and for **emergencies**.
21. In addition **animal keepers** or attendants are responsible for the humane handling and care of the animals, especially during loading and unloading, and for maintaining a record of journey events and problems and the completion of the journey log on long journeys. To carry out their responsibilities, they have the **authority to take prompt action**. In the absence of a separate animal keeper, the driver is the animal keeper.
22. The '**Organiser**' is responsible for planning the journey to ensure the care of the animals. This may be the transporter, the vehicle owner and/or the driver. In particular they are responsible for
 - a) Choosing **appropriate vehicles** for the species transported and the journey,
 - b) Ensuring that properly **trained staff** are available for loading/unloading of animals,
 - c) Ensuring adequate competency of the driver in matters of animal welfare for the species being transported,
 - d) Developing and keeping up-to-date **contingency plans** for all journey types (even when not mandatory) to address emergencies (including adverse weather conditions),
 - e) Producing a **journey plan** for **all** journeys (including where mandatory) which includes a loading plan, journey duration, itinerary and location of resting places,
 - f) Loading only those **animals** which are **fit to travel**, for their correct loading into the vehicle and their inspection during the journey, and for appropriate responses to problems arising (if fitness to travel is in doubt, the animal should

be examined by a veterinarian who is then responsible for declaring any animals unfit to travel),

- g) Welfare of the animals during the actual transport, and
- h) **Planning the journey, which** should take into account any disparity in the requirements for animal journey times and the requirements of the **social regulations relating to drivers' hours**, including the numbers of drivers required for long journeys to achieve complete compliance. This will ensure compliance with both sets of regulations. This may relate to both driver and animal rest times and a decision on the number of drivers required for long journeys.

23. **Managers of facilities** at the start and at the end of the journey and at resting points are responsible for

- a) Providing **suitable premises** for loading, unloading and securely holding the animals, with water and feed when required, and with protection from adverse weather conditions until further transport, sale or other use (including rearing or slaughter),
- b) Providing an **adequate number of animal keepers** to load, unload, drive and hold animals in a manner that causes minimum stress and injury,
- c) **Minimising** the opportunities for **disease transmission** by detailed attention to vehicle and facility **cleaning, disinfection**, hygiene and environmental control, as well as provision of clean bedding,
- d) Providing appropriate facilities to deal with **emergencies**,
- f) Providing facilities and competent staff to allow the **humane killing** of animals when required, and
- h) Ensuring proper rest times and minimal delay during stops.

Better practices on Responsibilities

- 24. Ensure there are **clear definitions of responsibilities** of keepers, attendants, traders, transport organisers, farmers, assembly centre managers, drivers, control post owners and slaughterers, and that they are listed in the transport contract and to provide a checklist accessible by all staff including the driver(s) or attendants.
- 25. **Standard Operating Procedures** (SOPs) are established for each activity/task by the agent defined as responsible. These describe **precise protocols** for feeding, watering, renewal and replacement of bedding, animal inspection and monitoring and **definition of those individuals responsible** for each task. SOPs are continuously updated in accordance with new advice and/or guidance.

2. Journey planning and preparation

2.1 Introduction

Good preparation and planning for the transport of horses is one of the most important stages of the journey. It is the key to successful animal transport in terms of compliance with legislation, better practices and high standards of animal welfare and economic benefit. **Good planning promotes smooth execution** of transport and is needed to minimize the risk that the involvement of the different parties is poorly synchronised. The complexity of the overall animal transport process necessitates **well-structured integration of each of the activities** according to defined sets of objectives, responsibilities and monitoring tasks. The anticipation of **unexpected events** and problems and the provision of **contingency plans** to supplement well defined Standard Operating Procedures are paramount. Next to the immediate animal welfare concerns, planning should include animal health considerations (biosecurity), human health and safety aspects and economic consequences. The importance of planning and preparation is also acknowledged by the EU legislators, and **journey logs with a planning section are obligatory for long journeys.**

From an animal welfare point of view, the 'preparation and planning' stage includes the following aspects:

- Planning the journey,
- Vehicle preparation,
- Animal related preparation,
- Administration.

These aspects are described in the paragraphs below.

2.2 Planning the journey

The journey should be as **smooth and quick as possible** in order to limit exposure to transport stress. It is planned carefully to assure horse welfare conditions during the whole transportation. As part of the planning for each journey, **arrangements are made to manage any delay**, breakdown or other emergency to minimise risks of impaired welfare during all transport.

The journey is **planned and prepared carefully** after the announcement by the farmer or trader of the date and the place of departure and the destination to the final client. Journey plans involve written arrangements regarding start and unloading places, contingency plans, and details on consignment sheets or arrangements that are in place for rest stops, particularly for long journeys.

In particular, they include:

- **Description of the route of travel** and estimation of its duration,
- Analysis of **weather forecast**,

- Choice of the **transport company** and of the truck (e.g. type I or II) and/or vessel depending on journey duration and weather conditions, horse number and categories,
- The reservation for unloading and **resting animals in a control posts** when applicable,
- A **contingency plan**,
- Planned **number of drivers**,
- Provisions for **bedding material**,
- Provisions for **water and feed** to be delivered at control post, depending on trip duration,
- Assurances **that the truck is ready** at the place and time appointed for departure,

Journey routes and scheduling of stops (including control posts on journeys > 8 hours) are optimised using the appropriate **commercial software and systems**. Besides the Regulation on the protection of animals during transport, drivers also have to comply with legislation regarding drivers hours (**Regulation 561/2006**). See [Rabitsch and Wessely \(2012\)](#) for an overview. During the planning phase of the transport these two legal requirements are both taken into account. Besides the timing of the rest periods also the location where the vehicle will stop is addressed in the planning phase, taking into account biosecurity. A summary of the maximum journey times allowed by the Regulation is in the table below:

Table 2.1 Maximum journey times allowed by the regulation.

	Basic Standard Vehicle	Higher Standard Vehicle		
Horses and Ponies	8	24 (when given liquid, and fed if necessary, every hours)		
	Basic Standard Vehicle	Higher Standard Vehicle		
		Travel	Rest	Travel
Unweaned	8	9	1	9

The expected overall journey duration for the planned route is determined realistically, taking into account time needed for loading and unloading. If after this journey time the animals have not reached their destination, they must be unloaded, fed and watered and be rested for a minimum of 24 hours at an EU approved control post, see [Chapter 6. Stay at control posts](#).

In practice the number of hours horses can be transported is limited by the number of drivers accompanying the animals. Net driving time can be increased with two drivers when due to a more sophisticated drinking system the animals can be drenched in less than an hour. These restrictions should be taken into account for a realistic route planning.

2.2.1 Journey duration

Good practices on nature and duration of the journey:

26. Sufficient time is taken into account for **loading** the animals so that this can be done in a calm and quiet manner.
27. The transport company is chosen according to its authorization, ability and experience, by the party requesting a horse to be transported (the client).
28. The **journey duration** is defined accurately by the transport organizer in agreement with the client (i.e. route map, the rest periods for the driver, stops in control posts, export – and import requirements in case of journeys to/from Third countries, visa requirements of drivers). Time spent on a lorry loaded onto a vessel is counted as journey time, and not as resting period.
29. The transporter makes sure the journey planning is clearly **communicated** with the loading and unloading locations before the transport starts, and that **necessary arrangements** (e.g. at Control Posts or ferries) **are confirmed**.
30. **Effective communication** between the driver and the people responsible for loading and unloading locations at the places of departure and destination is essential; to achieve this they share contact details in advance in order to promptly communicate any **modifications** to the scheduled transport programme before or during the journey.
31. For journeys where animals should be unloaded at a control post the competent authority demands **proof of a reservation and proof of acceptance** of the animals at the control posts en route that is mentioned in section 1 of the journey log. This procedure is a part of the checks carried out by the competent authority before long journeys.
32. Duration of the breaks is long enough to check the animals for any signs of compromised health or welfare and to check feed and watering systems to ensure adequate supply is available.
33. Time is allowed to **treat individual animals** if required following inspection during stops.
34. Journey-time and stops as well as loading procedures and vehicle dispatch are planned according to the actual load (e.g. space-requirements, max. journey time, feed and watering times, etc.).
35. The transporter chooses the vehicle according to the type and number of horses to be transported and the journey duration (with truck equipment according to Type I or II authorization).
36. All necessary **documentation** and records for the “load” are prepared and collected and the driver and handler are directed accordingly.
37. In case of long journeys, the **journey log** is presented at least 48 hours prior to the scheduled departure to the competent veterinary service.
38. The journey is carried out with enough drivers to avoid delays due to drivers resting periods required by the social laws that do not match with animals resting periods.



39. Loading and transportation are scheduled such that horses can be unloaded promptly at destination.
40. All **required paperwork** (e.g. livestock manifests, bills of lading, emergency contact information) is completed and provided to the driver by the transport organiser so that the vehicle can leave immediately after loading.

Better Practices on nature and duration of the journey

41. Slaughterhouse representatives and transporters make clear arrangements regarding **allotment of responsibilities**, and communicate these with drivers and slaughterhouse personnel.
42. The “**Livestock Weather Safety Index**” (see paragraph [4.3 Climate control](#)) is used to plan the timings of the journey, taking weather conditions into account. If thermal stress is likely during daytime, journeys are planned to take advantage of cooler conditions at night, and travel during the hot parts of the day is avoided. Travel is postponed if necessary.
43. The journey time is limited to 12 hours at maximum for all horses.
44. When route planning, bad and/or winding roads are avoided if there are alternative routes using good roads in order to increase comfort.
45. **Known or foreseeable delays** such as road works and diversions are avoided, particularly during rush hours, if there are reasonable alternatives.

2.2.2 Contingency plans

The main goal of the transporter is to deliver the animals timely and in good welfare conditions, despite risks of delay on the road. Emergencies may occur, even when optimal preparation and planning has taken place. **The contingency plan aims at helping the driver and the transport company to ensure the security and the welfare of the animals in case of emergency.** The Regulation mentions these as a requirement for long journey transporter authorisation, but they are also useful for short journeys. Contingency plans are most useful when they are regularly trained and updated by the transporter. They should address 4 questions: what **potential risks** may cause an emergency, **what can be done** when they occur, **who is to do what** and **how will the mitigating actions be carried out**. By being prepared, the transporter will be able to respond in an effective manner and reduce the impact of a delay or accident on the animals. Figure 2.1 provides an example taken from the [Practical Guidelines to Assess Fitness for Transport of Equidae \(2016\)](#).

Annex III – Example of UK contingency plan

Council Regulation (EC) 1/2005

Contingency Plan Template For Type 2 Transporters

Please complete this Contingency Plan and submit to the following address with your application form for a Type 2 Transporter Authorisation:

This generic Contingency Plan is to be completed by the Transporter.

Section 1 – Contact Details

Name of Transporter	<input type="text"/>		
Address:	<input type="text"/>		
Contact Telephone Number	<input type="text"/>	Email Address	<input type="text"/>

Section 2 – In case of an emergency:

1 Who is your nominated vehicle breakdown/recovery company?	<input type="text"/>		
2 What action will you take in the event of a traffic accident, road closure or weather conditions delay your journey?	<input type="text"/>		
3 What action will you take if the ferry/shuttle service has been suspended?	<input type="text"/>		
4 What action will you take in the event that your vehicle suffers an irreparable breakdown?	<input type="text"/>		
5 What action will you take if any animal(s) become ill during the journey?	<input type="text"/>		
6 What action will you take if any animal(s) needs to be euthanised?	<input type="text"/>		
7 What action will you take in the event that you encounter extreme temperatures (either hot or cold) during the journey?	<input type="text"/>		
8 What action will you take if there is confirmation of a Notifiable Disease in an area you're travelling through?	<input type="text"/>		
Transporter Signature	<input type="text"/>		
Name in BLOCK LETTERS	<input type="text"/>	Date	<input type="text"/>

Figure 2.1. The structure of an emergency plan (as presented in the Practical Guidelines to Assess Fitness for Transport of Equidae, 2016)

Good practices regarding contingency plans

46. If a delay occurs, the welfare and safety of the animals must be considered paramount at all times. It is the driver's responsibility to keep the animals comfortable and safe and ensure the journey time is kept to a minimum.
 47. The driver should make every reasonable effort to minimise the delay and ensure that **water, shade on a hot day, and adequate ventilation are available**.
 48. If necessary, the **driver should seek the help of the police** to enable his journey to continue as soon as possible during long traffic hold-ups (i.e. if the road is closed due to an accident).
 49. In the case of a **mechanical breakdown** of the vehicle, the nature of the breakdown should be determined and it should be estimated how long the repairs will take. If the repairs cannot take place at the site of the breakdown or they will take an extended period of time, **arrangements for another vehicle** will have to be made.
50. A contingency plan should be present in the vehicle. An example is provided in Figure 2.1. The plan should be known and understood by everyone involved in animal transport during any journey. It needs to describe how to handle unforeseeable incidents and delays to ensure the animals do not suffer significant harm. Delays can be caused by weather, traffic issues, accidents, road construction, mechanical breakdowns or plant shutdowns. The contingency plan must amongst other things include the provision for facilities to hold animals in emergencies.
51. In case of emergencies the contingency plan is activated by the driver and/or transporter, whoever is first aware of the emergency.
 52. The contingency plan should **include the following elements**:
 - a) Solutions how a **constant contact** can be organised between the transporter and the driver/s,
 - b) Solutions how a **contact to authorities** can be warranted (police/veterinarians),
 - c) A list of **contact-phone numbers** of all parties involved, including the phone-number of the insurance-company for the horses,
 - d) Solutions how **local breakdown services** can be organised, how a taking over of the shipment can be organised (substitutes),
 - e) Solutions to **arrange repairs** in case of a damage to the vehicle,
 - f) Solutions to **unload animals** in case of emergency or delay: **places where animals can be unloaded** are identified throughout the planned route, and this information is readily available to the driver.
 - g) Solutions how **water, food and bedding** can be organised for animals in the case of unforeseeable long delays (e.g. at border crossings),
 - h) **Other matters** necessary to ensure the animals do not suffer significant harm as a result of delays during transport.
 53. **Animals may become injured** during transport and it may be necessary to humanely kill an animal before it reaches its destination in order to prevent the animal suffering further pain or distress. Therefore the transporter should have

- readily available the **contact details of a veterinarian** or licensed slaughter man competent in humane killing at locations along the journey or at the destination.
54. Only drivers or attendants who have a certificate of competence and have received specific training in the field of animal emergency care, may **attend to animals injured** during transport.

Better Practices regarding contingency procedures

55. A contingency plan should also be drawn up and in place for **short transports under 8 hours**
56. In order to be properly prepared for an accident, each transport vehicle should contain the following:
- a) Emergency **contact sheet** with 24-hour phone numbers for dispatch, destination point and local competent authorities, available veterinary surgeons, emergency services, emergency plant operators and insurance companies,.
 - b) Emergency **warning devices** (e.g. flares, emergency triangles) consistent with European requirements.
 - c) **Camera** / mobile phone camera
 - d) Accident **information sheet**
 - e) Company **accident policy sheet**/Standard Operating Procedures,
 - f) Fire extinguisher**
 - g) **Spill containment** or cleaning kit
57. The transporter should constantly **monitor the comfort and condition** of the animals during any delay.
58. The transporter, in the case of delay, should **contact the origination and/or the destination contact persons** to inform them of the nature of the delay and determine the best plan of action for themselves and for the well-being of the animals
59. Provision for **convenient and simple emergency access** should be present on vehicles to make it easier to inspect the sheep and provide assistance to animals in need
60. Emergency procedures are **periodically tested** and discussed with personnel through internal audits, and amended as necessary
61. Equipment kept for **emergency euthanasia** is well maintained and can be operated efficiently; documented training and equipment maintenance records are kept
62. Information on how to transport animals (incl. issues related to emergencies) **is shared between transporters**, and what works or does not work is evaluated regularly.

2.3 Means of transport

The circumstances under which animals are transported to a large extent are determined by the means of transport (usually a vehicle) that they are transported with. The possibilities for the driver to regulate the **on-board environment** depend on the facilities that the truck is equipped with. The design of the vehicle is very important for short as well as long journeys, however there are higher standards for trucks used for long

journeys. The risk of technical failures is reduced by adequate **maintenance**, which forms an essential part of vehicle preparation.

There are several aspects of vehicle design and maintenance that can influence animal well-being in transport and which constitute potential hazards. Because the animals are kept in a relatively small space continuous air refreshment is needed, both to limit accumulation of ammonia and carbon dioxide and to prevent heat accumulation. However, during journeys wide ranges of weather conditions and ambient temperatures are common and the speed of the vehicle is changeable. Prolonged stops due to traffic or border controls in hot climates can lead to heating up the vehicle interiors resulting in hazards for livestock. Thus, adequate and appropriate **ventilation systems** able to maintain good air quality but also to keep compartment temperatures within the **thermo-neutral zone** of the animals are essential.

Thermo-neutral zones are characterised by lower and upper critical air temperatures. [See also 4.3 Climate control](#). Although for horses there are no widely accepted absolute criteria for thermal requirements because of their ability to adjust, the sudden transfer to different environments may cause acute **thermal stress**. Further factors like humidity and wetness of coat can also influence the acceptable temperature range. Ventilation systems are either free (these depend on the movement of the vehicle for their functioning) **or forced systems** (that can operate when the vehicle is stationary). Free ventilation systems are common in vehicles used for short (less than 8 hours) journeys, whereas forced systems are required for long journey vehicles.

According to the Regulation, the minimum nominal capacity of airflow rate of fans is 60m³/h per 100 kg live weight. Moreover, the ventilation system should be capable of operating for at least 4 hours when the vehicle engine is off. The efficacy of forced ventilation systems is of great importance for transports from Northern Europe to Mediterranean regions in summertime.

Poor **suspension** can also impair animal welfare. Excessive vibrations can lead to symptoms ranging from nausea to muscular fatigue. Non-slippery **floor surfaces** are essential to prevent falls and are required by the Regulation. A layer of bedding material will not resolve foothold problems on a slippery floor. The main purpose of **bedding** material (required only for long journeys) is to absorb spilled water, faeces and urine produced by the animals during the journey. Therefore, adequate bedding material should be dry with high ability to soak up fluids. Sufficient amounts of bedding allow for more comfort and may facilitate the resting of animals, although horses usually remain standing during transportation. Although bedding may be edible, over-consumption is rare. Dusty or mouldy materials should be avoided.

The Regulation requires that higher standard vehicles (additional provisions for long journeys) have equipment to **monitor** and record temperature. An example is shown in figure 2.2.



Figure 2.2 Climate monitoring equipment

The risks of thermal stress in transit are significant and it is essential to ensure **early detection** of thermal conditions that might pose a risk to animal welfare. However with most monitoring systems the intervention of the driver or attendant is still required. **Automatic control and regulation of mechanical ventilation** is technically feasible and new evidence suggests that it would be beneficial in animal transport.

EFSA recommends that besides temperature parameters such as relative humidity, vibration and total loaded weight are monitored for welfare assessment during transport. However, much of the equipment (e.g. that for measuring relative humidity) is still not sufficiently robust or accurate enough for routine application in commercial transport. Moreover, such parameters probably are particularly useful for **evaluation afterwards** but less for adaptations during the journey. Vibration is probably strongly linked with driving style and is addressed in paragraph [4.2 Driving](#) of this document.

Horses shall not be transported in multi-deck vehicles except if animals are loaded on the lowest deck with no animals on higher deck. Moreover, internal compartment height shall be at least 75 cm higher than the height of the withers of the tallest animal. Inadequate penning is regarded a major welfare risk during horse transport. Therefore, vehicles designed for horse transport should have sufficient solid and safe **partitions**. These should assist balance when necessary, prevent injury and avoid negative interaction between neighbouring animals. The Regulation does not define dimensions for partitions, but they must:

- Be strong enough to withstand the weight of animals.
- Have fittings designed for quick and easy operation.

On vehicles used for journeys of over eight hours, partitions must be:

- Fitted so that separate compartments may be formed.
- Adjustable to suit the specific needs of the animals being transported.

When transporting a mare and foal together, partitions should be full height and width to ensure foals are not trapped in any gaps. Insufficient **space allowance** is regarded as a major risk to animal welfare, but because horses may have difficulty maintaining their balance too much space can also be a problem. When horses are transported in individual stalls, space is primarily determined by correct placement of the partitions. The legal requirements for the amount of space are rather general and ignore differences in body size of the animals within each category. Because horses are placed individually more **animal specific space provision** can improve the circumstances for the animals. Moreover, the ambient temperature can be taken into account giving the animals more space when transported in hot weather. The ventilation system should be designed such that it is able to ventilate all individual pens well.

During long journeys animals should be given access to drinking **water** and opportunities to **eat** and **rest** during travelling. Practically this can only be done during stops, and only if the equipment required is available. The Regulation requires that horses are given liquid every 8 hours, although an interval of no more than 4.5 hours is suggested to be biologically more justified. The quality of the water and the equipment used are important. Similarly, if horses are to be fed they should be used to the type of feed provided.

2.3.1 Vehicle design and maintenance

Good practices for vehicle design and maintenance

63. Engine exhaust fumes do not enter the area occupied by the animals.
64. **Temperature sensors** are placed on the front and the back inside each transport unit in order to provide a clear picture of the average temperature. The temperature sensors are placed at a height above the horse's head, but not on the ceiling. They are not affected by the ventilation to ensure the adequacy of the measurement. They are of a robust construction, capable of tolerating a harsh environment and produce readings that accurately reflect the true air temperature where they are located.
65. The vehicle is designed such that adequate **ventilation** can be applied above the horses and heat can be removed from the individual stalls.
66. The driver is able to monitor the animal compartment temperature from the truck cabin. The **monitoring system** is clear and simple to operate and interpret and provides warnings in case of expected major excursions outside the accepted thermal range for the animals transported.

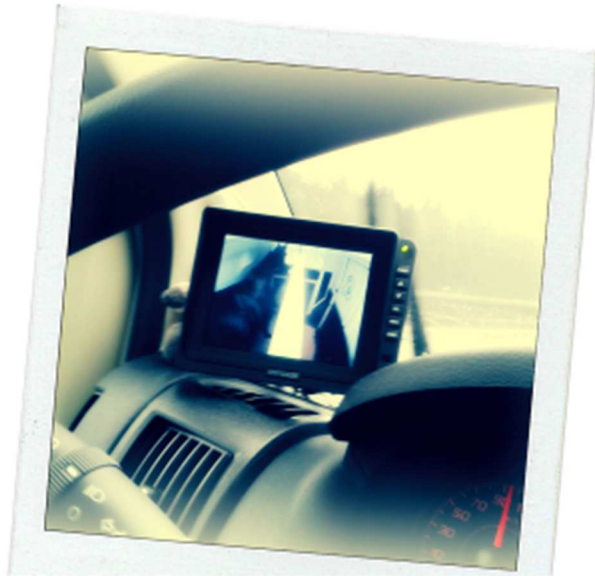


Figure 2.3 Monitoring the animal compartment with a camera.

67. A **loading plan** is made and the vehicle is prepared accordingly such that the following categories of animals (when applicable) can be handled and transported separately:
 - a) Animals of different species,
 - b) Animals of significantly different sizes or ages,
 - c) Adult stallions,
 - d) Sexually mature males and females,
 - e) Animals hostile to each other,
 - f) Tied animals and untied animals (except for a mare with its foal).
68. Unbroken horses are loaded in groups of maximum four animals. Unbroken horses are only transported on short journeys.
69. The vehicle is inspected by the driver before the animals are loaded.
70. The validity of licence and protocols of vehicles is checked prior to dispatch (maintenance, disinfection) and the status of the loading deck, ramp, and technical equipment are physically controlled.
71. Aerodynamic air foils installed on truck tractors to enhance fuel efficiency do not restrict airflow into the trailer which is necessary for ventilation and cooling.

Better practices for vehicle design and maintenance

72. **Tyre pressure** is checked before transporting animals: excessive pressure in tyres (as is done to extend the duration of 'useful' tyre inflation) is avoided to reduce vibration.
73. **Suspensions** are well maintained to reduce vibration, reducing stress to the animals.
74. Beams on body trucks and single-deck semitrailers are at least 2 m high and padded along their full length to a thickness of 2 cm with soft material.
75. Walls, floors and ceilings are padded or constructed using a suitable material to avoid rubbing or injury.
76. If flooring is a stamped metal tread, it maintains a minimum tread of at least 3mm.
77. The connection between the cargo cage and chassis is designed to minimise vibration.

78. **Partitions** used between stalls are designed so that they protect and isolate (physically but not socially) each animal. Partitions are solid, start from the floor, cover the full width of the vehicle and are as high a possible without impairing ventilation.



Figure 2.4 Examples of well-designed partitions for a horse truck

79. To facilitate movement of the animals, both walls and floor are of a light colour and the flooring of the loading-ramp matches the flooring of the transport-unit. Strong contrast between colours is avoided.
80. Regardless of journey time, horses are placed in individual stalls (but not socially isolated), unless this is likely to cause severe stress, e.g. for inexperienced animals.
81. All vehicles (also those only used for short journeys) are equipped with forced ventilation, are of light colour and have an insulated roof.
82. The **technical status** of vehicles and trailers for horse transports is monitored through annual inspection and approval by qualified personnel.
83. **Ventilation capacity** is at least 60 m³/h/KN of live-weight for short and long journeys. For journeys over 8 hours this is a legal requirement (Annex I chapter VI article 3) and therefore a Good Practice.
84. Forced ventilation equipment is used when ambient temperatures during the journey are likely to fall below -5°C or above 25°C for more than 0.5 hour.
85. The functionality of the ventilation system is checked daily.
86. Only single deck vehicles are used for horse transport.
87. The animals can be observed from outside the vehicle at all times, either directly or using a camera system.
88. Stallions and mares are not transported on the same vehicle unless they can be separated into compartments with different air spaces

2.3.2 Space allowance

Good Practice regarding space allowance

89. The minimum space allowances laid down in the Regulation (Chapter VII) are taken into account.

Table 2.2 Space allowances for horses

Type of horse	Minimum space allowance	Minimum width and length
Adult horses	1.75 m ²	(0.7 × 2.5 m)
Young horses (6 – 24 months) (journeys up to 48 hours)	1.2 m ²	(0.6 × 2 m)
Young horses (6 – 24 months) (journeys over 48 hours)	2.4 m ²	(1.2 × 2 m)
Ponies (under 144 cm)	1 m ²	(0.6 × 1.8 m)
Foals (0 – 6 months)	1.4 m ²	(1 × 1.4 m)

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

Better Practices regarding space allowance

90. Horses are provided with adequate space to prevent balancing problems, injury and damage to the vehicle. Some horses need more space than others because of their size, breed or stance: they 'stand wide'. A guideline is to provide between 10 and 20 cm of total space between animal and partitions.
91. For best balancing and adequate space provision of the horses to be transported, they are to be stalled diagonally with stalls 30-40 cm skewed.
92. If stalled diagonally, the animals are placed with the hindquarter in driving direction.
93. Space allowance is increased above values set in the Regulation during high-temperature season and driving is mainly done in the evening. Space allowance is kept at values set in the Regulation during low temperature season and driving is mainly done during late morning until the early evening.

2.3.3 Flooring and bedding on the vehicle

Better Practices regarding floor and bedding

94. Before loading the floor of the vehicle is checked to ensure it is not slippery.
95. A soft floor with elastic top layer (comparable to mats in cubicles for cows) is used to improve grip.
96. **Dry and clean bedding** is present that is able to absorb all moisture produced until unloading. The amount will depend on the journey duration: the longer the journey the more bedding is required.
97. Wood shavings (free from splinters and dust, and not made from hardwood) and several kinds of chopped straw (dust free, and not likely to cause intestinal obstruction when eaten) are suitable bedding materials. A layer thickness of 1 cm per 100 km is proposed for wood shavings.
98. Bedding is cleaned or refreshed at least every 24 hours.

99. **Dust-free bedding** is provided on vehicles transporting horses showing signs of Chronic Obstructive Pulmonary Disease (but are considered fit for travel).

2.3.4 Water and feed intervals

Good Practices regarding rest, water and feed intervals

100. Before departure, the means of transport is equipped with a clean and filled water tank.
101. If the vehicle is equipped with a water tank (obligatory for long transport) the water level is checked prior to start and on each control-point and filled if necessary.
102. To provide fresh water clean containers are available without protrusions or sharp edges that could injure horses as they drink.
103. Vehicles used for long journeys are fitted with **water troughs** allowing access for all animals individually stalled. The troughs are designed and constructed in a way that the animals cannot get injured.
104. For long journeys the drivers carry the necessary equipment to refill the water tank of the vehicle (hose, adapter to tap).

Better Practices regarding rest, water and feed intervals

105. Adequate devices to water the animals manually if required are carried along.
106. It is planned to give the horses access to water and feed every 4.5 – 5 hours for at least 30 minutes.

2.4 Animal related preparation

Several aspects of the preparation stage are related to the animals that are intended to be transported. These are addressed in the following sub-paragraphs.

It is recognised that loading **physically fit**, healthy animals on the vehicle is an extremely important factor to maintain an adequate level of welfare during transport. Selection of animals for transport is a major factor in assuring animal welfare during transport. Along with the Regulation, the OIE animal welfare guideline specifies criteria for unfit animals such as sick, injured, weak, disabled or fatigued animals or mares in an advanced state of pregnancy and new-born foals with unhealed umbilical cord.

As clearly described in the Practical Guidelines on the Watering of Equine Animals Transported by Road ([World Horse Welfare et al., 2014](#)), horses must be **fully hydrated** before travelling to help prevent the development of health and welfare problems. Even in very cold weather all horses need to drink water. If they have the opportunity they will drink frequently, on average around once every 1-2 hours. Transported horses may require 50-100 litres of water per day. High ambient temperatures, high humidity and sweating increase the water requirements.

Provision of **good quality forage** can help to create a reservoir of fluid in the horse's gut which helps to avoid dehydration. Moreover, the forage provides a source of energy for the horse to cope with the challenges of transportation. Good quality forage is also needed to

maintain the health of the digestive system and avoid colic. Feeding large amounts of concentrate can cause serious health problems and thus should be avoided.

Before transport horses should be kept in a quiet environment with adequate space and access to water and feed, so that they are **well rested** when loaded. If they are to be transported in groups they should be accustomed to each other before loading. The duration of transport from start of loading onwards should be as short as possible. Everything that can be done prior to loading will contribute to minimizing the transport duration. An example is the application of halters for animals that are required to wear them. Another is to hold the animals in areas that are easily accessible and close to the loading area.

One of the requirements for animal transport is that the animals are **fit for the intended journey**, i.e. are able to cope with the challenges of the transport while maintaining a good level of welfare. This implies that the potential impact of the journey should be taken into account. Guidelines regarding horse fitness for transport have recently been agreed and presented by a consortium of stakeholders in "Practical Guidelines to Assess Fitness for Transport of Equidae" ([World Horse Welfare et al, 2016](#)). Legally, a horse should not be transported unless it is judged that it is healthy enough to withstand the stress of the entire expected trip (including intermediate stops). A reduced capacity to withstand transportation (i.e. unfitness) may be due to injury, fatigue, infirmity, poor health, distress, impending parturition or any other cause. Each case must be judged individually. If it is not sure whether a horse is fit for the trip, a veterinarian should be contacted. When an animal is unfit for transport, treatment must be provided until the animal is fit for the trip and can be transported. If necessary, the animal should be euthanised.

2.4.1 Preparation of animals and equipment for the journey

Good Practices on preparation of animals and equipment

107. The animals are accustomed to the means of feeding and watering to be used during the journey.
108. A **check-list** is developed and implemented that is to be signed by the driver prior to transport.
109. The **halters** horses wear during transport are flat (and not made of rope) in order to avoid injuries. They are preferably applied before loading begins.
110. Horses transported in groups are unshod, and accustomed to each other.

Better Practices on preparation of animals and equipment

111. In the hours prior to departure **hay and water** are provided ad libitum. For horses that receive concentrate feed, the amount is reduced gradually before departure.
112. Prior to the journey, the horses are able to **rest** for not less than 48 hours untied, in a suitable and quiet holding area, with easy access for staff, enough space to turn

around and lie down and that is fitted with an adequate amount of clean bedding material.

113. If foals are transported, they are at least 5 months old, and weaned at least a week before being transported, unless transported with their mother.

2.4.2 Fitness to travel

Good practices for determining fitness to travel

114. A checklist, e.g. as described in the "Practical Guidelines to Assess Fitness for Transport of Equidae" is readily available and used to determine fitness prior to loading.

115. Appropriate action is taken if any of the following signs are observed during the Fitness to transport check:

- Discharge: from eyes, mouth, nose, rectum, vulva or penis
- Abnormal breathing: e.g. flared nostrils, rapid, shallow, laboured or noisy breathing
- Frequent coughing;
- Profuse sweating or shivering
- Abnormal posture or movement
- Abnormal behaviour: e.g. unresponsiveness, lethargy, repeated rolling, biting, kicking, aggression
- Abnormal faeces: diarrhoea, hard, absent, infrequent or mucus-covered
- Abnormal urine: thick, dark, passed in small amounts or absent
- Appetite/thirst: reluctance or refusal to eat and/or drink, or excessive drinking behaviour

116. Moreover, **further assessment is required** when the following health conditions are observed: Reluctance to stand or move, Mild lameness, Weight shifting, Abnormal posture, Multiple wounds or a wound that may reopen and where transport is likely to aggravate the wound, Nose bleeding or other bleeding that has stopped, Enlarged abdomen, Full or enlarged udder, Restlessness, Profuse sweating or Facial tension.

Better practice for determining fitness to travel

117. The checks on animals before loading are performed by a vet specialised in equines.

3. Handling & loading

3.1 Introduction

Loading animals onto a vehicle with a **minimum of stress** improves animal welfare because it eases the loading procedure and reduces the risks that animals slip, fall or get injured. It is more difficult to move stressed animals than non-stressed animals, because they may refuse to move on, try to escape and generally be more difficult to handle. It can be risky for the handler if they turn back and run away. **Handling quality** during loading and unloading of horses has a major impact on their welfare. It is of particular importance to take into account the physiological and health status of the animals. Handling skills are required for the handler to understand horse behaviour and to be able to detect signs of unfit animals similar to those described for fitness to transport. Adapted operating procedures should be planned for such cases. Drivers and operators should be aware that some animals may suffer from transport conditions and should be handled accordingly in order to avoid any additional stress.

Along with the physiological and health status of the animal and inadequate handling, risks of poor welfare at loading are mainly related to:

- The inadequate **design of driveway and gates** (in particular inadequate dimensions and shape, presence of visual obstacles) that could cause bruising, injuries, reluctance to move,
- The slippery of the **floor surface, including ramp**, that will lead to similar adverse effects,
- The presence of **sharp edges** that will cause injuries,
- The **lighting environment** (light contrasts) that may cause disorientation and fear,
- Unfamiliar or loud **noises**.

As a result, loading is one of the most stressful phases of transport. Loading starts when the first animal to be transported exits the holding pen at the place of departure (a farm, assembly centre or control post) and is moved towards the vehicle and ends when all the animals are in the vehicle. Using good and better practices and proper equipment for handling at this stage are of utmost importance to reduce these negative effects. It is important to understand the potential effects that human interactions have on horses and horse behaviour. Quick handling may not be understood by horses and may create fear and/or a negative reaction to a handler. Additionally, horses that have had regular, positive interactions with people will typically be less fearful and easier to handle.

3.2 Loading facilities

Poor design, construction, maintenance or operation of loading and unloading facilities, particularly when combined with poor handling, may cause slipping, falling, bruises and eventually injuries and more stress to the animals, thus producing low meat quality and economic losses. An accurate design and construction of platforms and loading ramps will facilitate loading and unloading with minimum animal distress and bruising. Important aspects of loading facilities are the layout, inclination of the ramp, slip resistance of floor

and ramp and side protections. Light levels and noise also have an impact on the loading process. The following practices are applicable for all loading and unloading facilities.

Good Practices regarding loading facilities

118. The loading area is designed and maintained so that excitement, suffering, injury or distress during animal movements are avoided as much as possible.
119. The maintenance of the loading area/equipment and lairage pens (doors, light, ventilation, cleanliness and quality of the floor) are checked before penning to avoid the risk of horses slipping, stumbling or injuring themselves.
120. Roads and loading area are **accessible** in all kinds of weather that can occur at the location, and the loading area is constructed, used and maintained so that excitement, suffering, injury or distress during animal movements are avoided.
121. The loading facility has a ramp with a gradient of max. 36.4% with guard-rails and are equipped with slip-resistant and anti-sliding surfaces
122. For loose loading the proper space allowance is determined beforehand and only pre-socialised horses are transported together.
123. The **duration of loading** is minimized, whilst ensuring enough time is available for horses to be loaded without rushing or causing additional stress.
124. A non-slip floor is used with a design that ensures the leakage of faeces and urine is kept to a minimum.
125. A suitable source of light is present for loading and unloading procedures
126. The loading area is easy to **clean and disinfect**.
127. Lateral protections (side barriers) are used when animals are loaded/unloaded.



Figure 3.1 Side protections on a horse truck

128. The ramp is covered with straw, sand or sawdust to prevent slipping and to reduce noise.
129. The ramp is constructed such that it does not sway or move while animals are passing it.

130. Lighting in the truck compartment and in the loading area can be operated throughout the duration of the whole (un)loading stage with the truck engine off.

Better practices regarding loading facilities

131. A rubber bumper is used to prevent injuries for vehicles requiring horses to step up.
132. **Foot battens** are 25 mm high and 20-35 cm spaced.
133. A flat loading dock, or one with an angle less than 10 degrees, is used to improve (un)loading. Efforts are made to achieve the optimum (un)loading angle of 'zero' degrees, (e.g. by reducing tyre pressure, higher loading platform, riser block, etc.).
134. Traffic areas and truck paths between entrance (of farms, assembly centres, control posts, slaughterhouses, etc.), loading and unloading areas, and parking are planned according to the maximum size for trucks, trailers and semi-trailers and to their radius of curvature.
135. During (un)loading, animals are **moved from a darker to a lighter area**, and light contrasts such as shadows are avoided or limited as much as possible.
136. In case of harsh lights, a cover to dim the lights is used.
137. Lighting of the inner part of the animal compartment in the truck is provided. Adequate light in this area will ease the entry of the horses into the truck. Moreover, it is more comfortable for the animals, will enhance the inspection of the truck interior and the animals during a stop and will ease loading and unloading for the handlers.

3.3 Handling during loading

Loading and unloading operations should be performed in a calm way by experienced personnel, understanding equine behaviour. In the loading phase the distinction between broken and unbroken horses is important, because the latter cannot be led by a halter during loading and should not be transported in groups of more than four individuals or on journeys over 8 hours. Unfamiliar, sexually mature stallions should not be grouped, and should be kept separate from mares.

Horses have **wide-angle vision** and they can see nearly 360° around themselves. People who are handling horses and other grazing animals should have knowledge of flight zone principles. A **flight zone or safety zone** is the space around an animal within which the animal feels safe. If the animal turns away from an approaching handler, it means that the handler has entered the flight zone and the animal is trying to re-establish a comfortable distance. The size of the flight zone depends on the tameness of the animal: when a horse becomes more fearful, its flight zone will increase. The centre of the flight zone circle ("**point of balance**") is usually at the animal's shoulder. All species of livestock 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. An approximation of the flight zone can be made by approaching the animal and noting at what distance the animal moves away. Animals have a widening blind spot located right behind them and a narrowing one in front. If a handler positions himself in the **blind spot**, animals can get nervous as they cannot see what is happening. Handlers should always try to avoid that "blind spot" when approaching a horse. See figure 3.2 for an illustration of flight zones and horse vision. Knowledge of horse behaviour and response to humans is achieved through training and practical experience.

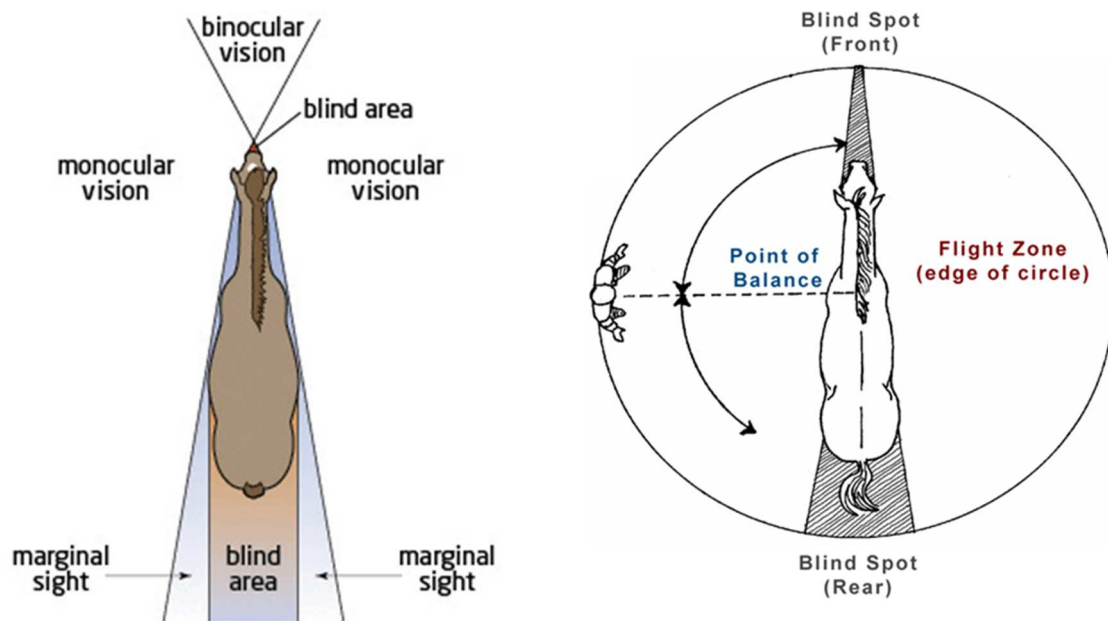


Figure 3.2 Horse vision and flight zone

Good Practices regarding handling during loading

- 138. Handling and loading are performed in a **calm and quiet** manner.
- 139. Whether a horse is **broken** or not is determined by the following checks:
 - a) A check with the animal keeper,
 - b) Take into consideration age and origin of the animals,
 - c) Being able to approach the horse without causing excitement,
 - d) Being able to put on a halter without causing excitement,
 - e) Being able to lead the horse by a halter without causing excitement (this does not necessarily mean that that horse can be tied up),
 - f) Being able to tie the horse by a halter without causing excitement (although some broken horses can pull back violently when tied).
- 140. To avoid stress, fighting or other injurious behaviour, potentially hostile animals should be kept out of physical reach of other horses.
- 141. If horses need to be tied, rope length is such that the animals can stand upright but also move their head up and down and they are tied such that they cannot get caught with a front leg/hoof.
- 142. Foals up to 6 months of age are not tied, even if they can be led (i.e. are broken).
- 143. The animals cannot bite the neighbouring horse, e.g. by using partitions with head sections.

Better practices regarding handling

- 144. The loading process is **documented and supervised** by a designated responsible officer and / or an official vet.
- 145. Foals are lifted if they cannot negotiate the ramp.

146. Dogs are kept away from the loading area during loading.
147. For journeys up to 8 hours horses are not penned individually when they show signs of fear and/or distress due to isolation, but are grouped with familiar animals.
148. Inexperienced or unbroken animals are treated with extra caution and allowed more time to adjust to their surroundings.
149. Halter loaded horses are trained to be loaded beforehand. Horses well trained to the halter are taught loading procedures well before the anticipated date of transport. Unbroken horses kept in small groups can be taught loading by feeding next to the vehicle, from the ramp and in final step in the vehicle. Horses that have had a positive experience loading are often less fearful than horses loaded for the first time.
150. A **quick-release safety device** is used if horses are tied.
151. Provisions are available and used to enable and disable visibility between neighbouring animals
 - a) Disabled visibility is needed when an animal is aggressive to its neighbour.
 - b) Enabled visibility is needed when an animal is stressed when it is isolated.

4. Travelling

4.1 Introduction

Transport involves several potential stressors that could negatively affect animal welfare. The new and **unfamiliar environment, movement restrictions due to confinement, vibrations, sudden and unusual noises, mixing with other animals, temperature and humidity variations together with inadequate ventilation and often feed and water restrictions** all have an impact on the animals' state. The impact of all these factors on livestock is influenced by the experience of the animals with transport, their physical condition and the nature and duration of the journey. Long journeys have been mooted as specially impacting on the general status of the animals, because of the longer duration of the above mentioned stressors. Stressful journeys and hostile transport environments or conditions may influence animal health and welfare. Inappropriate handling and transport can be associated with overt injuries, physiological and psychological stress, immunosuppression and metabolic disturbances. These responses may impact upon productivity and profitability through changes in animal body weight, hydration state and meat quality in slaughter animals.

The driver (and attendants) have sole responsibility for the welfare of the animals on the road, and thus play a crucial role during this stage of the transport. They not only operate the vehicle, but also monitor and take care for the animals and deal with emergencies if these occur. They should do this by providing an adequate climate, sufficient water and food and opportunities for resting. Drivers skills are achieved through training ([paragraph 1.2 Competence and training](#)) and practical experience.

4.2 Driving

While standing in a moving vehicle, all livestock struggle to **maintain their balance** and to **avoid contact with other animals** if they are in a group. Because of their high centre of gravity and because horses usually remain standing during travelling this is particularly difficult for them. The smoother the vehicle moves (i.e. with minimal acceleration or decelerations in any direction) the easier it is for the horses to keep balance. The main welfare impairments related to rough journeys (opposite to smooth journeys) are:

- Loss of balance resulting in bruising or falling.
- The need for **continuous postural adjustment** to maintain balance and to avoid falling, resulting in fatigue.

Rough journeys can be caused by an erratic driving style, but also by rough roads. The latter should be avoided as much as possible, and if they cannot be avoided the driver should drive extra carefully and slow down sufficiently.

There is a strong relationship between **driver skills**, the amount of stress on livestock and the profitability of the transport business. Smooth, consistent driving habits allow the animals to relax more during a journey than hard, erratic driving. A rough driving style increases measurable stress on the animals transported, but can also cause significant decreases in meat quality. It has been estimated that there is a difference of 20% in fuel efficiency between driving on a flat road at uneven speeds of up to 100km/h compared with a uniform, cruise controlled safe speed of 80km/h. If a driver encounters a slower driver on a road with no passing opportunities, it is advisable to sit back and take a steady pace instead of hustling an uncontrolled situation. Another aspect of smooth driving is smooth braking. This helps to keep animals on their feet with minimum of effort. Hard breaking results in more stress, more stress equals bad welfare, and bad welfare results in poor meat quality.

The **principles of road-holding** of an HGV (Heavy Goods Vehicle) and the ability of an animal to be sure-footed are the same. However, the driver has complete control over the vehicle, but only partial control over the animal. It is important that the knowledge of what horses experience and how they will behave under certain conditions is addressed in drivers training courses. A horse transported probably has more pressure on its feet than the load on the vehicle tyres: for a loaded livestock vehicle with 18 wheels, the load on the tyres is 4.7kg per square centimetre on the tyres; a 600 kg horse has four feet in contact with the ground, and the load on the horse's feet is around 10-12kg per square centimetre. Despite this high load, horses will attempt to remain standing. The more effort this requires the greater the stress they will be under.

There is no strict legal requirement regarding driving, but according to the Regulation means of transport are operated so as to avoid injury and suffering and ensure the safety of the animals. To achieve this objective some general and simple good practices should be followed when driving a vehicle transporting live horses. These practices apply to short and long journeys.

Good practices when driving

152. When driving a vehicle transporting horses, the driver:
- Starts out slowly,
 - Avoids sudden braking,
 - Takes curves carefully (in particular roundabouts),
 - Changes gear gently,
 - Uses, whenever possible, highways (bad road conditions entail increased vibration in the vehicle). If road conditions are bad, speed is adjusted. Road conditions should be taken into account in the planning phase ([2.2 Planning the journey](#)) as the route should not be determined ad hoc.

Better practices when driving

153. An accelerometer is used to monitor and improve driving style, and the data collected via the navigation system are analysed and kept on record for identifying best driving-practices. This can be part of a possible Quality Control System.

4.3 Climate control during driving

The microenvironment inside vehicles is a major determinant of animal welfare. This environment is modified by the **metabolic heat** and **moisture** production and the **gas exchange** of the animals kept inside. These depend on the numbers, types and ages of the animals being transported. A steady supply of fresh air to all livestock on a vehicle is essential to support normal health. This will remove the excess moisture and heat that comes from the animals' bodies and provides oxygen. External climatic conditions (the weather) determine the properties of the air entering the vehicle for ventilation, and therefore should be taken into account.

A proper **ventilation system** has sufficiently large ventilation openings, traversing the whole length of the vehicle at the animal height and has adjustable settings. The challenge is to provide adequate ventilation when a vehicle is stationary during hot weather, but also when driving at 80 km/h on a cold morning.

As already indicated in the introduction of paragraph [2.3 Means of transport](#) monitoring is a crucial element of climate control. Although for long journeys temperature **monitoring and warning systems** are obligatory, specific requirements regarding the use of ventilation systems are not given in the Regulation. Key to prevention of thermal stress is to monitor the internal thermal environment on vehicles, and to adjust ventilation system settings based on measured environmental parameters inside the compartments (e.g. actual temperature) and relevant circumstances such as driving speed and ambient temperature. It is not the presence of ventilation and monitoring equipment but proper use thereof that can make a difference for the animals and have a positive impact on animal welfare. Of particular importance in this regard is to determine when something should be done and to implement correct measures if monitoring indicates that something should be done (i.e. what should be done).

In addition to recording and monitoring temperatures, thermal inadequacy in the truck can be assessed by looking for excess sweat on the animals or laboured breathing, but this can only be applied during stops, whereas temperature can change dramatically during travelling (e.g. by geography, time of day, weather, driving speed). Moreover, since both sweating and laboured breathing indicate heat stress, these parameters are particularly useful to check if the ventilation system is used properly (i.e. at each check they should be absent) but not to prevent heat stress.

The primary hazards associated with vehicle environments are **heat stress** in response to hot weather conditions and **cold stress** resulting from cold weather. It is assumed that in practice, excessive heat is likely to be a greater problem for horses than extreme cold, and that particularly prolonged heat stress impairs the welfare of horses. Local convective cooling or excessive wetting of animals due to water ingress, rain or snow may induce cold stress. Long journeys should be avoided when for instance ambient temperatures are expected such that temperature within the means of transport cannot be kept between 5

°C and 30 °C. Drivers must give consideration to ventilation at all times while there are animals inside, including when the vehicle is stationary and during statutory driver breaks.

The **thermo-neutral zone** (the range of temperatures in which an animal maintains body temperature in the short term with little or no additional energy expenditure) of horses is estimated to be somewhere between 5 °C and 25 °C. This implies that at temperatures below 5 °C or above 25 °C thermoregulation costs additional energy (e.g. for sweating, panting or shivering), but as long as temperatures are within the limits of the thermoregulatory capacity the animal is able to maintain its body temperature. Other research has shown that there are differences between breeds and heat loss is affected by e.g. thickness of the hair coat and body condition. Moreover, thermal comfort is both determined by temperature and humidity, and their effects are influenced by air movement and direct wetting of animals. High humidity exacerbates the effect of extreme temperatures. The combined effects of humidity and temperature are visualised in **Figure 4.1**.

Livestock Weather Safety Index

Dry Bulb Temp (°C)	Relative humidity (%)					
	50	60	70	80	90	100
25,6	22,2	23,3	23,9	23,9	25	25,6
26,7	23,3	23,9	25	25,6	26,1	26,7
27,8	23,9	24,4	25,6	26,1	27,2	27,8
28,9	25	25,6	26,7	27,2	28,3	28,9
30	25,6	26,7	27,2	28,3	28,9	30
31,1	26,7	27,2	27,8	29,4	30,6	31,1
32,2	27,2	28,3	28,3	30,6	31,1	32,2
33,3	28,3	28,9	30	31,1	32,2	
34,4	28,9	30	31,1	32,2		
35,6	30	31,1	32,2			
36,7	30,6	31,7				
37,8	31,1	32,8				

Good!

Alert

Danger

Emergency

Figure 4.1 The combined effects of temperature and humidity on livestock.

Good practices for climate control

154. The temperature in the animal compartments is monitored from the truck cabin by the driver.
155. At all times while the animals are on a vehicle the animal compartments are sufficiently ventilated.
156. If the temperature in the truck reaches 35 degrees Celsius then the driver starts the emergency procedures of paragraph [4.7 Emergencies](#) to reduce the temperature.

157. In case of hot conditions (temperatures over 25 °C), when animals develop excessive sweating and show increased breathing, the following measures are considered:
 - To activate the ventilation system,
 - If it is necessary to stop (e.g. to water the animals): park in the shade, fully open the ventilation flaps, keep the stop as short as possible,
 - Proceed to the destination without unnecessary delay,
 - Prepare operators at the place of destination for immediate unloading,
 - If the destination cannot be reached within two hours and temperature on the truck cannot be lowered sufficiently, activate the contingency plan and unload the animals at the nearest emergency unloading facility.

158. If extreme cold or hot conditions are foreseen along the planned route, which will make it unlikely that the driver can maintain temperatures within the compartments between the legal range of 5 to 30 (± 5) °C, then horses are not transported.

Better practices for climate control

159. If it is necessary to park the vehicle in **cold weather**, when possible it is parked in an area that provides protection from the wind. Extra weather boards are added, if necessary, to keep wind or freezing rain out, particularly if the horses are warm due to maintaining their balance during travelling before. Ventilation is kept adequate to avoid laboured breathing and overt sweating.
160. In **high temperature conditions**, when possible, the trailer is parked in an area that provides shade and allows for a breeze to pass through the sides of the trailer. It is avoided to park near other animal transporters because of the potential for reduced air flow and increased risk of disease transfer.
161. If the temperature in the truck reaches 30 degrees Celsius then the driver starts the emergency procedures of paragraph [4.7 Emergencies](#) to reduce the temperature.

4.4 Water and feed requirements

Providing water and roughage in the hours preceding loading (see paragraph [2.4.1 Preparation of animals and equipment for the journey](#)) reduces the likelihood that nutritional requirements will not be met during transport. The general principle laid down in Regulation 1/2005 is: "water, feed and rest are offered to the animals at suitable intervals and are appropriate in quality and quantity to their species and size." Restrictions regarding drinking and feeding are more or less inevitable during transport. On standard

vehicles it is often difficult to provide liquid or feed, therefore maximum journey time is set at 8 hours when using such vehicles.

Since water and feed are basic needs for all animals these restrictions reduce animal welfare. Particularly during long transports animals should be given opportunities to drink and (if necessary) eat during the transport at least every 8 hours during **stops** that were planned in the preparation phase, and preferably every 4.5 hours. If the hydration status of the horses indicates that water is required sooner than after the planned intervals then it should be given. The stops are mainly needed for watering, feeding and checking the animals but also for resting.

There is no specific requirement regarding the length of the stops, except for foals on a milk diet. These foals should be given a rest period of at least one hour after nine hours of travelling during which they can be given liquid and if necessary feed. Because longer stops prolong the overall journey duration the stops should not last longer than is needed to take care of all foals individually if this is more than one hour. The best check to determine if feeding is needed, is to give the animals the opportunity to eat. For horses per 100 kg of live weight a minimum 2 kg feed and 1.6 kg of concentrated feed per day is offered and 45 litres of water per animal per day. Trucks used for long transport of horses should be equipped such that feeding and drinking the animals on board is possible, and that water and feed can be carried during the journey.

Good Practices for long journeys regarding watering and feeding:

162. Still (not running) water, with individual access, is provided.

Better Practices for long journeys regarding watering and feeding:

163. Horses are given access to good quality water and forage every 4.5- 5 hours for at least 30 minutes.

164. Horses are fed with the same type of forage before, during and (if applicable) after their journey.

165. Animals prone to laminitis are not fed feedstuffs with a high starch and/or sugar content.

166. The water level in the bowl is high enough to allow the animal to see over the rim of the bowl.

4.5 Care of sick or injured animals

The regulation only allows transport of animals that are fit for the intended journey, both at initial loading and after a stay in a control post. Therefore, the animals are checked for fitness for travel before and during loading. However, there is a risk animals become sick or injured during transport even if environmental circumstances are monitored and regulated correctly, good driving style practices are applied, the animals are fed and watered as required and are given sufficient opportunities to rest. These animals may be identified during routine journey breaks or specific inspection stops (e.g. additional stops during hot weather). The animals will probably fall in to 4 groups:

- a) Animals that have fallen or been trampled or injured e.g. as a result of aggression and have a clear lesion or fracture;

- b) Animals that exhibit an injury such as a hernia or prolapse or dislocation;
- c) Animals that are exhibiting the symptoms of heat or cold stress and/or dehydration;
- d) Animals that appear to have developed symptoms of a disease or infection:

The driver is responsible for the well-being of the animals during travelling. The Regulation states that **animals that fall ill or are injured during transport** shall be separated from the others and (after being given first aid treatment a.s.a.p.) shall be given appropriate veterinary treatment and if necessary undergo emergency slaughter or killing in a way which does not cause them any unnecessary suffering. Practically the possibilities for the driver to intervene are limited and welfare consequences for the unfit animal(s) and the other animals should be carefully weighed. The destination should be informed that one of the animals will be unfit, so that they can be prepared. A clear description of the preferred course of action is presented in the Guidelines to assess fitness for transport of equidae.



The occurrence of **seriously unfit animals** is an emergency, and therefore also the emergency plan should be implemented (see paragraph [4.6 Emergencies](#)). Animals identified as sick or injured at the end of the journey will be dealt with by the appropriate authority at the destination, e.g. the veterinarian at a slaughterhouse or control post. It is very important that a driver or attendant actually checks the health status of the animals during the journey (particularly for long journeys with intermediate stops), and that the limited things that can be done in case one or more animals show abnormalities are actually done.

Good practice regarding the care for sick and injured animals

167. During stops the **animals are checked** for signs of impaired fitness. In case there are abnormalities the contingency plan is activated and appropriate action is taken, according to the checklist for fitness (presented in paragraph [2.4.2 Fitness to Travel](#); and Ref 005).

Better practices regarding the care for sick and injured animals

168. Drivers and attendants carry a list with phone-numbers of official vets and other emergency point of contacts at all times.

169. A 'Welfare-officer' at the company is in charge of handling and organizing emergency-situations in the back-office.

4.6 Emergencies

Emergency situations are by definition unexpected, and require immediate action. It is important that drivers or other persons in charge **have a plan on what to do**, should an emergency situation take place. The plan should include a series of emergency telephone numbers, e.g. to obtain veterinary assistance.

Better Practices during emergencies

170. **In case of a mechanical breakdown** of the tractor, the nature of the breakdown is determined and it is estimated how long the repairs will take. **If the repairs cannot take place** at the site of the breakdown or they will take an extended period of time (too long for the animals to be left safely on the vehicle), **arrangements for another tractor** are made. Numerous factors need to be taken into consideration when determining how long animals can safely be left on a stationary trailer:
- Weather – (e.g. horses will do fine on a trailer for four hours in cool, low humidity weather. In extreme summer heat and humidity, they will experience heat stress quite quickly),
 - Fitness of the animals,
 - Age of animals,
 - Time since last feeding and drinking,
 - Location of the delay (e.g. rural area vs. freeway),
 - Time of day,
 - Safety of animals at current location.
171. In the event of an accident, the actions in Table 4.1 are undertaken.

Table 4.1 Actions required in case of an accident whilst transporting animals

- a) The **national road emergency number is called** if the accident occurs on a public road or if emergency assistance is required for an on-farm accident.
- b) The operator is advised of:
 - The location of the accident,
 - The fact that there are animals on-board,
 - The status of any loose animals,
 - Any known hazards.
- c) **Emergency warning devices are set out** a.s.a.p. (preferably within 10 minutes of the accident).
- d) The **designated company contact is called**. If the company has a dispatch checklist for accidents, this is followed by proceeding through the list. If not, the dispatcher of the location of the accident is informed whether there are any injuries, about the condition of animals, position of the trailer, number of vehicles involved and whether first responders are on scene yet.
- e) Other designated contacts are called according to the company protocol and provided with the same information. These contacts could include, but are not limited to, the insurance companies for the cargo and the vehicle and the destination.
- f) If the tractor and/or trailer are damaged and unable to move: proceeding to next point. If damage is minor, the trailer is upright and there are no injuries: photos are taken and names and addresses of other people involved and witnesses are recorded.
- g) Any **loose horses are herded from the road** and gathered in an area as far away from traffic as possible.

- h) **Locate the accident reporting kit and take photos** of the accident as soon as possible. Photographs should include photos of road conditions, vehicle damage, animals, trailer position, the overall accident scene, skid marks, curves, intersections and where the vehicle left the road (if it did).
- i) As much **protection and comfort are provided for the animals** as possible
- j) Statements are released only to people of authorities. The driver must remember that at this point he or she is the most visible company and industry representative and must conduct himself or herself as such.
- k) When first responders arrive, the driver advisee them of accident details including any human injuries, the status of any loose animals, any known hazards and the company's emergency response plan. If available, the transporter should let the authorities know if a company rescue trailer and animal handling personnel are on the way and their estimated time of arrival. Transporters must respect the chain of command at all times.

172. Drivers are given regular training allowing them to respond in an effective manner and lessen the impact of any delay or accident on the animals and on themselves.
173. Animals that fall ill or become injured during transport are separated and receive veterinary attention without delay. In case the vet judges treatment of an animal is not possible this animal is humanely killed on the spot.

5. Unloading animals

5.1 Introduction

Upon arrival at the final destination or control post unloading of the animals should be undertaken as soon as possible. Unloading is part of the journey and the journey is only complete when the last animal has been unloaded at the final destination. It is important to optimise the ease and efficiency of unloading to ensure that undue delay is avoided and that animals do not remain on the vehicle for longer than is necessary. The same principles regarding **handling** horses mentioned in paragraph [3.3 Handling during loading](#) also apply to the unloading phase and the handling skills required are similar to those reported for loading. Attendants and receiving personnel should be able to **detect signs of unfit, ill or injured animals** similar to those described for fitness to transport and adapted or amended operating procedures should be planned for such cases. Incorrect handling of the animals during unloading can have detrimental effects on animal welfare. Horses that are loaded and transported individually, should also be unloaded and accommodated individually afterwards.

The Regulation requires that loading and unloading equipment, including flooring, must be designed and operated so as to prevent injuries and suffering, to minimize excitement and distress, and to ensure the safety of the animals. Poor design of loading and unloading facilities, combined with poor handling, may cause slipping, falling, bruises and eventually injuries and more stress to the animals, thus producing low meat quality and economic losses. An accurate design of platforms and loading ramps will facilitate loading and unloading with minimum animal distress and bruising.

When performing unloading, the physiological and health status of the animals should be taken into account. Drivers and operators should be aware that some animals may have suffered from transport conditions and should be handled accordingly in order to avoid any additional stress. Along with the physiological and health status of the animal and inadequate handling, **risks of poor welfare at unloading** are mainly related to:

- Inadequate design of driveway and gates (in particular width) that could cause bruising, injuries, reluctance to move,
- Slippery floor surface including ramp that could lead to similar adverse effects,
- The presence of sharp protrusions that could cause injuries,
- The lighting environment that may cause disorientation and fear.

5.2 Layout of the unloading area

Unloading areas should be secure and provide a wide, clear, straight path from the vehicle to the holding pens. The good and better practices related to the design of facilities for horse unloading are described in paragraph [3.2 Loading facilities](#). Additional good and better practices are provided for unloading horses at the slaughterhouse, but in principle they can also be applied at other places where large numbers of horses are unloaded.

Good practices regarding the layout of the unloading area

174. **Closed fences** are provided around the unloading area to avoid intrusion and escape of the animals in case of incidents during unloading
175. Traffic areas and truck paths between entrance (of farms, assembly centres, control posts, slaughterhouses), loading and unloading areas and parking are planned according to the maximum size for trucks, trailer and semitrailers and to their radius of curvature.
176. A clear **signalling and identification of the dock** (for example, according to the type of truck) is present.
177. The floors of the ramp and dock are not slippery and the composition of the floors ensures that the discharge of faeces and urine is kept to a minimum
178. Regular **cleaning and maintenance** of the floor is carried out
179. A suitable source of **light** is present for unloading procedures
180. During unloading, animals move from a darker to a lighter area, contrast of light such as shadows is avoided.
181. Lighting in the compartment and in the loading area can operate throughout the duration of the whole loading stage with the truck engine off.
182. The optimum **unloading angle** for all animals is 'zero', so a method to maintain the angle as low as possible is adopted (minimum height of the dock depending on the type of trucks, lift, etc.).
183. As animals prefer to walk slightly uphill rather than downhill, it is advisable to maintain lower angles during unloading.
184. The dock should be 2.75 m wide for a truck and equipped with lateral protection (height >1.7 m).

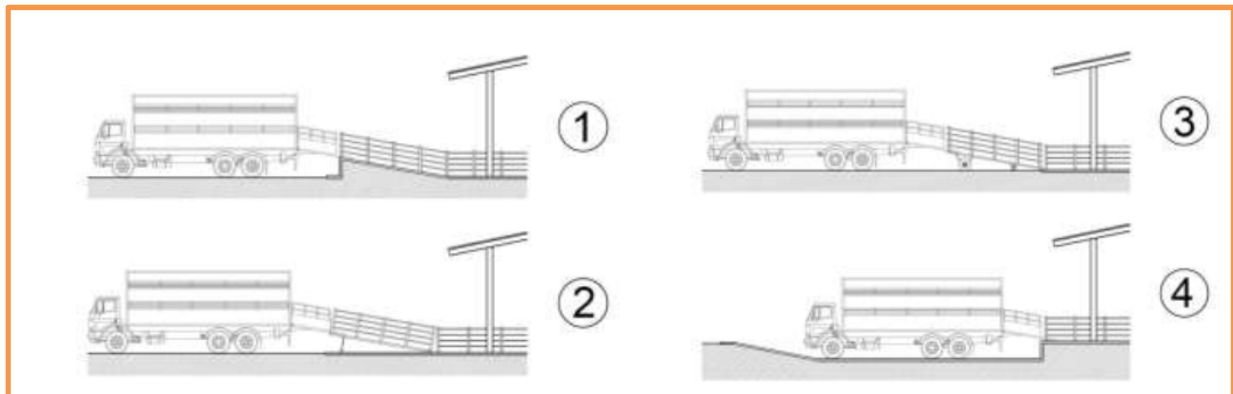


Figure 5.1 Possible recommended features for (un)loading animals.

Better practices

185. The area in front of the unloading dock is around twice the length of the trucks long.
186. The unloading area is covered and protected from adverse weather conditions.
187. The truck door preferably is not opened in an Easterly direction when unloading takes place in the early morning, as this will help to limit unwanted balking behaviour when facing the morning sun.
188. The dock includes human passageways in order to secure the zone for handlers.

5.3 Care of animals during and after unloading

Unloading of horses can cause serious stress and discomfort. It is important that appropriate care is given to the animals, in particular when they have sustained injury or have fallen ill during transport..

Good practices regarding care of animals at and after unloading

189. At the place of destination a procedure to take care of **sick or injured animals** is in place.
190. Trucks with poor ventilation or other complications are **unloaded as a priority**
191. If a sick or injured animal is able to be unloaded by putting weight on all four legs and walk off the vehicle, then the animal is separated from the others in a holding pen and is **assessed by a vet** as soon as possible.
192. If a sick or injured animal cannot walk on four legs it is not forced to leave the vehicle, but a vet is consulted immediately before taking further action.
193. A **stunning device** is present at the slaughterhouse which can reach the truck and the separation pen. This device is used in case an animal needs to be killed on board the vehicle at arrival or in the separation pen. Staff appropriately trained to handle the device is present at the site. Stunned animals are killed before they regain consciousness.
194. If an animal that is to be killed is not destined for human consumption it is euthanized by a vet or emergency killed by a qualified person on the spot.

5.4 Cleaning and disinfection

Bio-security is important for travelling animals to prevent the spreading of diseases. Stress during transport may also impact on their immune system and make them more sensitive to disease. After unloading the animals the vehicle can still carry and spread pathogens, therefore it is obligatory to clean and disinfect it after each transport. The practices below apply both to short and long transports.

Good practices for truck cleaning and disinfection

195. Trucks are cleaned **directly after unloading**, before they enter the overnight parking space.
196. Dirty **bedding** is removed from the truck to the manure treatment facility or the manure storage area.
197. The truck compartment is cleaned, using **high pressure warm water** (>70 bars).
198. The vehicle is disinfected using **authorised disinfectant products** once wall and compartment barriers are clean but still humid. The disinfectant is applied according to the manufacturer's recommendations.
199. There is sufficient hot and cold water available (volume and pressure) at the place of cleaning and disinfection to clean the maximum number of trucks that can be unloaded each day.
200. All washing facilities and products are kept closed and protected from weather.
201. A **record is kept** by drivers of each cleaning/disinfection, including the trade name of the disinfectant product used and the concentration applied.

Better practices for truck cleaning and disinfection

202. Protective waterproof clothes are worn by the driver during cleaning.
203. Lorry wash areas are 25 m long, with a 5 to 7% slope to conduct waste water to the relevant collecting system.
204. The cleaning and disinfection area is free of obstacles for at least 2 metres around the truck.
205. Lighting is available at night time; 400 lux is provided at the level of objects to be cleaned.

6. Stay at control posts, markets and assembly centres

6.1 Introduction

The maximum permitted travelling time is 24 hours for horses and ponies on a higher standard vehicle, with a tolerance in all cases of 2 additional hours to reach the final destination. The additional 2 hours are exceptional only (e.g. in cases of traffic jams) and are not to be included in the planning. At the end of the legal maximum permitted travelling time, the animals must either have reached the final destination and be unloaded there, or be unloaded for a resting period of 24 hours, which in ongoing journeys has to happen at an approved Control Post before travelling further. The Regulation also establishes a maximum duration for long journeys, which varies according to the species and the age of the animals, and requires a specific resting period for foals (Table 2.1).

Control Posts are facilities which may be attended and inspected by an official veterinarian, and which have been approved by competent authorities based on specific EU requirements (Council Regulation EC No 1255/97). At the control post the animals may rest, be fed and watered and cared for during long journeys. **Assembly centres** are places such as holdings, collection centres and markets, at which animals from different origin may be sold and grouped together to form consignments. Regarding animal welfare and health, the main risks are similar for control posts, markets and assembly centres (see below).

Control Posts must be designed, organised and managed to accommodate animals for rest, feeding, watering, and care during long journeys. Housing conditions and staff working at the Control Posts should guarantee that the animals transported receive adequate care according to their status and continue their journey under optimum welfare conditions, including compliance with animal-health requirements and bio-security measures. **Therefore, resting periods in Control Posts must ensure the possibility for all animals to get rest, food and water at the level of their needs.** Then the use of Control Posts is an efficient mean to improve animal welfare and for commercial operators during very long transport. Control Posts can be approved for pigs, cattle, sheep and/or horses. The booking of the Control Post has to be done **before the beginning of the transport** and must be indicated in the journey log. A current list of Control Posts can be found on the internet at the following address:

https://ec.europa.eu/food/sites/food/files/animals/docs/aw_list_of_approved_control_posts.pdf

Main risks of poor welfare at control posts, as well as at assembly centres and markets are related to:

- **Inappropriate/rough/hasty unloading or loading procedures** which can cause stress and injuries,
- **Inadequate space allowances** and/or pen sizes in the Control Post that can compromise resting conditions and cause competition and aggressive behaviour between animals,

- **Inappropriate feeding and watering**, and facilities that could cause animals frustration or health problems due to hunger and/or dehydration.

Relevant recommendations can be found in High Quality Control Post Handbook (www.controlpost.eu)

Good practices regarding Control Posts

206. All control posts are required to have a **closing day for cleaning and disinfection** after 6 days of usage. Any available break in occupation even after less than 6 days of continuous use is exploited to undertake this cleaning and disinfection.
207. A **Proof of an Appointment and a Proof of an Acceptance** of the animals by the control post are shown to the 'loading vet' (the veterinary officer approving the journey).
208. **Only one assembly centre is used** during long journeys, and any resting legally required during a very long transport must be for a full 24 hours at an approved control post.

6.2 Housing

Although the purpose of their stay differs for control posts (resting and recovery from the previous journey), markets (bringing together sellers and buyers with the intention to sell animals) and assembly centres (to collect animals for more efficient further transportation), each of these three need to **provide the animals the resources they need** to become prepared for (further) transportation. The risk is that, if the animals are not accommodated with essential resources available (water, food, rest and social comfort), their fitness will be impaired. **What horses need is a quiet and comfortable environment where they feel secure and relaxed to rest and where water and feed are available at their needs.** Flooring should be non-slippery, the animals should be protected from adverse weather conditions and constructions where the animals can get injured should be avoided. Moreover, it should be able to separate animals when needed and they should be easily inspected. For comfort, a sufficient amount of suitable dust free bedding should be provided and the floor should be drained. The following practices apply.

Good practices for housing in control posts, markets and assembly centres

209. The **floor material** is non-slippery, easily cleaned, and has sufficient drainage to allow the run-off of liquid. Suitable bedding material is provided to help absorb urine and water.
210. Appropriate types and numbers of **fire extinguishers** are available in every building as recommended by fire safety experts/personnel/consultants.
211. The **roof and side protections** are such that they provide the animals an environment within their thermal comfort zone (see paragraph [4.3 Climate control](#)) even during adverse weather conditions.

Better practices for housing in control posts, markets and assembly centres

212. The control post has adequate mechanical or natural **ventilation** to provide fresh air and keep the effective environmental temperature within the comfort zone of the animals. Air circulation takes place above the heads of the animals.
213. The control post is divided in **pens of appropriate size**, their number allows the animals to be parted within the same groups or individual setting as in the truck. Mobile barriers enable flexible adjustment of pen sizes for each transport and are therefore recommended. Separations are constructed such that they cannot harm or injure the animals and all materials used are non-toxic, cleanable and can be disinfected.
214. **Lighting of the facilities** is such that it avoids stressing the animals with light contrast, or darkness or high luminosity. Diffuse natural or proper artificial lighting is provided along the whole from the (un)loading area to the resting area. A light intensity of around 40 lux is sufficient in the regular pens (reading a newspaper is possible), but it must be higher in the unloading area (100 to 150 lux).

6.3 Feeding and watering

During transport, animals have no easy access to food and intake of food and water may be affected by circumstances during travelling. Therefore, it is important that they can drink and eat during the resting period at control post, market or assembly centre. When animals are resting, their **biological needs** should be covered. Free access to water is essential to maintain good health. Offering food (particularly at a control post) is essential for animal welfare as it helps them to recover from the preceding transport, but care should be taken to the type, amount and quality of feed. Main risks of poor welfare related to watering and feeding are linked with:

- Inadequate amounts of food and water,
- Inadequate quality or presentation.

Potential adverse effects are stress (hunger, thirst, social), weight loss and impaired health (that can result in illness or in severe cases in mortality). Economic losses can increase with poorly designed and managed feeding and watering procedure of animals at control post.

Good practices for feeding and watering

215. Animals are fed a **sufficient quantity** of feed to maintain body condition. Feed is of good quality for horses, preferably forage that is not dusty or mouldy.
216. Feeding equipment is **adapted to the type of feed provided**. Feeding installations are regularly cleaned and if necessary disinfected.
217. All animals have **free access to fresh drinkable water**, delivered ad libitum. Drinking devices are designed and positioned in such a way that the animals can drink in a natural posture.
218. The **drinkers can easily be emptied completely and cleaned** between shipments of animals to avoid spread of disease.

Better practices for feeding and watering

219. Feed is stored in a (closed) clean, dry and labelled (visually identifiable) facility. Feed storage facilities are used for feed only, unless feed is stored in closed containers/packaging material. No chemicals (for instance pesticides, biocides, veterinary pharmaceuticals) are present in feed storage facilities. The feed storage facility is included in the pest control program.
220. To avoid freezing, water pipes are buried between 0.50 to 1.0 m deep and protected against freezing by isolating thermal protection when in the building if otherwise freezing is possible.
221. The drinkers do not create obstacles for animals, workers, machines and mechanical systems.
222. Water flow at the drinker is adjusted to the species. For horses, recommended values are 1.0 l/min for a bowl.
223. The Control Post can provide additional feed to supply transporters before they continue the journey.

6.4 Biosecurity, cleaning and disinfection

Transport conditions impose a close contact between animals and can increase the risk of pathogens spreading. Biosecurity is based on good hygiene practices aimed to limit pathogen development and spread, logistic management to prevent contacts between different consignments, and global management of the location to minimise sanitary risks and hazards. The owner of the location (but also the transporter) has to ensure the **biosecurity criteria are followed in order to protect the animals** that are hosted. [Regulation \(EC\) 1255/97](#) sets down the requirements regarding the location, construction and operation of control posts that aim to achieve an appropriate level of biosecurity. Local competent authorities check that these requirements are fulfilled before approving control posts.

Good practices regarding biosecurity at control posts

224. Hygienic routing of transport is organised to prevent external transport (feed deliveries, removal transport of waste) to cross internal transport (animals). Different routes are clearly indicated to **separate 'clean' and 'dirty' routes** to: animal buildings, lorry wash station, feed and bedding storage, and manure storage. If physical separation is not possible, transports are separated in time. A plan to show the movement of all such vehicles or time separation to prevent cross overs should be made available.
225. The control post is **divided into zones** to allow the Control Post owner to plan for traffic patterns, work organization and biosecurity measures. Zones are large enough to permit later expansion without encroaching on other areas. Control posts can be divided into three concentric rings or activity zones: Zone 1 office and main entrance; Zone 2 accommodation for drivers, store house and truck wash; Zone 3 animal houses, truck parking and waste storages (See Figures 6.1 and 6.2).
226. Traffic areas and truck paths between entrance, (un)loading areas, truck wash and parking are planned according to the maximum size for trucks, trailer and semitrailers and to their radius of curvature.

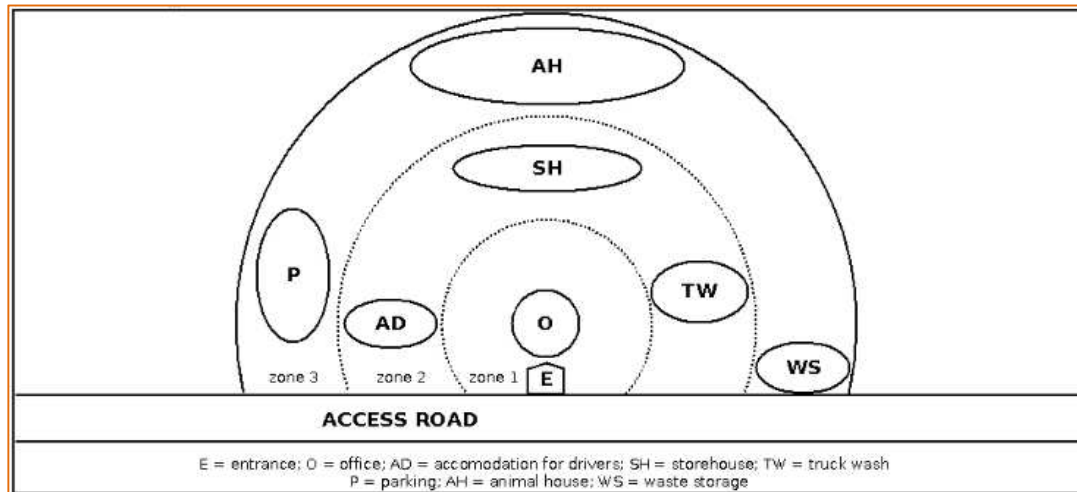


Figure 6.1 Example of the organization of a control post to optimize biosecurity

227. **Dead animals are stored in a separate building or sealed container (chilled)** and these facilities must be paved or floored with appropriate material. They should be cleaned and disinfected after every use. Carcasses are transferred to vehicles for transportation to the site of disposal or incineration in a manner that ensures these vehicles do not have to enter the premises of the control post (Regulation (EC) N. 1774/2002). Bedding and waste from these buildings should be removed and disposed of in an appropriate manner.
228. Animal buildings are **clearly marked**. Control post staff should be the only persons allowed to enter into these buildings of the control post. All people entering the building have to wear clean clothes and shoes only used in the control post (or one-use disposable clothing) or walk through footbath facilities to disinfect the shoes before entering into the control post. The driver has to fulfil this procedure to handle animals into the control post. Bathroom should be available to visitors and drivers to wash their hands and themselves.

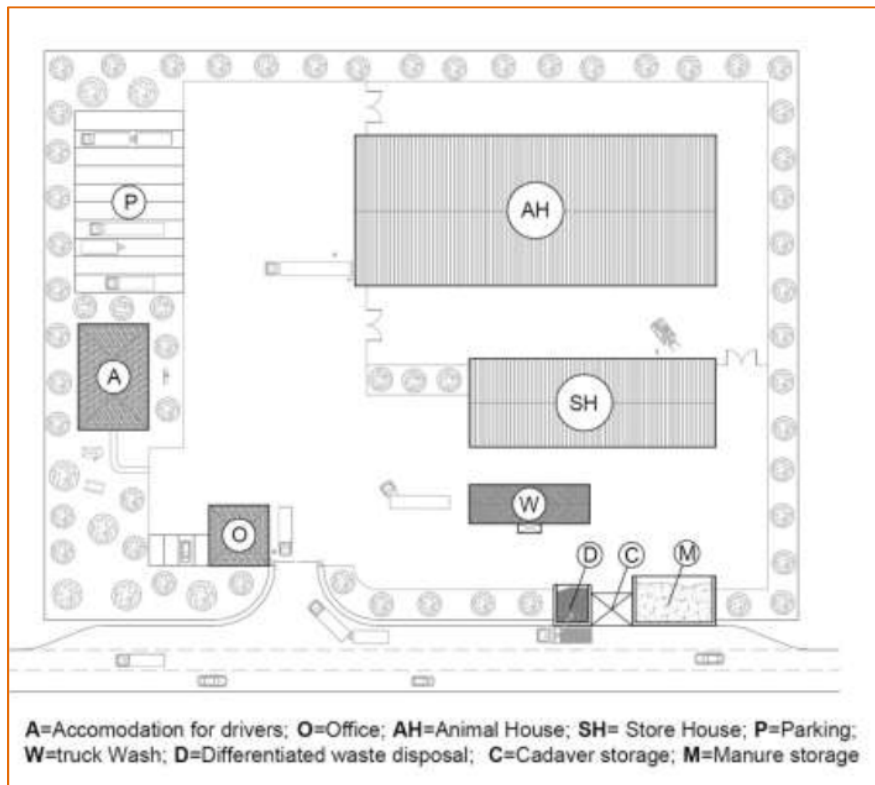


Figure 6.2 Possible organizational layout of a control post.

229. The cleaning, **removal of solid waste, washing and the disinfection of the building and equipment must be completed within 24h** from the time of removal of the animals from the pens. Buildings and equipment should be dry before a new batch of animals can be housed again. Cleaning of barriers and flooring (pens and ways) should be done using high pressure water (40-200 bars, 25 to 70 l/min).
230. **Warm water with detergent is specially recommended for metallic barriers.** Cleaning of drinkers and feeders can be done as partitions, floors and walls by using warm high pressure water, or if possible by soaking equipment 20 to 30 minutes in warm water and detergent before pressure cleaning. Foaming can improve the washing. When pens wall and barriers are clean and still humid, disinfection should be done.
231. **Authorized disinfectant products** should be sprayed according to manufacturers' recommendations. Only authorised products (under national agreements) can be used: for national lists of products, refer to official veterinarian and check for AFNOR reference (NFT 72-150/151, 72-170/171, 72-200/201, 72-180/181).

Better practices regarding biosecurity at control posts

232. Changing rooms separated from building in which animals are kept should be available both for co-workers, drivers and visitors (veterinarians, inspectors, etc.). A basin with running hot and cold water, soap, disinfectants, clean towels are available in the changing rooms. **The control post shall have showers, toilets and leisure room for drivers and a well-kept first aid kit.**

233. **The control post should have communication facilities** available for drivers (telephone, fax, internet) and a website including: the name of the contact person of the control post, phone number, e-mail address, address, route planner, opening times, availability of facilities, language spoken, service available for driver (sanitation, leisure facilities, etc.) and health service. A phone list of local medical practitioners, hospitals, police, fire department, veterinarians must be available.
234. Water supply to animals should be potable and not become contaminated. Any water storage tanks must be covered and capable of being disinfected if necessary. **Water supply systems should be capable of being flushed with a sanitizer if required.**
235. Storage of feed and bedding must be kept secure and not capable of becoming contaminated. **Tractors and other mechanical equipment used for feeding and bedding should be cleansed and disinfected after each use.**

6.5 Emergency

In case of emergencies occurring while animals are at the control post, the contingency plan of the control post and that of the transporter are activated.

Good practices during emergencies at control posts

236. If there are not enough pens according to the number of pens in the truck, **no more than two pens of the truck are mixed**. Behaviour is observed and injured or stressed animals are isolated
237. If an animal shows **signs of colic** (e.g. profuse sweating, continuous rolling, turning head towards the belly, persistent movement and getting up and down violently, lying down frequently), which is one of the most common problems, **veterinary assistance** is sought immediately. It is avoided as much as possible to stress the animal.
238. If **several trucks arrive together** at a control post with animals of different sanitary status:
- The **competent authorities** are contacted for official recommendations, also when one or more trucks create a biosecurity hazard.
 - Animals of **different sanitary status are isolated** in different areas of the site.
239. If a local **sanitary crisis** occurs when animals are expected at the control post:
- The **competent authorities** are contacted for official recommendations, also when one or more trucks create a biosecurity hazard.
 - The **driver and the owner of** the transported animals are informed before the arrival. Mobile disinfection systems (wheel splash-boards) are used when the truck enters the control post.

Better practices during emergencies at control posts

240. **If animals need to remain** in the control post after the truck has departed, for instance because they are injured or otherwise unfit to be transported, they are kept in a **separate area**. The local competent authorities are informed of these animals. No pens are disinfected whilst animals are still inside them. Care is taken not to cause avoidable stress.

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For further reading, the following documents can be recommended.

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