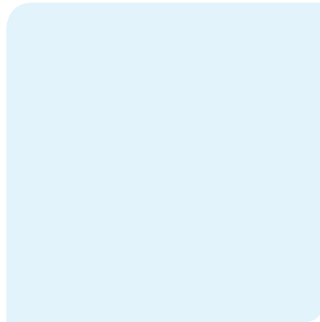




**WorldHorseWelfare**



**Recommendations for amendments to  
EU Council Regulation (EC) No. 1/2005**

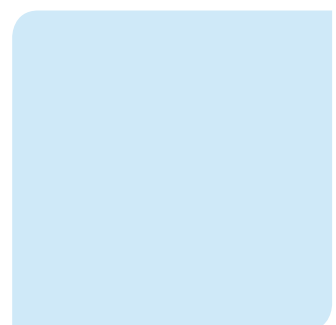
# **Dossier of Evidence**

**Second Edition**

**Part 1: Journey Times**

**October 2011**

World Horse Welfare's  
campaign to end  
the long-distance  
transportation of horses  
to slaughter in Europe



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## THANK YOU

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## OVERVIEW

This Dossier of Evidence has been prepared by World Horse Welfare for consideration by the European Commission, the Member States (including Government Departments in the UK) and the European Parliament. It makes recommendations for changes to Council Regulation (EC) No. 1/2005 on the protection of animals during transport and related operations, to improve the welfare, including health, of Equidae before, during and after transportation. The Dossier also makes recommendations on guidance that should be issued in support of the Regulation.

This is the first of a two-part Dossier, and focuses upon a maximum journey limit and guidance on water provision and fitness for transport in particular. The second part of the Dossier will be produced in 2012, covering the topic of space allowance and related issues.

A standalone summary has been included within this document, providing an overview of the key evidence and brief details of World Horse Welfare's recommendations; this will be translated into other EU languages and distributed to Member States for their consideration. The main body of the Dossier includes World Horse Welfare's 14 key recommendations and the evidence justifying their inclusion into an amended Regulation 1/2005. The recommendations apply to Equidae intended for slaughter and other non-registered Equidae only.

Throughout this Dossier:

- The term 'Equidae', unless otherwise stated, refers to horses, ponies, donkeys, mules and hinnies. Where the term horse (including ponies) or donkey is used this relates to areas that only involve these species.
- Regulation 1/2005 refers to Council Regulation (EC) No. 1/2005 on the protection of animals during transport and related operations.

## SUMMARY

### 1. Introduction

Every year around 80,000 horses are transported long distances across Europe to slaughter or for further fattening, in addition many non-registered Equidae (including those of a low value) are moved for a variety of purposes. World Horse Welfare carries out regular field investigations into the trade in these Equidae, and has considerable evidence demonstrating that current journey times and transportation practices, lead to unnecessary suffering and pose an EU-wide disease threat. The charity's ongoing programme of scientific, desk and field-based research forms and underpins the case for amending the current Regulation 1/2005.

### 2. Key recommendations

The recommendations outlined below should be included in Regulation 1/2005 to aid in alleviating the negative impact of transportation upon these Equidae.

#### 2.1 Maximum journey limit

- World Horse Welfare proposes that there should be a maximum journey limit of 9 to 12 hours without exception, for all movements of Equidae intended for slaughter (including Registered horses being moved for slaughter) and non-registered Equidae transported in accordance with Council Directive 2009/156/EC. No changes to the current exemptions for Registered horses are being proposed. Those Equidae intended for slaughter shall not be permitted to start a new journey as their destination clearly should be a slaughterhouse. Other non-registered Equidae must be unloaded for 24 hours rest at their destination; a new animal health certificate together with a new journey log, must be completed before a new journey is commenced.

#### 2.2 Water provision

- It is common sense to insist that Equidae must be provided with constant *ad libitum* access to fresh water, along with good quality forage, prior to the journey, during rest stops and upon arrival at destination.<sup>2</sup>

During the journey Equidae should be offered water and forage for a minimum of one hour at least every 4.5 hours; this watering requirement should be planned to correspond with driver rest breaks so that the overall time Equidae spend on the vehicle is kept to a minimum. However, if the hydration status of the Equidae indicates that water is required sooner than 4.5 hours then it must be given.

### 3. Justification

World Horse Welfare takes the view that Equidae intended for slaughter and low-value non-registered Equidae are ill-equipped to cope with long journeys. Few Equidae sourced for slaughter are accustomed to transport, making the experience stressful. Few are physically fit. Foals and elderly animals have a lower capacity for work, therefore are unable to cope with the long journeys. The body condition of Equidae intended for slaughter ranges from 'emaciated' to 'obese', with limited muscle tone. It is recognised that these Equidae are likely to become fatigued more rapidly.

Equidae intended for slaughter or of a low value are frequently recognised to demonstrate signs of poor welfare and health<sup>4</sup>, such as pre-existing disease, injury, exhaustion, dehydration and stress. World Horse Welfare's key recommendations of a maximum journey limit and improved water provision are based upon evidence from a broad range of sources, some of which are summarised below:

#### 3.1 Fatigue and exhaustion

- The need to balance on a moving vehicle requires an Equid to expend a substantial amount of energy. The risk of fatigue and exhaustion increases with journey duration due to cumulative energy losses, increasing the risk of injury and disease<sup>5</sup>. Equidae transported and intended for slaughter do not have adequate physical fitness or prior preparation to withstand transportation over long distances.

#### 3.2 Injury

- World Horse Welfare field investigations undertaken in September 2010 and February 2011, examined horses intended for slaughter; 85% of horses had at least one acute injury.
- Scientific research has indicated that the prevalence of severe injuries and lameness was significantly higher in horses following long-distance transportation to Italy for slaughter, than in those observed in Romania prior to transportation; an average of six horses per standard-sized shipment of 22 horses had at least one acute injury on arrival.<sup>6</sup>

#### 3.3 Pain

- Behavioural data from one randomly selected shipment observed in 2010 showed that 94% of horses had an abnormal stance and 83% were weight-shifting, both of which are indicative of pain or discomfort.<sup>7</sup>

#### 3.4 Unfit for transport

- In one report 14% of Equidae were deemed unfit to be transported at the commencement of their journey from Romania to Italy; this figure was more than doubled at the time of arrival at their destination to 37%<sup>8</sup>. World Horse Welfare consistently records Equidae that are unfit for transportation during field investigations.

#### 3.5 Dehydration, water and food provision

- World Horse Welfare has demonstrated that Equidae currently have limited, if any, access to water prior to, during, or after these journeys. Under these conditions Equidae would become severely dehydrated within 10 hours<sup>9</sup>.
- A lack of water leading to dehydration can result in health problems such as gastrointestinal disturbance and colic<sup>10</sup>. Equidae intended for slaughter or of a low value, consume little or no forage until water is made available. If the time period between forage meals increases beyond six hours, as is allowed under the current Regulation 1/2005, the risk of gastric ulceration increases<sup>11</sup>.

### 3.6 Disease

- Recent World Horse Welfare field investigations found that 93% of horses observed after 24 hours of transport showed clinical signs of disease, with animals affected on every shipment.
- A maximum journey limit is supported by EFSA, who state that journey times should not exceed 12 hours for horses transported for slaughter and report evidence of: “...increased pyrexia in horses transported for 10 hours...immunosuppression in horses transported for 12 hours...a large increase in clinical signs of acute respiratory disease...after road journeys in excess of 12 hours.”<sup>12</sup> A similar comment was made in the 2002 Scientific Committee on Animal Health and Animal Welfare (SCAHAW) report.
- An elevated head posture is common practice during transportation of Equidae intended for slaughter and of a low value; it can lead to marked increases in mucus, bacteria and neutrophils in the trachea within 6-12 hours<sup>13</sup>.
- ‘Shipping fever’ is a recognised sequel to long-distance transport in some Equidae. One study found that 70% of horses developed pneumonia within 14 days of arrival following journeys of 515km<sup>14</sup>; this is a short distance in comparison to those covered by many Equidae intended for slaughter or many of a low value.
- The introduction of a maximum journey limit would not only help to prevent development of disease, it would minimise the transport-associated spread of both exotic and endemic diseases. This is supported by EFSA: “...to reduce the risk of transport-associated disease outbreaks, strategies should be developed to reduce the volume of transport...and long-distance transport of animals for finishing or slaughter (e.g. by the transport of carcasses and food products) or reducing journey time (e.g. by slaughtering animals as close as possible to the site of production).”<sup>15</sup>

### 4. Implementation of a maximum journey limit

World Horse Welfare’s evidence shows that a maximum journey limit is entirely feasible given the number and distribution of licensed equine slaughterhouses within the EU.

It is possible to transport a greater volume of carcasses than live horses on any given vehicle. One typical lorry-load of live horses represents around 7.2 tonnes of horsemeat, whereas a refrigerated lorry can carry at least 20 tonnes of horsemeat, clearly demonstrating a significant economic benefit and smaller environmental footprint.

The introduction of a maximum journey limit would not only improve equine welfare but harmonise relevant legislation with driver working and rest times, which would benefit transporters. Synchronising a maximum journey limit would assist enforcement agencies, by allowing simultaneous and cost-effective enforcement checks.

A maximum journey limit for Equidae intended for slaughter would reduce the overall costs of moving Equidae, as there would no longer be a requirement to stop at control posts. Non-registered Equidae may still require use of these or similar facilities for 24 hours rest off the vehicle at the end of their journey.

### 5. Other recommendations

In addition to a maximum journey limit and improved water provisions, World Horse Welfare recommends that the European Commission (the Commission) adopts the following provisions in developing a proposal to amend Regulation 1/2005, and in drawing up appropriate guidance on implementation:

- Guidance on the interpretation of fitness for transport to be agreed by the Commission and the Member States. This should be clear, practical and consistent to support robust enforcement.
- Increased space allowance. This should be based on a minimum distance between the Equid’s body and the sides of the vehicle, partitions or other Equidae (i.e. unbroken Equidae, mares and foals).
- Improved and robust enforcement of Regulation 1/2005, combined with detailed guidance and training for all individuals involved in the transportation process (e.g. veterinarians, drivers, control post staff).
- An improved, clear and enforceable definition of unbroken Equidae.
- A definition of appropriate partition design to cover materials and dimensions.
- Orientation specifications ensuring Equidae are not transported at a 90° angle to the direction of travel.
- Improved specifications for flooring requirements (i.e. rubber matting) and vehicle design.
- Reclassification of Equidae separately from other farm animals, to reflect the specific differences<sup>16</sup>.
- Amendment to the references to ‘Registered Equidae’ in both the introduction and the articles of Regulation 1/2005, to ensure that the current limited exemptions are not open to abuse.
- Amended journey logs to include details of the entire journey (source, transportation, rest stops and destination) to improve traceability and enforcement.
- A compulsory 24 hour rest period off the vehicle with access to food and water, immediately upon entry into the EU on health and welfare grounds.
- When a maximum journey limit is introduced there should be a consequential amendment for the movement of Equidae using basic standard vehicles. This movement should be restricted to a maximum of four hours.

### 6. Conclusion

Evidence collected by World Horse Welfare demonstrates that long-distance transportation of Equidae across Europe intended for slaughter causes suffering and is unnecessary. The simple and practical solution of a maximum journey limit for Equidae intended for slaughter and non-registered Equidae, would not only reduce the current suffering but would also reduce the unacceptable disease risk that the trade creates. If this is coupled with detailed guidance and robust enforcement, it will improve equine welfare, including health, enhance traceability, reduce the legislative burden and enable more effective enforcement at a lower financial cost.



## NOTES AND REFERENCES

- <sup>1</sup> The full recommendation for space allowance provision has not been included within this part of the Dossier, but will be provided in the second part.
- <sup>2</sup> This is supported by the European Food Safety Authority (EFSA 2011) who stated in their Scientific Opinion to the European Commission that: "At least one hour should be allowed during the watering stop to allow animals to drink and, if necessary, feed."
- <sup>3</sup> 'Work' in the context of this Dossier means those activities involving energy expenditure through exercise such as being ridden or driven for sporting or leisure purposes, or used as draught Equidae for pulling carts, ploughs, or in forestry.
- <sup>4</sup> World Horse Welfare ongoing field investigations, Marlin *et al.* (2011a), other animal welfare NGOs.
- <sup>5</sup> Mars *et al.* (1992), Doherty *et al.* (1997), Stull (1999), Giovagnoli *et al.* (2002)
- <sup>6</sup> Marlin *et al.* (2011a)
- <sup>7</sup> World Horse Welfare (2010a)
- <sup>8</sup> Marlin *et al.* (2011a)
- <sup>9</sup> D. Marlin (personal communication)
- <sup>10</sup> Edwards (1999), van den Berg *et al.* (1998), Kaya *et al.* (2009)
- <sup>11</sup> Luthersson *et al.* (2009)
- <sup>12</sup> EFSA (2011 p98)
- <sup>13</sup> Racklyeft and Love (1990), Raidal *et al.* (1995, 1996)
- <sup>14</sup> Foreman *et al.* (1992)
- <sup>15</sup> EFSA (2011 p109)
- <sup>16</sup> Equidae are particularly prone to stress and injury during transportation.

## INTRODUCTION

World Horse Welfare is a leading international charity, dedicated to promoting equine welfare worldwide. Founded in 1927, and formerly called The International League for the Protection of Horses (ILPH), the charity is committed to stamping out suffering and improving the quality of life for Equidae in the UK and overseas through direct care, education and campaigning.

Since its foundation World Horse Welfare has campaigned to end the suffering of horses during long-distance transportation to slaughter. The charity has led the drive for changes to legislation and transportation practices within the EU, and is widely respected for its pragmatic, evidence-based approach.

The aim of the current campaign is to end the long-distance transportation of Equidae across Europe intended for slaughter, through the introduction of a carcass-only trade. Until this is achieved the campaign aims to bring about critical and humane welfare improvements for Equidae transported on these journeys.

Every year around 80,000 horses are transported thousands of kilometres across Europe, passing through a number of different Member States en route to slaughter. The majority of these Equidae originate in Eastern Europe (particularly Poland and Romania) or Spain and are destined for slaughterhouses in mainland Italy and the islands of Sicily and Sardinia.

For many years, World Horse Welfare has carried out regular field investigations into the trade and its impact upon equine welfare. As a result, the charity has a wealth of evidence demonstrating that journey times and transportation practices permitted under current EU legislation (Regulation 1/2005), not only lead to unnecessary suffering but also pose a real disease threat for the whole of Europe. Poor welfare, including health, is commonplace with horses consistently showing signs of disease, injury, stress, exhaustion and dehydration such that they are unfit for transport. The situation is exacerbated by a serious lack of robust enforcement of EU legislation in some Member States.

World Horse Welfare undertakes extensive desk-based and scientific research. In 2008 the charity undertook a large-scale study into the welfare of horses transported long distances across Europe to slaughter, the results of which were published in the Equine Veterinary Journal (Marlin *et al.* 2010a).

The first edition of World Horse Welfare's Dossier of Evidence was presented to the Commission in 2008. This updated version of the Dossier, focuses on journey times, water provision and includes the latest findings from the charity's field investigations. The recommendations outlined in this Dossier are aimed at improving the welfare, including health, of these animals, thereby reducing the risk of disease spread and protecting both the equine industry and the welfare of individual Equidae. The recommendations apply to Equidae intended for slaughter (including Registered Equidae intended for slaughter) and other non-registered Equidae.

## RECOMMENDATIONS

World Horse Welfare has developed the following evidence-based recommendations to amend Regulation 1/2005. These recommendations, within the Dossier of Evidence, will be submitted to the Commission, Member States and other interested parties, with a request that the Commission adopts a proposal to amend the current Regulation to improve the welfare, including health, of all Equidae.



### Recommendation 1: Maximum journey limit

World Horse Welfare proposes that there should be a maximum journey limit of 9 to 12 hours without exception, for all movements of Equidae intended for slaughter (including Registered horses being moved for slaughter) and non-registered Equidae transported in accordance with Council Directive 2009/156/EC. No changes to the current exemptions for Registered horses are being proposed. Those Equidae intended

for slaughter shall not be permitted to start a new journey as their destination clearly should be a slaughterhouse. Other non-registered Equidae must be unloaded for 24 hours rest at their destination; a new animal health certificate together with a new journey log, must be completed before a new journey is commenced.



### Recommendation 2: Water provision

It is common sense to insist that Equidae must be provided with constant *ad libitum* access to fresh water, along with good quality forage, prior to the journey, during rest stops and upon arrival at destination.<sup>17</sup>

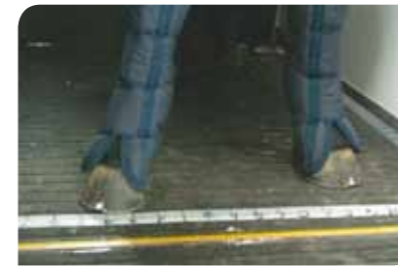
During the journey Equidae should be offered water and forage for a minimum of one hour at least every 4.5 hours; this watering requirement should be planned to correspond with driver rest breaks so that the overall time Equidae spend on the vehicle is kept to a minimum. However, if the hydration status of the Equidae indicates that water is required sooner than 4.5 hours then it must be given. The Equidae must be unloaded, fed and watered at their destination.

<sup>17</sup> This is supported by European Food Safety Authority (EFSA 2011) who stated in their Scientific Opinion to the European Commission that: "At least one hour should be allowed during the watering stop to allow animals to drink and, if necessary, feed."

### Recommendation 3: Fitness for transport and veterinary supervision

Guidance on the interpretation of fitness for transport to be agreed by the Commission and the Member States. This should be clear, practical and consistent to support robust enforcement, and be useable by both lay people and veterinary professionals to allow consistent understanding and enforcement of this provision.

There are particular areas where guidance needs to be clear, covering situations where Equidae should either not be transported at all or for very restricted times (e.g. extensive chronic injuries, severe dehydration, exhaustion, obesity, severe stress).



### Recommendation 4: Space allowance<sup>18</sup>

Increased space allowance, to take into account the widely varied body shapes and sizes of Equidae transported across Europe. This should be based on a minimum distance of free space between the Equid's body and the sides of the vehicle, partitions or other Equidae (i.e. unbroken Equidae, mare and foals). No animal should be forced into constant contact with the partition, vehicle sides or other Equidae.

<sup>18</sup> The full recommendation for space allowance provision has not been included within this part of the Dossier, but will be provided in the second part.



### Recommendation 5: Enforcement, guidance and training

Improved and robust enforcement of Regulation 1/2005, combined with detailed guidance and training for all individuals involved in the transportation process (e.g. veterinarians, drivers, control post staff). It is axiomatic that the existing Regulation and recommendations outlined in this Dossier can only improve equine welfare and health if enforcement risk assessment requirements are defined by the Commission and monitored to ensure that they are implemented comprehensively across the Community.

- A standardised approach to enforcement by Member States based on risk assessment should be encouraged, to remove uncertainty for both traders and hauliers. This should be underpinned by improved communication between the Member States.
- Guidance should be produced and adopted by the Commission and the Member States to assist with the correct interpretation of Regulation 1/2005.
- Amendment to the references to 'Registered Equidae' in both the introduction and the articles of Regulation 1/2005, to ensure that the current limited exemptions are not open to abuse, wilful or otherwise.
- The Food and Veterinary Office (FVO) should increase the number of transport-related missions to encourage proper implementation and enforcement, a number of which should be unannounced spot checks.
- Training should be provided (for assembly centre staff, hauliers, enforcement agencies, control post staff, official veterinarians, etc.) on correctly interpreting Regulation 1/2005, spotting the signs of welfare problems, and what action to take.
- Enforcement should include checks on the welfare of animals, and not simply concentrate on documentary checks.
- The Commission should instigate a higher number of infringement proceedings against Member States who are failing to implement or enforce Regulation 1/2005.



### Recommendation 6: Tethering

When Equidae are tied, the ropes or tethers should be long enough to allow the Equidae freedom to raise and lower their heads in order to clear their airways and to establish and maintain balance as the vehicle moves. Ropes should not be so long that Equidae are at risk of becoming entangled in them. A head collar suitable for Equidae, made of a material that will not cause injury and fitted to the individual Equid, and a lead rope should be used. Rope halters are not suitable, due to the high incidence of rubbing

injuries, and should be prohibited. Quick-release knots must be used to enable Equidae to be moved quickly in an emergency.

### Recommendation 7: Unbroken Equidae

The term 'unbroken Equidae' needs to be clearly defined. It is recommended that the following definition be adopted: *"Unbroken Equidae are those that cannot be tied, led by a halter, loaded, unloaded, partitioned and/or transported without causing undue excitement, stress, pain or suffering."*



### Recommendation 8: Partitions

Partitions must be full-length to the floor, with protection at the head area to prevent Equidae from biting each other. They should be constructed to safely bear the full weight of the Equid, while allowing air to circulate. They must be designed to allow Equidae to see and sniff each other (particularly in the case of bonded pairs) so that the Equidae do not become distressed due to separation. The design should not allow unfamiliar Equidae scope to bite or kick each other.

There should be no sharp edges or projections, they must be made of material which provides padding and does not cause friction burns or injury to Equidae (metal and wood are unsuitable). If a rubber skirt is used at the bottom of the partition, it must be made of robust material of an absolute minimum thickness of 4cm, so when Equidae are in the fully-braced position they do not impinge on the neighbouring partition space, the rubber would be strong enough to protect both Equidae from injury. The skirt's attachment should not have any protrusion that could cause injury and should reach the floor.

Partitions should have a secure catch designed for quick release in an emergency, and must remain secured under normal transport conditions. Partitions should be orientated as described in Recommendation 9.

### Recommendation 9: Orientation

Equidae should not be transported at a 90° angle to the direction of travel, which reduces stability, provides insufficient space for many Equidae, and has been identified as the least favoured orientation in preference studies. Instead, Equidae should be travelled either forward or rearward facing, or at a 45° angle to the direction of travel (herringbone).

### Recommendation 10: Flooring requirements and vehicle design

It should be specified that rubber matting should be used to provide an anti-slip flooring surface, as required under Annex 1, Chapter II, 1(g) of Regulation 1/2005. Metal flooring, which becomes extremely slippery when wet, should not be used without secure, fitted rubber matting placed on top to provide grip. Additional bedding should be provided for the purpose of absorbing urine and for the comfort of young animals.



### Recommendation 11: Reclassification

Equidae should be reclassified separately from other farm animals to reflect the specific physical, physiological and behavioural differences that mean Equidae are more prone to stress and injury during transportation. Furthermore, Regulation 1/2005 must recognise that Equidae differ markedly from farm livestock in the way in which they are used, and consequently in their management, socialisation, previous experiences, training and, frequently in value (financially, culturally and emotionally).

The case has been clearly stated by EFSA (2011 p86): *"Equidae differ markedly from other commonly transported farmed species, such as sheep and cattle, in terms of inter-animal behaviour and, in particular, the levels of aggression during transport."*

### Recommendation 12: Journey logs

Amended journey logs to include details of the entire journey (i.e. source, transportation, rest stops and destination) to improve traceability and enforcement. Journey logs should be checked against the actual journey undertaken with the aid of satellite tracking systems, and non-compliance should be penalised by enforcement agencies.



### Recommendation 13: Entry into the EU

Upon entry into the EU, all Equidae being transported for slaughter and other non-registered Equidae must undergo a compulsory 24 hour rest period on health and welfare grounds. Equidae must be rested off the vehicle for the whole of this 24 hour period, with continuous access to food and water. The identification of all Equidae must be checked to aid in traceability.

### Recommendation 14: Maximum journey for basic standard vehicles

If a maximum journey limit is introduced there should be a consequential amendment for the movement of Equidae using basic standard vehicles. This movement should be restricted to a maximum of four hours.



## WELFARE PROBLEMS ASSOCIATED WITH LONG-DISTANCE TRANSPORTATION

### 1. Introduction

It is generally agreed that Equidae differ from 'farm animals' and therefore have specific welfare needs (SCAHAW 2002, Dalla Villa *et al.* 2009, EFSA 2011). World Horse Welfare undertakes regular and ongoing field investigations to collect data on the welfare, including health, of Equidae transported long distances across Europe to slaughter and those of low value moved for other purposes. These Equidae vary enormously in type, breed, size, age, condition, health status, management, socialisation, handling and previous experience. They range from old work animals to young animals fattened specifically for slaughter and the majority have limited previous transportation experience.



Problems such as poor footcare can reduce an Equid's ability to cope with transportation.

Paradoxically, the very reasons for which many Equidae are sent to slaughter render such animals particularly unsuitable for long-distance transportation, due to inherent physical and physiological weaknesses. Equidae bred specifically for slaughter may suffer from problems, such as poor foot care, obesity and respiratory disease, due to inadequate and inappropriate management. Likewise, Equidae that have no monetary value besides slaughter, because they can no longer be used for work or leisure due to lameness, injury, disease, old age or poor performance, are predisposed to problems during transportation. Lack of physical fitness is common to both groups.

The European Food Safety Authority (EFSA 2011 p98) states: "The effects of transport on horses are profoundly influenced by their previous experience of transport and their state of health before transport". Marlin *et al.* (2011a) found that 49% of horses observed during loading in Romania had at least one chronic injury, 8% were lame or ataxic and 11% were deemed unfit for transport on the basis of showing clinical signs of disease. Similarly, 34% of horses observed during recent World Horse Welfare investigations had some form of chronic condition, such as contracted tendons, pre-existing wounds, lumps and blindness (see p31).

Obesity is common, particularly amongst horses fattened specifically for slaughter; 33% of horses observed by World Horse Welfare during a 2010 field investigation, and 26% of horses observed by Marlin *et al.* (2011a), were obese. Injuries and disease notwithstanding, obesity and lack of physical fitness significantly diminish an Equid's ability to cope with transportation, especially on long journeys (see p18-19).

**Obesity and lack of physical fitness diminish an Equid's ability to cope with transportation.**

Foals are commonly transported; 45% of horses observed by World Horse Welfare at one control post in 2010 were less than one year of age. High levels of stress, injury and behavioural abnormalities suggest that these young horses are particularly susceptible to the adverse effects of long-distance transportation; this is supported by the finding that six hours of transportation constitutes a significant stressor for yearling horses (Garey *et al.* 2010).

Much of the research into long-distance transportation has been conducted on sports horses, which differ significantly from Equidae transported for slaughter in their background, handling, care and management, having generally higher levels of health and physical fitness. Sports horses tend to be transported in superior vehicles with greater overall standards of care, making them better able to cope with the rigours of transportation, yet even these Equidae experience problems on long journeys. Equidae intended for slaughter and those of a low value are generally of a poorer health-status and fitness; they are often transported in unsuitable vehicles (not designed specifically for Equidae) with lower standards of overall care, including inappropriate driving style. As such, the adverse effects that long-distance transportation has on these Equidae are almost certainly underestimated by studies using sports horses.

It is evident that Equidae intended for slaughter and those of a low value are predisposed to problems during transportation, which underpins the case for a maximum journey limit of 9 to 12 hours without exception. Vulnerable Equidae or those with specific needs, such as foals, youngstock, elderly Equidae, pregnant females and unbroken Equidae are likely to require even shorter journey times.



This exhausted elderly gelding was very quiet and depressed, with a low head carriage. He was unresponsive and showed little protective behaviour; leading to numerous bite and kick wounds. Lack of space, tight tethering and fighting prevented the gelding lying down for recumbent rest.



### 2. Key welfare problems

The following section presents evidence of common welfare problems associated with long-distance transportation of Equidae, clearly illustrating why a maximum journey limits must be introduced.

World Horse Welfare's field observations show that Equidae intended for slaughter and low-value non-registered Equidae, are exposed to numerous physical and psychological stressors at all stages of the transportation process. These stressors include:

- Lack of water, food, rest and space
- Fatigue and exhaustion
- Pain, injury and disease

- Obesity, poor condition and lack of physical fitness
- Mixing of unfamiliar Equidae, and those of different ages or sexes
- Unfamiliar experiences and environments (e.g. markets, assembly centres, control posts, vehicles, transportation, slaughterhouses)
- Environmental challenges (e.g. high heat and humidity)
- Unsympathetic handling before, during and after transportation (e.g. during loading, unloading, at rest stops)
- Unsympathetic driving (e.g. braking and accelerating abruptly, turning acutely, driving too fast for the conditions).

All of these stressors result in poor welfare, but three in particular have been highlighted during field investigations as having a detrimental, yet largely avoidable, impact; namely, fatigue and exhaustion, disease and dehydration (see also p31).

### 2.1. Fatigue and Exhaustion

World Horse Welfare's field investigations show that signs of fatigue and exhaustion are extremely common in Equidae transported long distances for slaughter or further fattening. Such signs include:

- *Depressed or withdrawn demeanour:* Of two randomly selected shipments recently observed by World Horse Welfare, 47% of horses showed a markedly withdrawn demeanour. Horses observed during field investigations typically display limited interaction and a reduction in normal behaviours, such as foraging. Depression is a recognised feature of 'exhausted horse syndrome' in endurance horses (Carlson *et al.* 1976, Foreman 1998).
- *Low head carriage:* Although head carriage is dictated, in part, by the length of the tether rope (i.e. tight tethering physically restricts head movement), horses observed during field investigations frequently stand with their head lowered, if they are able.
- *Chin resting:* Horses rest their chins on structures such as water troughs, often taking the full weight of the head on their chin.
- *Lack of response to external stimuli:* There may be little or no reaction to stimuli such as the presence of people, fighting amongst other horses, or loud noises. Lack of response to stimuli is considered indicative of poor welfare and, when accompanied by a 'slumped' posture, of depression or exhaustion (Burn *et al.* 2010).
- *'Dead' eyes:* The horse's eyes appear glazed and expressionless. Although a difficult sign to quantify or define, veterinarians working with endurance horses recognise this as being suggestive of exhaustion (S. Coombs personal communication).



Depressed demeanour and low head carriage are recognised indicators of fatigue and exhaustion.

- *Closing eyes ('heavy eyelids'):* Horses appear unable to keep their eyes open, and will often close them completely.
- *High drive to rest:* Horses will attempt to adopt a recumbent position, despite a lack of space, often on bare concrete floors, with their heads held in an unnatural upright position by tight tethers, and in close proximity to other horses.
- *Weight shifting, resting limbs, stretching:* Weight shifting, resting limbs in or on water troughs and stretching of hind limbs are commonly observed (World Horse Welfare 2010a), all of which can be indicative of fatigue, as well as other welfare problems (see p23).
- *Rhabdomyolysis:* Signs suggestive of possible rhabdomyolysis are commonly seen during field investigations, including dark reddish-brown urine, weight-shifting, intense sweating and abnormal stance; rhabdomyolysis has previously been reported in horses during transportation (Ito *et al.* 1992).



Horses are commonly observed resting a leg in or on the water trough.

Many of these signs, which together may give the impression of a sedated horse, correspond closely with those cited by EFSA (2011) and Friend (2000) as being observational indicators of fatigue and exhaustion. They demonstrate a serious welfare problem.

The constant need for muscular effort in order to balance on a moving vehicle over periods of up to 24 hours (see p18) means long-distance transportation has close similarities to endurance work. The fact that horses undertaking sustained endurance work are at increased risk of exhaustion (Foreman 1998) may explain the relatively high risk of exhaustion in Equidae after long journeys (EFSA 2011). Endurance horses are typically provided with rest and water at least every 40 kilometres (this equates to at least every four hours) (S. Coombs personal communication).

Fatigue increases the risk of injury during transportation (Stull 1999) and therefore undoubtedly plays a role in the high rate of injury on long journeys. In a sample group of 161,685 horses observed in Slovenia en route to slaughter, the rate of injury was 8-25 times higher in horses than in cattle (Stefancic and Martin 2005). Ninety-five per cent of horses observed mid-journey by World

Horse Welfare (2010a) had some form of acute injury. Similarly, Marlin *et al.* (2011a) found that, on average, 28% of horses on each shipment arriving in Italy had at least one acute injury compared to 19% on each shipment departing from Romania. Furthermore, almost three times as many horses were lame post-transportation as were lame prior to transportation.

The widespread fatigue and exhaustion observed amongst Equidae transported long distances across Europe intended for slaughter clearly demonstrates that current journey times are excessive and emphasises the need for a maximum journey limit of 9 to 12 hours, without exception.



Fatigue increases the risk of injuries such as this one.



## 2.2. Disease

Recent World Horse Welfare field investigations have recorded clinical signs of disease in 93% of horses observed mid-journey, with horses affected on every shipment seen. Similar evidence of disease has been noted in low-value horses at markets across Europe. The most commonly observed clinical signs include nasal and ocular discharge, abnormal respiration and coughing, but diarrhoea, head pressing or tilting, and abdominal discomfort are also seen.

Absence of disease is considered a “*basic requisite for good welfare*” (Dalla Villa *et al.* 2009 p14). However, transportation of animals is a known risk factor in the development and spread of infectious disease (Stull and Rodiek 2000, Stull *et al.* 2004, Fèvre *et al.* 2006, Herholz *et al.* 2008, Greger *et al.* 2010, EFSA 2011), particularly respiratory disease (Raphel and Beech 1982, Mair and Lane 1989, Austin *et al.* 1995).

Pleuropneumonia (‘shipping fever’) is a recognised sequel to long-distance transport in some Equidae that may not become evident until several days after transport has taken place. In one study of 130 healthy horses transported 515km, a short distance compared with many Equidae transported for slaughter within the EU, 70% developed pneumonia within 14 days of arrival (Foreman *et al.* 1992). Similarly, the health status of horses transported long distances to slaughterhouses in Italy deteriorated over the 24-48 hour period following arrival (D. Marlin personal communication).



This black foal was one of many horses on one shipment showing signs of disease, including nasal and ocular discharge, coughing and elevated respiration. She was extremely subdued, showing little interest in her surroundings.



## 2.3. Dehydration

Signs indicative of dehydration are common amongst Equidae transported long distances across Europe to slaughter and those of a low value status, many Equidae begin their journey in a dehydrated state (World Horse Welfare 2010a, 2010b) (see p21). Observational signs of dehydration or heat stress, many of which are listed by EFSA (2011), include:

- *Extreme thirst (high drive to drink)*: Field observations show that all horses will drink, on or off the vehicle, if water is available. The need for water appears to override other factors, such as

fear of the watering method, demonstrating a high drive to drink. Drinking bouts lasting in excess of five minutes have been recorded, which contrast starkly with reports of ‘normal’ drinking bouts lasting from around 10 to 60 seconds (McDonnell *et al.* 1999, Nyman and Dahlborn 2001). Pritchard *et al.* (2008) found water consumption to be the best field test for dehydration in working horses.



Equidae observed during field investigations show signs indicative of extreme thirst.

- *Wrinkled skin and skin ‘tenting’*: Wrinkling of the skin and loss of skin elasticity are frequently observed, particularly on the neck and quarters. Water losses of around 3-4% of bodyweight reportedly lead to loss of skin elasticity in horses (Harris 1998), whilst veterinary intervention would normally take place at around 5% bodyweight loss (D. Marlin personal communication). Data collected from a small random sample of horses during a 2009 field investigation showed skin ‘tenting’ in 67% of the horses. However, research on working animals suggests that, whilst the ‘skin-tent (pinch) test’ may be a valid indicator of dehydration in donkeys, it is not so in horses (Pritchard *et al.* 2006, 2008) and therefore this test is not generally used during World Horse Welfare’s field investigations.
- *Congested mucous membranes*: Marlin *et al.* (2011a) report that 6% of horses observed in Romania prior to transportation and 14% of horses observed in Italy after transportation had congested mucous membranes. This factor is not examined during World Horse Welfare field investigations.
- *Sweating*: The vast majority of horses observed during field investigations show signs of sweating, which can be profuse, regardless of the time of year. At one control post 99% of horses showed evidence of sweating, and therefore an increased risk of dehydration and heat stress.
- *Salt deposits*: Horses are often observed with visible white salt deposits on their body. Schroter and Marlin (1995) state that extended periods of sweat evaporation lead to build-up of salt deposits on the skin, thus indicating high levels of sweat loss in these horses.
- *Urination*: Field observations show a reduced frequency and volume of urination amongst horses, with urine often being thick and dark in colour (World Horse Welfare 2010a, 2010b).



Thick, discoloured urine typical of that observed during field investigations.

It is recognised that transporting horses for long periods causes them to become dehydrated (Stull and Rodiek 2000). Dehydration is a serious welfare problem that plays a role in the development of disease, is a leading cause of heat stress and may contribute to fatigue through inadequate compensation of calorific expenditure due to a drop in feed intake (Meyer *et al.* 1985, Sneddon *et al.* 1993, Smith *et al.* 1996). Research in working donkeys suggests that hydration status affects an animal’s ability to work safely, with dehydration being linked to a potential increase in tripping risk (Pritchard *et al.* 2006).

Profuse sweating, whether it be for thermoregulation (see p22) or as a result of stress (see p19), greatly increases water loss and therefore plays an important role in the onset of dehydration. The risk posed by this high water loss is exacerbated by inadequate water provision (see p21).

Weight loss is a common measure of dehydration during transportation and longer journeys have been linked to a greater degree of weight loss than shorter journeys (Stull 1999). Healthy horses lose on average 0.34% of their bodyweight per hour (Foss and Lindner 1996, van den Berg *et al.* 1998, Oikawa and Jones 2000, Marlin *et al.* 2001) during transportation. However, for stressed animals with limited transportation experience, transported in hot humid conditions with poor ventilation, as is the case with many consignments of Equidae intended for slaughter, rates of loss would be at least 50% higher (D. Marlin personal communication). In sport or leisure horses veterinary intervention to rehydrate would usually take place at a total bodyweight loss of 5%. Thus, a horse transported to slaughter under these conditions would become severely dehydrated within 10 hours, requiring veterinary intervention.

In order to prevent dehydration, a maximum journey limits must be introduced and Equidae must be provided with constant *ad libitum* access to fresh clean water, along with good quality forage, prior to transportation, during transportation (at least every 4.5 hours) and upon arrival (see p7).



This chestnut colt drank until there was no water left, and then continued to lick at the empty trough for a considerable time afterwards.



### 3. Factors contributing to poor welfare

It is clear that current transportation practices result in compromised health and welfare through fatigue and exhaustion, disease and dehydration. Numerous factors contribute to the development of these welfare issues during transportation and there is substantial evidence demonstrating that the risks are exacerbated by long journeys, as outlined in this Dossier.

### 3.1. Long journeys

The key factor contributing to poor welfare during long-distance transportation is the length of the journey itself. Under Regulation 1/2005 Equidae, including non-registered horses and those intended for slaughter, can be transported for 24 hours without rest; after this time they must be unloaded and rested off the vehicle for 24 hours before being reloaded to continue their journey. This cycle can continue indefinitely. One of the most commonly used slaughter routes, from Poland to Sardinia, lasts in excess of three days but many Equidae travel even further than this.

Long journeys have been linked to an increased risk of fatigue and other welfare problems (EFSA 2011). The levels of fatigue commonly observed are indicative of the considerable amounts of energy expended by Equidae during transportation. Increases in energy expenditure (Doherty *et al.* 1997), heart rate (Smith *et al.* 1996, Waran *et al.* 1996, Ohmura *et al.* 2006) and electromyographic activity (Giovagnoli *et al.* 2002) have been reported in transported horses, all of which are closely correlated and demonstrate high levels of activity (Doherty *et al.* 1997, Giovagnoli *et al.* 2002).

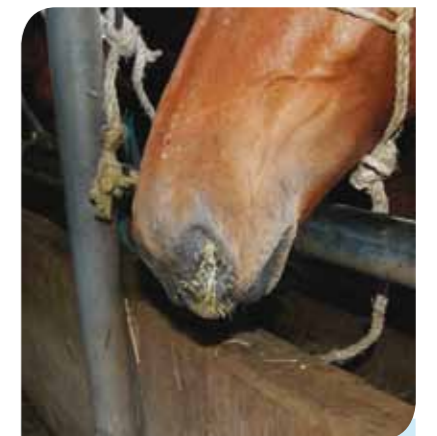
**World Horse Welfare consistently observes Equidae showing clear signs of fatigue and exhaustion during long-distance transportation.**

**Road transport in excess of 10 hours increases the risk of pyrexia and the development of infectious disease.**

This high level of activity has been attributed to the constant muscular adjustments required in order to balance on a moving vehicle (Mars *et al.* 1992, Giovagnoli *et al.* 2002). For horses, the physiological effort of transportation is equivalent to that of walking, and energy expenditure is almost double that of standing still (Doherty *et al.* 1997); in practical terms, this means that 24 hours of

transport requires approximately the same amount of energy as 24 hours of walking. Fatigue and exhaustion are more likely in Equidae with reduced exercise tolerance such as those that are unfit, obese, young, elderly, infirm, unused to transport, immunocompromised or debilitated.

Long journeys have been linked to an increased risk of the development and spread of disease, even in fit, healthy horses. Road transport in excess of 10 hours increases the risk of pyrexia (Oikawa and Jones 2000) and the development of infectious disease (Raphel and Beech 1982, Mair and Lane 1989, Austin *et al.* 1995); whilst journeys in excess of 12 hours lead to reduced immunocompetence (Stull *et al.* 2008). The effect on the immune system and the number of horses exhibiting signs of disease increase with journey time (Oikawa and Kusunose 1995, Stull 1999, Oikawa and Jones 2000, Oikawa *et al.* 2005). Equidae of a lower general health status, unaccustomed to transport and travelling in sub-optimal conditions are likely to be affected sooner than fit, healthy animals.



Clinical signs of disease were observed in 93% of horses seen during recent field investigations.



### 3.2. Lack of fitness

Physical fitness is essential in order for Equidae to cope with the energetic demands of transportation; unfit Equidae are at greater risk of exhaustion (Foreman 1998). However, by their nature, low-value Equidae and those intended for slaughter generally lack physical fitness. For example, World Horse Welfare's observations indicate that horses fattened specifically for slaughter often have limited or no exercise experience, having been kept housed and tethered for most of their lives. Consequently, as well as being obese, they lack the muscular development or stamina necessary to deal with the physical exertion of long-distance transportation.



Obesity is common amongst Equidae destined for slaughter, which predisposes them to problems during transportation.

### 3.3. Obesity

Fatigue may occur sooner in obese Equidae due to greater energy expenditure and reduced exercise tolerance (Webb *et al.* 1989, Kearns *et al.* 2002). The ability to cope with long-distance transportation may be further compromised by the presence of obesity-linked metabolic or endocrine disturbances, such as insulin resistance and hyperlipaemia. These conditions can lead to severe illness or death and may be exacerbated by long journeys, due to factors such as stress, increased energy expenditure or food and water deprivation (Jeffcott *et al.* 1986, Hughes *et al.* 2004).

Obese horses are at greater risk of disease (Hungerford *et al.* 1992), heat stress and dehydration (Webb *et al.* 1989, Cymbaluk and Christison 1990), particularly in hot humid conditions, such as those commonly encountered on Europe's main routes to slaughter. Furthermore, obese Equidae may take longer to recover from transportation than Equidae of a lower body condition score (Webb *et al.* 1989).

### 3.4. Stress

Equidae showing signs of stress are commonly observed during World Horse Welfare's field investigations; these signs include those described by EFSA (2011) as being indicative of fear, such as vocalisation and escape behaviour (e.g. pulling back against the tether rope, attempting to jump out of pens). Lack of previous transportation experience predisposes these Equidae to particularly high levels of stress (Andronie *et al.* 2009, Schmidt *et al.* 2010).

Similarly, research suggests an increased susceptibility to transport-related stress in stallions (Fazio *et al.* 2008). Overt signs of stress, such as repeated pawing, kicking at partitions, vocalisation and a general inability to settle are frequently observed among stallions, particularly those in close proximity to mares. However, all Equidae, regardless of gender, display

evidence of stress, whether it be overtly or more subtly. Commonly recorded signs of stress include threat behaviour, tail swishing, stomping, vocalisation and bar chewing.

Stress during transportation is likely to play an important role in the development of fatigue through increases in heart rate (Schmidt *et al.* 2010) and energy expended performing certain



This horse is one of many that are observed showing clear signs of stress.

stress-related behaviours such as pawing and kicking. It can elicit greater water losses from the body through sweating, alterations in gut flora and an increase in faecal water content. Transport-related stress has been linked to immunosuppression (Stull and Rodiek 2000, Stull *et al.* 2004) resulting from increased cortisol concentration (Werner and Gallo 2008, Medica *et al.* 2010), and can lead to increased shedding of infectious agents, such as Salmonella (Owen *et al.* 1983), or reactivation of latent infections, such as equine herpesvirus (EHV) (Browning *et al.* 1988).

### 3.5. Inadequate rest

World Horse Welfare's observations indicate that Equidae cannot rest whilst on board the vehicles typically used for the transport of these Equidae; regardless of whether it is in motion or stationary. When the vehicle is in motion, the constant need to balance makes it impossible for Equidae to obtain even standing rest. Whilst individual stalling is essential on vehicles, as emphasised by EFSA (2011), current practices mean that even when a vehicle is stationary, lack of space prevents recumbency and, for many Equidae, greatly inhibits standing rest. Additional factors, such as inadequate ventilation, high levels of stress and inter-animal aggression, many of which are facilitated by poor vehicle and partition design, further impede rest.



This chestnut gelding became untied, enabling him to rest in recumbency. He was unresponsive to external stimuli, even when stepped on by another horse. When forced to stand by control post staff, the gelding was uncoordinated and fell against his neighbour.



Thus, during a 24 hour journey, Equidae receive little or no rest. This contrasts starkly with the 8-18 hours that stalled horses reportedly spend resting over the same time period, of which, up to six hours may be taken in recumbency (McDonnell *et al.* 1999). Equidae are only able to attain deep sleep when in lateral recumbency and therefore a prolonged lack of recumbent rest leads to sleep deprivation (Bertone 2006).

Under Regulation 1/2005, Equidae must be unloaded at a control post for a 24 hour rest break following 24 hours of transportation. However, field observations show that, by this stage, Equidae are already showing signs of extreme fatigue and dehydration. What is more, the efficacy of these rest breaks is greatly dependent upon conditions at the control posts, which are often extremely poor. Lack of space and tight tethers mean Equidae are unable to adopt a recumbent position, whilst stressors such as pain, fear, competition for water, mixing of incompatible individuals and fighting can all lead to environmental insecurity and psychological stress, contributing to inadequate rest.

### 3.6. Lack of water

Equidae transported long distances for slaughter or low-value non-registered Equidae, commonly receive little or no water prior to or during their journey (World Horse Welfare 2010b). Marlin *et al.* (2011a) found that only one-third of horses transported to Italy for slaughter had access to water before departure and only one in ten had access to water on arrival at their destination, a finding with severe welfare implications. Lack of water inevitably leads to dehydration and has been found to increase the risk of fatigue (Friend 2000) and other problems, such as gastric ulceration (Luthersson *et al.* 2009).

Risk of colic is frequently cited by drivers and control post operatives as a reason for not providing water. However, one control post that does provide constant access to water reports no incidences of colic. What is more, horses observed by World Horse Welfare at this control post demonstrate less abnormal behaviour than horses observed at control posts where constant access is not provided. The horses urinate more frequently, in greater volumes, and their urine is less thick and dark than that seen at control posts where limited water is offered.

The thick, dark urine of the mare on the left is typical of that seen in Equidae with restricted access to water; these Equidae tend to urinate infrequently and in small amounts. Compare this to the clearer more free-flowing urine of the mare on the right, photographed at a control post that provides constant access to water.



Similarly, research studies report no signs of colic in horses allowed unlimited access to water following 72 hours of deprivation (Carlson *et al.* 1979) or in horses offered regular intermittent access after 28 hours of deprivation (Friend *et al.* 1998). One study reported very mild colic due to rapid water consumption in three severely dehydrated horses provided with immediate unrestricted access to water after 30 hours of transport (Friend 2000). However, it is the opinion of scientific experts that constant access to water should be provided and that adequate water provision along with reduced journey times would prevent Equidae reaching a severe state of dehydration (see p7). This would help to protect against colic, as decreased water intake and dehydration have, in themselves, been implicated as risk factors for colic (Edwards 1999, van den Berg *et al.* 1998, Kaya *et al.* 2009).

World Horse Welfare's observations show that Equidae almost invariably drink when water is presented. Conversely, Marlin *et al.* (2011a) found that horses were less likely to be observed drinking, and 18 times less likely to be observed urinating, upon arrival in Italy than they were prior to departure in Romania. Likewise, Friend *et al.* (1998) found that horses provided with water following transport, having been deprived for the transportation period, still drank less than horses kept in pens for a similar duration. Horses have a relatively poor thirst stimulus and therefore may not rehydrate adequately following excessive fluid losses (Schott 2010). Simultaneous food and water deprivation may remove the physiological thirst stimulus (Rumbaugh *et al.* 1982) so that horses do not drink even when water is offered. Thus, reduced voluntary fluid intake in these horses suggests that they had reached such a severe level of dehydration by the end of the journey that their drinking stimulus was no longer triggered. Transportation should end long before Equidae reach a severe state of dehydration.

### 3.7. Lack of food

World Horse Welfare's field observations show that food intake mid-journey is usually low, with only around 40% of horses observed eating. This low intake is most likely due to inappetence as a result of dehydration, fatigue and poor quality, unpalatable forage; anorexia is a recognised sign in 'exhausted horse syndrome' (Foreman 1998). Food and water provision are closely linked; a source of forage is essential in order to ensure adequate hydration by maintaining gastrointestinal water reserves, yet horses are more likely to eat after receiving water (World Horse Welfare 2010b).

High energy expenditure must be compensated for by equivalent calorific intake and therefore the low food intake of these horses over such long journeys will inevitably lead to a severe energy deficit. Furthermore, horses require an almost constant throughput of food in order to ensure gastrointestinal health, and therefore must spend around 40-70% of their time eating (Sweeting *et al.* 1985, Boyd *et al.* 1988); disrupted feeding patterns and unfamiliar diets can lead to colic, whereas time periods greater than six hours between forage meals increase the risk of gastric ulceration (Luthersson *et al.* 2009).

### 3.8. Environmental conditions

Adverse environmental conditions, either externally or on board the vehicle, can seriously affect the welfare of Equidae during transportation. Marlin *et al.* (2011b) found that time of year and external thermal environmental conditions were significant risk factors for horses being deemed unfit for transport.

The thermoneutral zone (TNZ) of horses is around 5-25°C (Morgan 1998), outside this range horses must expend energy in order to thermoregulate, potentially contributing to fatigue. World Horse Welfare has observed Equidae being transported in temperatures up to 40°C. Similarly, Marlin *et al.* (2011a) recorded temperatures ranging from 0-38°C with ambient relative humidity ranging from 25-89%. Current journey times mean that both upper and lower extremes of temperature may be encountered in the same 24 hour journey (Joint Research Council 2009).

Horses are adversely affected by high heat and humidity. They rely heavily on sweating in order to thermoregulate in higher ambient temperatures, increasing water requirements and consumption (Crowell-Davis *et al.* 1985, Friend 2000, Iacono *et al.* 2007a); daily water intake may be up to 79% higher in a hot-humid environment (Geor *et al.* 1996). Furthermore, warm humid conditions within the vehicle, due to heat dissipation and exhaled moisture, may provide an ideal environment for transmission of infectious agents.

Thermoregulation can be compromised by inadequate or restricted ventilation (EFSA 2011), increasing the risk of heat stress. Equidae with unusual sweat patterns, indicative of inadequate ventilation and poor air flow on the vehicle, are frequently recorded by World Horse Welfare. Likewise, urine-soaked bedding and mouldy hay are common on-board vehicles transporting Equidae intended for slaughter and of a low value, over long distances. These factors all contribute to poor air quality due to accumulation of irritants, allergens and pathogens (e.g. dust, ammonia, moulds and bacteria),



Sweat-soaked Equidae, such as this one, are commonly observed during field investigations.



which can present a significant challenge to the horse's respiratory tract, leading to disease (Hobo *et al.* 1995, Katayama *et al.* 1995). Longer journeys are associated with higher concentrations of both ammonia and airborne dust (Oikawa *et al.* 2005) and therefore pose an increased risk.



Tight tethering, which can lead to respiratory disease, is common practice both on and off the vehicle.

### 3.9. Tight tethering

World Horse Welfare's field observations show that tight tethering of horses by the head is common practice during both transportation and rest periods. However, research shows that maintaining an elevated head posture can lead to marked increases in mucus, bacteria and neutrophils in the trachea within 6-12 hours (Racklyeft and Love 1990, Raidal *et al.* 1995, 1996), and this risk appears to increase over time (Chiesa *et al.* 2002). Horses must be able to adopt a lowered head position in order to facilitate clearance of the airways.

**An elevated head posture can lead to marked increases in mucus, bacteria and neutrophils in the trachea within 6-12 hours.**

### 3.10. Pain and discomfort

Data from one randomly selected shipment observed at a control post mid-journey showed that 94% of horses had an abnormal stance and 83% were weight-shifting (World Horse Welfare 2010a), both of which are considered indicative of pain or discomfort (Ashley *et al.* 2005, EFSA 2011). Constant muscular effort over long journeys, along with both pre-existing and transport-related issues, such as disease, injury, lack of space, fighting, stress, improper handling, inappropriate vehicle design, poor driving and rough road conditions can all lead to pain or discomfort, increasing the risk of fatigue and leading to poor welfare.



Equidae are commonly observed adopting abnormal stances, which can be indicative of pain.

### 3.11. Orientation

World Horse Welfare's observations show that, during transportation, Equidae intended for slaughter or further fattening are usually positioned at a 90° angle to the direction of travel. Orientation on the vehicle affects a horse's physiological and behavioural response to transportation, and therefore its energy expenditure (Clark *et al.* 1993, Smith *et al.* 1994a, 1994b, Waran and Cuddeford 1995, Waran *et al.* 1996, Gibbs and Friend 1999, Toscano and Friend 2001). The direction of forces within a vehicle, in relation to acceleration, deceleration and turns during the journey, are such that orientation at 90° to the direction of travel may require greater energy expenditure in order to avoid impacts with the partitions. Therefore, along with reduced journey times, World Horse Welfare recommends that Equidae are not orientated at a 90° angle to the direction of travel (see p9).

## 4. Conclusion

The evidence provided in this Dossier shows unequivocally that long-distance transportation leads to poor welfare, including health, even in fit, experienced, well-kept Equidae that begin their journey in good condition. As demonstrated by the findings from World Horse Welfare's extensive field work, the risks are amplified for Equidae of a low value or intended slaughter for, which tend to lack physical fitness and transport experience, are in poor initial condition and are transported under inappropriate or unsuitable conditions. The risks are likely to be greater still for Equidae with specific needs or those that are particularly vulnerable, such as foals, youngstock, elderly Equidae, pregnant females and unbroken Equidae.



Evidence shows that long-distance transportation leads to poor welfare, including health.

Whilst the welfare challenges that Equidae are faced with on long-distance journeys have, for clarity, been covered separately, in reality Equidae are faced with a multitude of these challenges at once and the effects are likely to be cumulative. Moreover, the interplay between the different factors is such that each may be both cause and effect of further welfare problems. By eliminating or reducing exposure to, frequency of, and/or severity of these factors or stressors, significant welfare improvements can be made.

The introduction of a 9 to 12 hour maximum journey limit would greatly reduce:

- Incidence of pain and discomfort
- Risk of injury
- Time spent without rest, water or food
- Water and electrolyte loss
- Risk of long-term exposure to temperature extremes
- Risk of heat stress
- Amount of energy expended in maintaining balance on a moving vehicle
- Weight loss
- Risk of immunosuppression and onset of disease
- Poor air quality
- Build-up of allergens and irritants in the airways.

In reducing these factors, a maximum journey limit of hours, without exception, would dramatically improve welfare, including health, by reducing fatigue and exhaustion, dehydration, injury, disease and the multitude of other welfare problems that accompany them.

## THE RISK OF DISEASE

The long-distance transportation of Equidae across Europe intended for slaughter and the movement of low-value Equidae significantly increase the risk of infectious disease being spread between Member States. Equidae showing visible signs of disease are regularly transported across many Member States, with few or no biosecurity precautions and little regard for their health and welfare (see p31).

Equidae from different shipments, intended not only for slaughter, but also for fattening, breeding riding, working or as companion Equidae, come into direct contact with each other during different elements of these journeys, increasing the risk that a serious infectious disease will enter the wider equine population.

Transportation of animals is a known risk factor in the development and spread of infectious disease (see p15). This threat has been recognised by the Food and Agriculture Organization of the United Nations (FAO), World Health Organization (WHO) and the World Organisation for Animal Health (OIE), who state that: *“Pathogens circulating in animal populations can threaten both animal and human health”*. These organisations are now collaborating to address these animal and public health risks (FAO-OIE-WHO 2010).

Similarly, EFSA (2011) states that the disease risks associated with transportation of animals are well-understood, and that: *“the Chief Veterinary Officers of the EU Member States recently ranked movement of animals as the most important risk for spreading infectious diseases [between farms] (EC 2009)”*. They recommend that: *“In order to reduce the risk of transport-associated disease outbreaks, strategies should be developed to reduce the volume of transport... and long-distance transport of animals for finishing or slaughter (e.g. by the transport of carcasses and food products) or reducing journey time (e.g. by slaughtering animals as close as possible to the site of production)”*.

It is important to appreciate that equine disease can only be introduced into the EU or a Member State by live animals, their semen, their embryos, external vectors or contamination of transport vehicles, but not by horsemeat. Therefore, a maximum journey limit and subsequent carcass-only trade could massively reduce the risk of disease spread.

### EFSA states in its 2011 Scientific Opinion on the Welfare of Animals during Transport, that:

*“Fitness for transport, animal welfare and infectious disease are intimately related. Animals that show clinical signs of infectious disease are self-evidently unfit to travel both in the interests of their own welfare and that of the other animals on the vehicle. Stresses associated with handling and transport may cause latent infections with, for instance, Salmonella or Pasteurella sp. that proceed to clinical disease. Such animals are more likely to infect others during the journey or after arrival at their destination and in many cases (e.g. salmonellosis) this will also increase the risk to public health. This is the case for the whole panorama of infectious animal diseases.”* (EFSA 2011 p73).

Most of the Member States involved in the trade in Equidae for slaughter do not import large numbers of Equidae in comparison with Italy (which takes 77% of the live trade (TRACES 2010)). However, many Member States are still at risk of importing a serious equine disease from these



Equidae showing visible signs of disease, such as this one, are regularly transported across Europe.

Equidae, since shipments can travel through as many as six or seven Member States before they reach their final destination. Many more Member States are involved in the trade in low-value Equidae, further increasing the risk of widespread disease outbreaks.

The potential for disease spread is highlighted by the findings of a 2009 FVO Mission to Romania, where Equine Infectious Anaemia (EIA) is endemic. The Mission found overall inadequacies in the system regarding control and eradication of EIA within Romania; furthermore, there was a general failure to verify the identity and health status of Equidae prior to them entering Intra-Community Trade (European Commission 2009a). Outbreaks of EIA have recently been recorded in a number of Member States, including the UK, and several of these have been traced back to Romania. The EU has now put in place additional precautions to reduce the risk of the spread of EIA from Romania but more needs to be done to counter this disease in the EU as a whole.

### Consequences of disease

The consequences of a serious disease outbreak could be devastating for the equine industry. In the event of a serious outbreak, the implementation of movement restrictions and cancellation of sporting and leisure events and sales could have far-reaching consequences, affecting not only the equine industry and its various support industries (such as feedstuffs, equestrian equipment suppliers and so on) but also subsidiary industries as diverse as tourism, catering, media and farming. Onward effects of movement restrictions could lead to disruption of sporting events which could, particularly in the case of horseracing, prove extremely damaging. In 2008, total betting turnover associated with racing in Europe was €28,184,539,393 (£24,870,050,457) (International Federation of Horseracing Authorities 2010).

The 2007 equine influenza outbreak in Australia is estimated to have cost \$560,000 (€407,250) per day for disease control and \$3.35 million (€2.43 million) per day in lost income to equine businesses. The loss in turnover from racing was estimated at \$327 million (€238 million). One State Government alone spent \$46 million (€33.5 million) on containing the disease (Victorian Department of Primary Industries 2008).

More difficult to quantify, but of equal importance, is the emotional impact upon owners who lose their Equidae, which are often viewed by their owners as companion animals.

### Summary

- Equidae are regularly transported despite showing clinical signs of disease, and in conditions which exacerbate the problem (see p24)
- Many of the assessments made regarding the fitness of Equidae to travel are poorly executed both prior to the commencement of the journey and at control posts during the journey, increasing the risk of diseased Equidae being loaded onto a shipment, or those that develop signs of disease during the journey being allowed to continue.
- Equidae are currently transported long distances across multiple Member States, travelling between countries of different disease status.
- Even where obvious signs of disease can readily be observed, it is common for no action to be taken by the transporter or the authorities (see p21).
- There is poor implementation and audit of community rules in some Member States (e.g. fitness for transport and disease prevention arrangements at control posts) allowing disease to be spread over very long distances. The complexities of the current legislation and the number of Member States through which shipments may pass mean that enforcement alone cannot remedy these problems.



## CONSUMER PERCEPTION AND LABELLING OF HORSEMEAT

The excessively long journeys that Equidae intended for slaughter currently undergo, not only compromise their welfare and health, but also mislead consumers of the end product, horsemeat. At present all meat, except beef, is stamped as the product of the country in which the animal is slaughtered and the meat is processed; meaning that consumers are often unaware of the fact that the meat they are eating derives from an animal raised in, and transported from, a completely different country to the one of the label. Consumers are therefore being denied the opportunity to make a fully-informed decision about what they eat, despite research that shows there is a desire to have proper traceability information. A study into consumer requirements for traceability information found that consumers felt that this type of information was important for fresh produce, with meat consistently rated as being one of the products for which it was most important (Van Rijswijk and Frewer 2011). When study participants were asked what they would do if they found a certain product was not what it claimed to be, the most common reaction was that they would not buy it again.



Consumers currently have no way of identifying the true origin of the horsemeat products they buy.

Research conducted by the Italian charity *Lega Anti Vivisezione* (LAV) into the consumption of horsemeat in Italy in 2007, revealed a lack of awareness amongst Italian consumers as to the origin of the horsemeat they ate. The meat, when compared to chicken and pork bought from supermarkets, was believed by consumers to be of better quality, more natural (i.e. less industrialised) and locally/regionally sourced. Most consumers believed horsemeat to be a genuinely healthy, local product, whereas the importation of live animals was thought to relate to other species (LAV 2007).

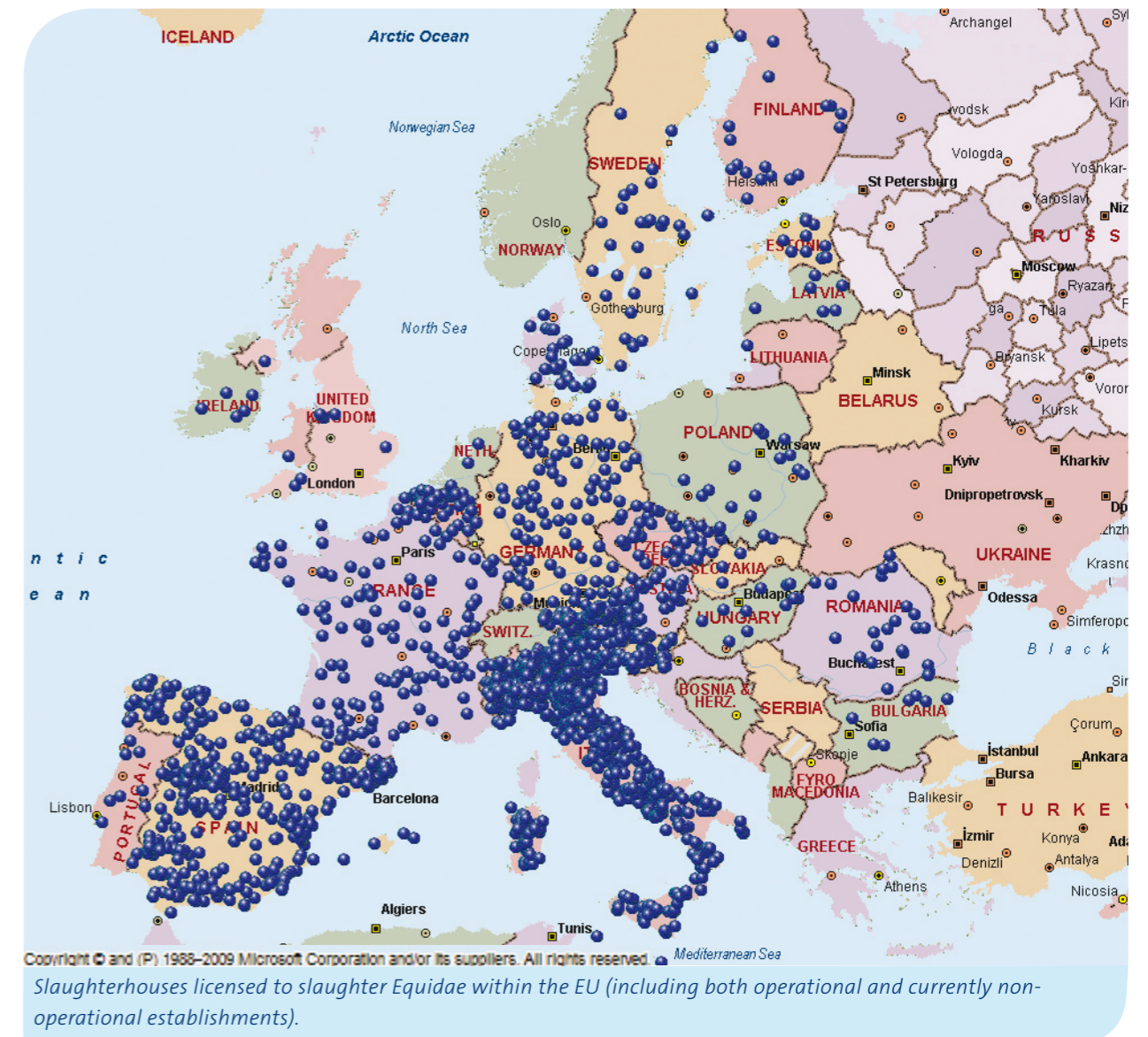
As a result of the absence of 'country of origin' labelling, the consumer has no means of identifying the meat's true origin. In a survey of attitudes towards animal welfare, 41% of Italian consumers felt that current labelling systems did not allow them to identify welfare-friendly products, and 73% of Italian respondents would change their place of shopping to buy

more welfare-friendly products (Eurobarometer 2007). Likewise, LAV (2007) indicated that if full information on traceability were available, more Italian horsemeat consumers (particularly those in the North of Italy and younger consumers) would change their purchasing choices in order to improve horse welfare; for example, choosing imported, vacuum-packed or frozen horsemeat over fresh horsemeat that has been slaughtered in Italy (but which comes from imported horses).

***If full information on traceability were available, more Italian horsemeat consumers would change their purchasing choices in order to improve horse welfare.***

It is the belief of World Horse Welfare that consumers are currently being misled as to the true origin of much of the horsemeat that they are eating, and that more accurate information should be provided. World Horse Welfare has worked hard to bring this issue to the fore. A maximum journey limit would assist the consumer in identifying the real provenance of the meat they purchase, by the simple fact that Equidae will be required to go to a slaughterhouse near to their country of origin. In addition to this it will improve traceability if there are concerns relating to the meat produced.

## SLAUGHTERHOUSE INFRASTRUCTURE



In order for a maximum journey limit to be possible in practice, the appropriate slaughterhouse infrastructure must be in place. Research undertaken by World Horse Welfare to identify and map all EU approved slaughterhouses licensed to take horses, indicates that facilities are sufficient in both number and distribution to ensure that horses can be transported to a licensed slaughterhouse within 9 to 12 hours, regardless of the Member State of origin.

This finding is supported by the Food and Veterinary Office of the European Commission (FVO), which states that: “based on our experience of carrying out inspections in the EU, there is no lack of slaughtering capacity in any Member State. It may be the case that in some Member States there are not many slaughterhouses reserved solely for horse slaughter, but horses can be slaughtered in cattle slaughterhouses. Overall, we consider that if a 12 hour limit were to be imposed there would easily be more than enough slaughter capacity available” (A.J. Wilson personal communication).



## LEGISLATION INTERACTING WITH REGULATION 1/2005

### Drivers' working hours

There is a well-documented conflict between the journey time requirements within Regulation 1/2005 and the maximum driving time permitted by Regulation (EC) No. 561/2006 (drivers' time Regulation). The daily driving time is set out in articles 6 and 7 of Regulation 561/2006 at nine hours of driving per day, with a 45 minute break every four and a half hours. This break may be replaced by a break of at least 15 minutes followed by a break of at least 30 minutes, each distributed over the period in such a way as to comply with the provisions of the first paragraph. The daily driving time may be extended to ten hours, no more than twice a week. The total weekly driving time must not exceed 56 hours for a single-manned vehicle.



A maximum 9 to 12 hour journey limit would harmonise Regulation 1/2005 and Regulation 561/2006.

This does not fit with the current provisions of Regulation 1/2005, which allow Equidae to be transported for 24 hours before being unloaded for 24 hours rest, with water and if necessary feed being offered every eight hours during the journey. GHK Consulting's *Evaluation of the EU Policy on Animal Welfare* (2010) states that this has consequences for drivers, and for animal welfare: "Transport industry stakeholders have pointed out that in practice the driver time Regulation takes precedence as it is more strictly enforced (with fines or the potential of losing a licence). There are also problems in relation to animal welfare when drivers have to stop and rest for example, at inappropriate parking places and in circumstances that expose animals to inadequate temperatures outside their comfort zone."



This foal sustained a serious facial injury in transit and therefore should have been deemed unfit for further transportation.

Whilst it should be possible, with careful planning, for transporters to adhere both to Regulation 1/2005 and to the drivers' time Regulation, harmonising these two pieces of legislation so that the rules on animal transportation match the rules currently in force for drivers' working hours, would assist both transporters and enforcement agencies. Planning requirements for transporters would be simplified, and enforcement agencies would be able to enforce both drivers' working hours and animal transport times concurrently, saving time and resources. Harmonisation would benefit animal welfare, as drivers would be able to combine their own rest break with a compulsory rest and watering break for the Equidae, thus helping to reduce levels of exhaustion and dehydration.

### Fitness for transport

There is potential for confusion over who is ultimately responsible for ensuring that only fit Equidae are transported. Two separate pieces of legislation cover this issue, Regulation 1/2005 and Council Directive 2009/156. Article 6 of Regulation 1/2005 states that the transporter shall transport animals in accordance with the technical rules in Annex I whilst, in accordance with Article 8, keepers, as defined, must ensure that the rules on fitness for transport set out in Annex I are met. In addition, the model Health Attestation in Annex II of Council Directive 2009/156 requires an official veterinary surgeon (OVS) to certify that, at the time of inspection, the Equidae are fit to be transported in accordance with the provisions of Regulation 1/2005.

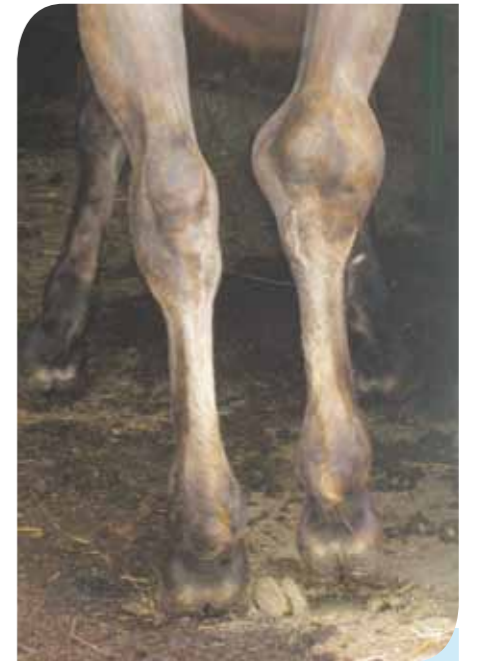
World Horse Welfare believes that EU Guidance adopted by the Commission is needed to clarify this relatively recent change, as there appears to be some confusion over who is ultimately responsible for ensuring compliance with the fitness rules and how Annex I of Regulation 1/2005 should be interpreted. This was highlighted as a concern for UK farmers by DEFRA's Independent Farming Regulation Task Force (2011), who reported that: "inconsistent interpretation and enforcement of welfare rules, in particular by officials veterinarians at abattoirs... can be a major worry when making decisions on the fitness of animals for transport". The Task Force recommends that guidance should be produced so that there is a common reference for producers, hauliers and regulators.

World Horse Welfare's field observations, along with the findings of Marlin *et al.* (2011a), demonstrate that horses which are unfit are being transported on long journeys (see p11-24 and p31). It is therefore crucial that any residual confusion over the responsibility on fitness for transport and interpretation of the provisions of Annex I of Regulation 1/2005 is resolved, that these provisions are clarified and that they are properly enforced. The transportation of unfit Equidae is a serious welfare concern, increases the risk that disease may be spread between Member States, and may also compromise meat quality (due to bruising or other injuries).

It is evident from these findings that there is a need for guidance to be adopted by the Commission and the Member States regarding the definition of fitness for transport in order to remove ambiguity and prevent the transportation of unfit Equidae. Improved and robust enforcement of Regulation 1/2005, combined with detailed guidance and training for all individuals involved in the transportation of Equidae (e.g. veterinarians, drivers, control post staff) would help to alleviate some of the current welfare and health issues. A list of welfare indicators, as suggested by EFSA (2011), is a useful starting point. Guidance should include the addition of frequently observed issues that can render Equidae unfit, such as obesity and dehydration.

### EU Animal Health Strategy

The Animal Health Strategy for the European Union (2007-2013) is based on the principle that 'prevention is better than cure'. Yet the long-distance transportation of non-registered Equidae across Europe, both to slaughter and for other purposes, undermines this goal and poses a clear threat to animal health (see p25).



This severely lame horse had been transported for over 24 hours despite being unfit for transport.

## ENFORCEMENT

Lack of enforcement of Regulation 1/2005 is an ongoing problem that is of extreme concern to World Horse Welfare and urgently needs to be addressed. The legislation itself must be changed to both improve welfare and make the rules easier to enforce. It is then imperative that overall levels of enforcement are raised.

Enforcement of Regulation 1/2005, which is the responsibility of the Competent Authorities (CAs) of each Member State and is monitored on behalf of the European Community by the FVO, is a complex and difficult undertaking that is resource-intensive both in terms of working hours and finances. There are currently massive inconsistencies in the levels of both compliance and enforcement between Member States (Cussen 2008). Lack of enforcement and ineffective penalties for non-compliance mean that Regulation 1/2005 is frequently ignored, resulting in suffering. The problems are well documented, not only by World Horse Welfare and other NGOs, but in reports produced by the FVO.

### World Horse Welfare observations:

World Horse Welfare observes frequent and repeated breaches of Regulation 1/2005, including:

- Unfit Equidae being transported from assembly centres, and allowed to continue their journeys from control posts without any veterinary intervention (see p11-24).
- Unrealistic journey plans and incomplete journey logs.
- Equidae being transported on long journeys with inappropriately constructed partitions.
- Unbroken Equidae being transported on long journeys.
- Equidae being transported in less than the minimum space allowance.
- Vehicles not stopping at control posts after 24 hours on the road, meaning that the Equidae are not provided with food, water or rest.



*This horse was allowed to travel for over 24 hours despite having a severe leg injury.*

### Examples of breaches of Regulation 1/2005

A recent high-profile case of multiple breaches of Regulation 1/2005 was reported in the Danube Delta area of Romania in May 2011. In this case, large groups of unbroken Equidae were transported on a long journey with no rest or water. Although reports from NGOs state that the local CA was aware of the situation, no action was taken to prevent this journey from taking place.



*Equidae are commonly observed being transported with less than the minimum space allowance.*

In 2010, World Horse Welfare observed Equidae being transported from a French market in a manner not compliant with Regulation 1/2005. Problems included Equidae being transported on a long journey, in an unsuitable vehicle with no partitions, and Equidae being struck during loading (in breach of Annex I, Chapter III, section 1.8(a)). No enforcement action was taken.

Without robust and consistent enforcement, Regulation 1/2005 is rendered largely ineffective. The FVO undertakes audits and inspections in Member States to evaluate how effectively EU law is being implemented and enforced. Issues related to poor enforcement have been found for many years – even before the introduction of Regulation 1/2005. Recent inspections have highlighted a number of problems with enforcement in several Member States:

- An audit undertaken in Bulgaria in 2010 found that journey logs were not being used correctly (European Commission 2010).
- An FVO mission to Romania in May 2009 highlighted some common problems, including inaccurate, incomplete and unreturned journey logs; unrealistic journey times; unsuitable partitions; lack of watering devices; inappropriate space allowances and a lack of prosecution or follow-up for non-compliance (European Commission 2009a).
- A mission to Bulgaria in June 2009 found inadequacies with regard to journey logs, unjustifiable delays and overstocking (European Commission 2009b).
- A mission to France in April 2009 showed failure to stop at control posts (European Commission 2009c).

### Improving enforcement

World Horse Welfare believes that changes to Regulation 1/2005 are essential in order to improve welfare. Many elements of Regulation 1/2005 are currently almost impossible to enforce consistently across the EU. Competent Authorities can find it difficult to carry out effective enforcement when transporters cross a number of different Member States; it is not always clear whether a journey log is realistic or not, journey logs may be incomplete and liaising with other Member States can be problematic.



*A maximum 9 to 12 hour journey limit would simplify enforcement.*

Enforcement could be more effectively implemented if Regulation 1/2005 was amended to introduce a maximum journey limit of 9 to 12 hours for Equidae intended for slaughter and non-registered Equidae. This would facilitate and simplify both enforcement and traceability by reducing the need for involvement from multiple agencies across a number of Member States. Instead, slaughter would take place within the source country, or a neighbouring Member State, leading to a reduction in the number of consignments moving between Member States and the need for control posts. Furthermore, it would reduce the need to make checks on the open road, which are an essential element of the enforcement procedure. Undertaking such checks can be difficult and potentially dangerous, and effective roadside inspection of the animals is impossible since they cannot be unloaded. Synchronising the journey limit with drivers' working hours would allow CAs to enforce both pieces of legislation simultaneously, reducing the legislative burden on hauliers and the resources needed to carry out effective enforcement (see p29). Limited government resources could therefore be targeted more efficiently on the start and end points of these journeys.

In addition to this, the implementation of measures within Regulation 1/2005 to require GPS tracking systems on livestock vehicles would assist in enforcing journey times, although care must be taken to ensure that physical checks are carried out to ascertain the actual health and welfare of the Equidae.



## DISCUSSION

World Horse Welfare believes that there is a strong case that the welfare of Equidae is currently being compromised as a result of long-distance transportation to slaughter, or as low-value Equidae. This Dossier has set-out evidence of the current suffering that occurs during these journeys. The evidence presented in the paper by Marlin *et al.* (2011a) and World Horse Welfare's ongoing field investigations, demonstrate that Equidae observed during rest at control posts and at the point of final destination, are dehydrated, stressed, exhausted, injured, and many show clear signs of disease. These Equidae are suffering.

It is clear from the findings of EFSA, other experts and numerous researchers, that even healthy, fit, highly-trained sports horses, experience health and welfare problems at various points during transport. Equidae intended for slaughter or of a low value moved for other reasons, are not fit or healthy, and are unaccustomed and ill-equipped to being moved in transport vehicles for the length of time currently permitted. It is clear that they are severely stressed by these journeys.

It is the evidence outlined within this Dossier that leads us to the conclusion that 24 hours of road transport is unacceptable for Equidae. A maximum journey limit is long overdue to address the specific welfare (including health) issues currently facing Equidae intended for slaughter or of a low value. Whilst it has not been possible to identify a specific number of hours (i.e. X hours) for a finite journey limit, as evidence related to a precise time is currently lacking, it is very clear that Equidae are susceptible to the ill-effects of transport between 9 and 12 hours, a view endorsed by EFSA. There are many examples included within this document that outline the onset of negative challenges upon the health and welfare of Equidae, for example the onset of pyrexia at 10 hours and immuno-compromisation at 12 hours. We believe that it is perfectly correct to apply the precautionary principle here, based upon the evidence that does exist, to set a maximum 9 to 12 hour journey limit. It is suggested that this would help to address the current welfare issues endured by these horses, the increasing threat of disease spreading within Europe's equine population and the very complicated issue of enforcement.

This Dossier would be incomplete if water deprivation and enforcement were not covered in some detail. The evidence that we have collected and appears in these pages, draws us to the conclusion that Equidae need constant access to fresh water before their journey commences, at frequent intervals during the journey when the vehicles stop, and at the end of the journey. We are equally clear, as are others, that the level of enforcement of the transport rules needs to be stepped up in many Member States, and that new guidance is required on fitness for travel as well as water provision. The recommendations in this Dossier will make enforcement much simpler and reduce the overall cost for the Member States, for these reasons they should be given very careful and detailed consideration by both the Commission and the Member States of the European Union. Adopting these recommendations would end much of the current suffering associated with the long-distance transport of Equidae.

***Based on the evidence within this Dossier, World Horse Welfare will continue to campaign for the introduction of a maximum journey limit, improvements in conditions of transport and guidance on water provision and fitness for transport.***

## KEY MILESTONES

- 1995** - The last time that journey times were reviewed by the European Community.
- 2002** - The Scientific Committee for Animal Health and Welfare (SCAHAW) released a report into the impact of various factors, including journey times and water provision, on the welfare of animals during transport. The report concluded that horse welfare becomes considerably worse after 8 to 12 hours of transport, and put forward recommendations for reduced journey times. Following this report, World Horse Welfare developed ten recommendations to improve the welfare of horses in transit.
- 2004** - Regulation 1/2005 on the transport of animals was adopted. The Regulation included a number of World Horse Welfare's recommendations such as single stalling for long journeys, specifications for unbroken horses and improved criteria on the fitness of animals to be transported. However, lack of agreement between Member States meant that the new Regulation contained no changes to journey time or space allowance.
- 2007** - Regulation 1/2005 came into force across the EU.
- 2008** - Data collection took place as part of a large-scale scientific research study commissioned by World Horse Welfare into the health and welfare of horses transported on long journeys.
- 2008** - The first World Horse Welfare Dossier of Evidence to the Commission. This put forward practical recommendations, underpinned by solid evidence, for changes to Regulation 1/2005 aimed at improving the welfare, including health, of Equidae transported long distances in Europe.
- 2010** - Figures from across Europe indicated a drop in the number of horses transported long distances to slaughter, from around 165,000 in 2001 to around 80,000 in 2010.
- 2010** - A Written Declaration calling for proper enforcement of the existing transport legislation and the introduction of a maximum journey limit was signed by over half of all MEPs (405 out of 736). As a result, it was adopted by the European Parliament and became the first ever Declaration on horse welfare to be officially adopted.
- 2011** - European Food Safety Authority (EFSA) report for the Commission was released, including references to papers submitted by World Horse Welfare. EFSA's recommendations included a reduced journey time of 12 hours for horses transported to slaughter.
- 2011** - A meeting of experts took place in June, to discuss the key issues of exhaustion, dehydration and water provision in relation to horses transported long distances for slaughter, the findings of this meeting have been utilized in this Dossier of Evidence.
- 2011** - Public and MEP's continue to show support to end the long-distance transportation of Equidae for slaughter in Europe, through the introduction of a maximum journey limit.



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