



## **Reducing animal welfare risks during transport: From challenges to solutions**

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**Webinar on Welfare risk assessment during**  
**transport: Advancing higher welfare standards**  
09.09.2026

## **ICFAW: Coalition of International Animal Welfare NGOs**

- Since 2001 to represent NGOs in the WOAHP standard-setting and policy space
- 25 members, working worldwide in 150 countries
- **Purpose: Contribute to the development, adoption, and implementation of animal welfare standards** (farming, trade, transport, slaughter, working equids, DPM, wildlife, aquatic animals, research) **via collaboration with WOAHP.**

## **Animals' Angels:**

- Nonprofit NGO, founded 1998
- Based in Frankfurt, Germany, operating internationally
- Dedicated to the protection of farmed animals, focus: animal transport and markets

Working together for better Animal Welfare

## ICFAW members:



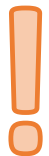
# **I. Animal Transport – General aspects**

## Animal Transport

= Complex issue, with different business operators and stakeholders involved (farmers, organizers, exporters, importers, transporters, competent veterinary authorities, and for cross-border transports also border police, customs, etc.)

→ **Shared responsibilities**

→ **Communication and preparation are essential!**



→ **High risk for poor animal welfare outcome**

→ **Growing societal concerns - citizens demand higher animal welfare standards**

## What are the reasons for transporting live animals?

- Specialization of intensive animal production systems
- Centralization of slaughterhouses

- Cultural and political motivations
- Increasing meat consumption / demand

- Economic benefits
- Overproduction
- Favorable transport costs



**Scientific consensus that transport is stressful for farmed animals.**

*„Transport of livestock is undoubtedly the most stressful and injurious stage in the chain of operations between farm and slaughterhouse and **contributes significantly to poor animal welfare and loss of production.**“*

[Food and Agriculture Organization of the United Nations \(FAO\), Guidelines for Humane Handling, Transport and Slaughter of Livestock, 2001](#)

16/07/2020



### **Transport-related factors causing stress to the animals:**

- Loading and unloading operations, handling
- New and unfamiliar surroundings, noises, and smells
- Mixing with unfamiliar animals, ranking fights
- Limited space and restricted movement
- Limited opportunities to rest
- Exhaustion from compensating vehicle movements
- Slippery flooring
- Insufficient supply with food and water
- Extreme temperatures
- Inadequate ventilation, poor air quality (ammonia gases)
- Exposure to new pathogens

**→ Increasing with the transport time.**



### Transport-related factors causing stress to the animals:

- Loading and unloading operations
- Handling
- New and unfamiliar surroundings, noises, and smells

• N  
• R **To safeguard the welfare of the animals and  
to mitigate disease spread during transport,  
transport stress must be reduced to a  
minimum.**

- L  
• U  
• E  
• S
- Insufficient supply with food and water
- Extreme temperatures, inadequate ventilation
- Exposure to new pathogens

## Why should we be concerned about animal welfare during transport?

### Ethical Obligation

We have an ethical responsibility to safeguard animal welfare, particularly when animals are under human care and dependent on us for their health, safety, and wellbeing.

### Animal Health

Can be easily affected during transport; animals more susceptible to infections and diseases; increasing the risk of transmission. Animals exposed to constant stress are more vulnerable. Prolonged stress weakens their immune function.

### Public Health

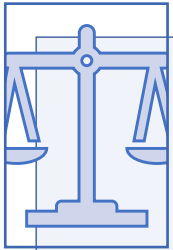
Spread of diseases

### Economic Reasons

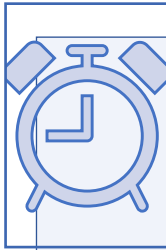
Production losses

 **Long journeys** are likely to have **more detrimental effects on the welfare of animals** than short ones and **increase the risk of disease spread**.

## How to reduce stress for the animals during transport?



**Legislative framework:  
Rules to protect animals  
during transport**



**Minimizing the duration and  
distance of animal transport**



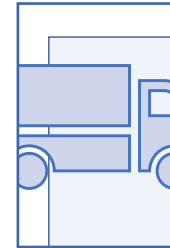
**Well-trained and competent  
operators (transporters,  
animal handlers, etc.)**



**Good planning and  
preparation of each journey,  
including contingency plans**



**Official controls of animal  
transports: veterinary  
services and police forces**



**Good infrastructure:  
vehicles, loading/unloading  
facilities (+ for emergencies)**

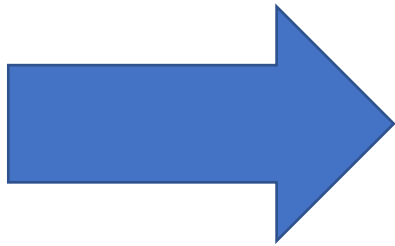


**Consumer awareness and  
labelling**

## **II. International Standards for Animal Welfare During Transport**

International AW standards on the transport by road, sea and air, set by the World Organization for Animal Health (WOAH):

## **Section 7 of the Terrestrial Animal Health Code: Animal Welfare**



**Chapter 7.1.** - Introduction to the recommendations for animal welfare

**Chapter 7.2.** - Transport of animals by sea

**Chapter 7.3.** - Transport of animals by land

**Chapter 7.4.** - Transport of animals by air

# **III. Main Animal Welfare Risks During Transport and Possible Mitigation Measures**

## KEY ISSUES OF LIVE TRANSPORT



**DURATION**



**FITNESS**



**SPACE**



**TEMPERATURE**



**MEANS OF  
TRANSPORT**



**HANDLING /  
(UN)LOADING**



**FOOD AND  
WATER**



**ANIMAL  
CATEGORIES**



**HYGIENIC  
CONDITIONS**



**PLANNING /  
PREPARATION**



If these aspects are not addressed, conditions of animals in transport cannot be improved.

## **JOURNEY DURATION:**

*“The amount of time animals spend on a journey should be kept to the minimum.”*  
(Art. 7.2.1, 7.3.1. WOAHA TAHC)



As journey duration increases, animal welfare tends to deteriorate as animals become increasingly fatigued, experience a growing energy deficit, become more susceptible to existing infections, and may become ill when exposed to new pathogens.

**The longer the journey, the greater the exposure to welfare risks.**

**CHALLENGES:**

No transport time limits for animals. Insufficient provision with water, food and rest on long journeys. Profit is the main driver for long distances/duration.



Heavily soiled sheep, after a sea journey from EU to ME of approx. 15 days



Exhaustion in young bulls during a 1,500-km road journey for export outside the EU

## **JOURNEY DURATION:**

### **BEST PRACTICES:**

- ✓ **To set reasonable journey time limits**
- ✓ **To support sustainable animal/meat production systems that minimize the need for long journeys**



It is important to consider particularly on long journeys (> 8 hours):

- To carry food and water for the animals on board the vehicles
- To give more space to the animals to ensure that all animals can lie down and rest and have access to water and food → load less animals.
- To plan the journey thoroughly in advance, also taking into account the weather forecasts.
- Contingency plan: to know how to replenish food and water, e.g. in cases of emergency; where to rest the animals during transport, if needed; etc.

## **FITNESS FOR TRANSPORT:**

### Art. 7.3.7.3. WOAHA TAHC

- a) *Each animal should be inspected by a veterinarian or an animal handler to assess fitness to travel. (...) **Animals found unfit to travel should not be loaded** onto a vehicle, except for transport to receive veterinary attention. (...)*
- c) *Animals that are **unfit to travel** include (...):*
  - i. *Sick, injured, weak, disabled or fatigued animals*
  - ii. *Animals unable to stand unaided and bear weight on each leg*
  - iii. *Blind on both eyes*
  - iv. *Animals that cannot be moved without causing them additional suffering*
  - v. *Newborn with an unhealed navel*
  - vi. *Pregnant animals in the final 10% of their gestation period*
  - vii. *Females travelling without young which have given birth within previous 48h*
  - viii. *Animals whose body condition would result in poor welfare because of the expected climatic conditions*



## CHALLENGES:

Different evaluation of “fitness” among stakeholders, profit considerations often prevail.



*Very young lamb with unhealed navel, transported together with his mother. She shows heavy abdominal breathing, has white nasal discharge, a swollen udder and vaginal bleeding.*



*HF cow, severely lame, with pain face, transported for slaughter via an animal market*



*Downer cow, unable to get up, transported for slaughter via an animal market*

**→ UNFIT FOR TRANSPORT! SUFFERING!**

**The condition of sick, injured or otherwise unfit animals is likely to deteriorate during transport.**

## ANIMAL CATEGORIES – PARTICULARLY VULNERABLE GROUPS:

- Unweaned animals → immature immune system; difficult to feed during transport; increased risk of hunger, and dehydration; more susceptible to diseases
- End-of-career animals (e.g., dairy cows, laying hens) → often poor body condition and limited energy reserves; impaired health; increased risk of injury, fatigue and stress during transport
- Pregnant animals (particularly in advanced pregnancy) → increased physiological demands; higher risk of stress and transport-related complications (abortions, premature births)
- Lactating animals → require milking at appropriate intervals; delayed milking causes distress, pain and a high risks of severe infections, such as mastitis.



*Left: goat likely suffering from painful mastitis  
→ Not fit for transport.  
→ Immediate veterinary treatment required.*

*Right: Cows giving birth during a very long  
export transport, not all calves survive.*





***Sheep in severe heat stress:***

*panting with open mouth, tongue sticking out and neck extended. Over 180 breaths per min counted (normal respiratory rate at rest: ca. 20-40 breaths/min).*

**→ Not fit for (further) transport.**

**→ Emergency measures required (water, shade, rest, veterinary care)**

Plan ahead for seasonal weather extremes:

- ✓ To **plan the transport in the cooler hours of the day or at nighttime only.**
- ✓ To keep journey time **as short as possible and reduce loading density.**
- ✓ To only use transport **vehicles with a roof protecting the animals from direct sun, ensuring good ventilation** and providing the animals with **water ad libitum.**
- ✓ To **never park the vehicle in the direct sun and avoid waiting times** for the animals on board the vehicles.
- ✓ To favor **animal breeds better adapted to high temperatures and better able to cope with heat.**



## FITNESS FOR TRANSPORT:

### **BEFORE LOADING:**

Always assess the fitness of each animal by a veterinarian or well-trained animal handler.

- *Are all animals fit **for the entire journey** (not only for loading)?*
- ✓ **In case of doubt, leave the animal out! Seek veterinary advice!**
- ✓ Pay special attention to 'end-of-career' animals (dairy cull cows, sows and laying hens) as particularly vulnerable group.



Practical Guidelines to Assess Fitness for Animal Transport  
(for cattle, horses, pigs):

[Guidance for Better Animal Welfare During Transport – FVE – Federation of Veterinarians of Europe](#)



Practical Guidelines to  
Assess Fitness for Transport of  
Adult Bovines



## SPACE ON THE MEANS OF TRANSPORT:

### Art. 7.3.5.6. WOAHA TAHC



- b) (...) The **space** required on a vehicle or in a container depends upon whether or not the **animals need to lie down (for example, cattle, sheep, pigs, camels and poultry), or to stand (horses).**(...)
- c) When animals lie down, they should **all be able to adopt a normal lying posture**, without being on top of one another, and **allowing necessary thermoregulation**.
- d) When animals are standing, they should have **sufficient space to adopt a balanced position** as appropriate to the climate and species transported.
- e) The amount of **headroom** necessary depends on the species of animal. **Each animal should be able to assume its natural standing position for transport** (including during loading and unloading) **without coming into contact with the roof or upper deck of the vehicle**, and there should be **sufficient headroom to allow adequate airflow over the animals**. (...)
- g) Other factors which may influence space allowance include: (...)
  - ii. **length of journey** (...) / v. **expected weather conditions** (...)

## CHALLENGES:

Animals commonly transported without enough space to move and rest. To increase space is considered less economically convenient.



## CHALLENGES:

Lack of headroom, presenting a risk of injury (abrasions, bruises) and hindering proper ventilation and air flow above the animals.



**Sufficient space** on board the means of transport is important, because:



All animals can lie down and rest at the same time

To prevent injuries (e.g. bruises)

For proper thermoregulation

To reach the watering devices on board the vehicle

To prevent ranking fights between the animals

For inspection during transport (access to the animals)



- ✓ **To adapt/reduce loading density** to the category of animals, the length of journey and the expected weather conditions.
- ✓ **To authorize transports with less animals.**
- ✓ **Physical checks** during loading/transport to ensure they have space to move and lie down, with space above them when standing.

## MEANS OF TRANSPORT:

### Art. 7.3.3.4. WOAHA TAHC

*“Transport companies, vehicle owners and drivers are responsible for planning the journey to ensure the care of the animals; in particular they are responsible for:*

*a) **choosing appropriate vehicles for the species transported and the journey; (...)**”*

### Art. 7.3.3.6. WOAHA TAHC

*“The responsibilities of Competent Authorities include: (...)*

*b) **setting standards for facilities, containers and vehicles for the transport of animals; (...)**”*

### Art. 7.3.5.4. WOAHA TAHC

*“Vehicle and container design and maintenance*

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

*b) **Vehicles and containers** should be designed with the structures necessary to **provide protection from adverse weather conditions** and to minimise the opportunity for animals to escape. (...)*

**CHALLENGES:** Unsuitable (multipurpose) vehicles, not designed for the transport of animals, causing risk of injuries and safety issues for the animals and humans.



*Transport of two heavy bulls in a small pick-up truck – without roof/top cover, ramp, space. Lateral protection? Escape proof? Overload – road safety?*



*Transport of cattle – vehicle without roof/top cover, no ramp. Leakage of faeces and urine – potential risk of disease spread?*

**Appropriate transport vehicles in good working order** are important, because:



For the safety of the animals and the operators

To prevent injuries (e.g. body parts can get stuck, animals can fall out of the truck etc.)

To ensure the greatest possible comfort for animals  
→ reducing transport stress

To prevent economic losses due to injuries, weight loss, illness, and mortality.

For road safety



**BETTER PRACTICE:**

**Vehicles used for the transport of animals should be approved according to AW standards.**

## Welfare risk assessment during transport: Advancing higher welfare standards



*Vehicle with top cover – goats protected from sun during transport.*



*Vehicle with loading ramp*

*Good sun protection, softened side protection and soft underground/floor for camel transport.*

## HANDLING, incl. LOADING / UNLOADING OPERATIONS:

Article 7.3.2.1. WOAHA TAHC

*“**Animal handlers** should be **experienced and competent in handling and moving farm livestock** and understand the behaviour patterns of animals and the underlying principles necessary to carry out their tasks.”*



Article 7.3.3.3 WOAHA TAHC

*“Animal handlers are responsible for the **humane handling and care of the animals, especially during loading and unloading**, and for maintaining a journey log. To carry out their responsibilities, they should have the authority to take prompt action. In the absence of a separate animal handler, the driver is the animal handler.”*

Article 7.3.3.7.

*„**All individuals, including veterinarians, involved in transporting animals and the associated handling procedures should receive appropriate training and be competent to meet their responsibilities.**“*

→ Article 7.3.8.: Loading

→ Article 7.3.10.: Unloading and post-journey handling

**CHALLENGES:** Untrained animal handlers, lack of understanding the animals' behaviour and needs, lack of proper infrastructure during loading and unloading, e.g. no loading ramps → dangerous, stressful operations for animals and humans; risk of injuries, stress and additional animal suffering

Loading/Unloading **without** ramp vs. **with** ramp

→ **stressful, violent handling** vs. **calm, humane handling.**





*“Handling of animals should foster a **positive relationship between humans and animals** and should not cause injury, panic, lasting fear or avoidable stress.” (Art. 7.1.5.10 WOAHA TAHC)*



### Good practices:

- To ensure that the animal handlers are well-trained and competent, understanding the instinctive behaviour of animals and making use of it (e.g. when moving animals).
- To **never** hit, poke or kick animals, or pull an animal by the legs, ears or horns, or use tail twisting or other violent methods. Do **not** use electric prods.



*Right pic:  
Excessive use of  
electric prod to  
make the very  
exhausted bull  
stand up during  
transport.*

## PLANNING AND PREPARATION OF THE TRANSPORT:

### Article 7.3.5.1. WOAHA TAHC

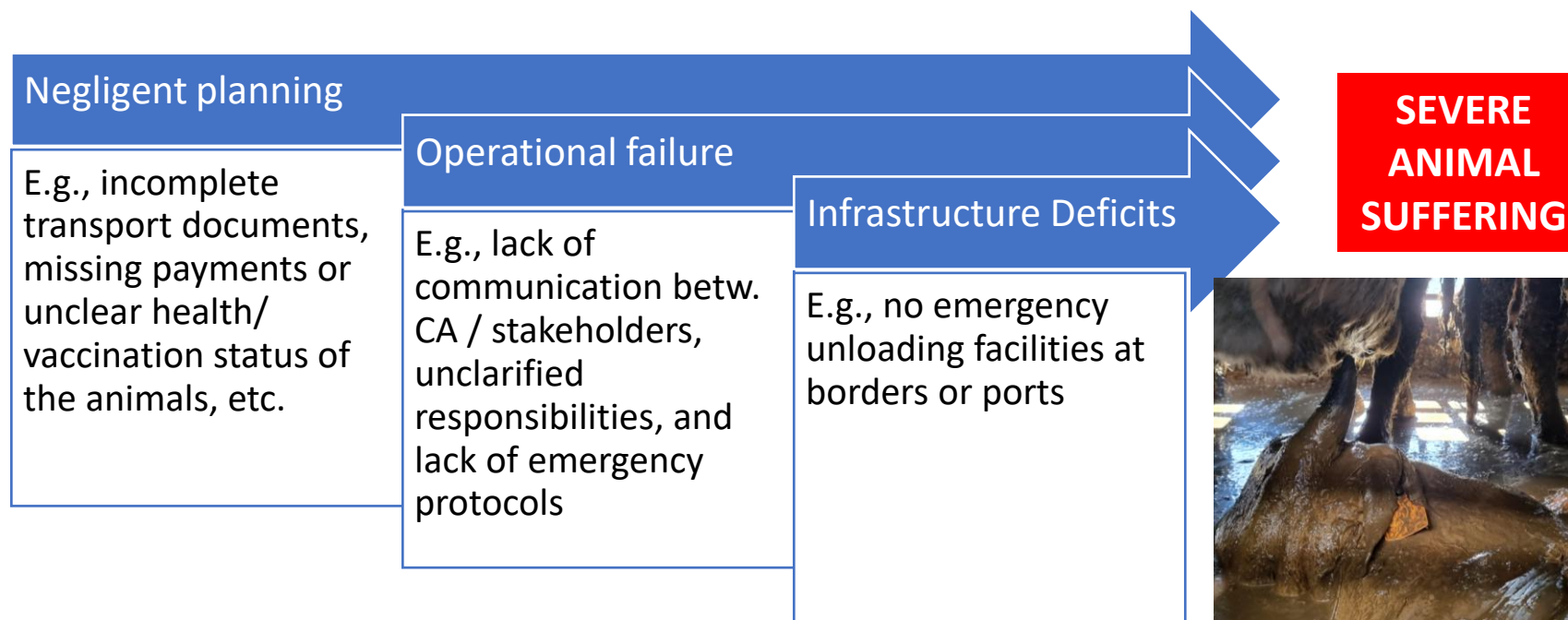
*“Adequate planning is a key factor affecting the welfare of animals during a journey.”*

#### → Good planning includes:

1. To select and prepare the animals before the journey
2. To check the vehicle's condition
3. To check the weather conditions
4. To be prepared for contingencies and have a journey-specific emergency plan
5. To have all necessary transport documentation well prepared and approved by the competent authorities - **before** loading the animals  
→ especially relevant for international, cross-border transports.



## A serious AW risk: Transport delays and rejections of the animals at borders



**A detailed planning and preparation of the journey in advance is essential to avoid further tragedies.**

- **Pre-approval systems prior departure**
- **For emergency preparedness:** Pre-agreement on emergency procedures, i.e. where/when to unload the animals, water and food supply, costs, veterinary care

## Conclusions and Recommendations



- **Strengthen legislation:** All countries should adopt appropriate legislation, aligning with WOAH AW standards to firmly protect the animals during transport.
  - Guidelines support the implementation of legal standards.
- **Better Implementation:** Compliance with AH/AW standards should be closely monitored by the competent veterinary authorities.
- **Proper training** of animal handlers should be a priority.
- Improvement in **transport infrastructure (incl. vehicles)** is necessary.
- **Responsibilities** between all persons involved in the transport chain (farmers, transporters, animal handlers, slaughterhouse staff, veterinarians) need to be clarified.
- **Be prepared for emergencies** and respond quickly to ensure the welfare of the animals at any time.

## You can take action for the animals:

- 
- **Raise awareness** about AW during transport among the stakeholders
  - **Organize AW workshops and practical training courses**, e.g. at markets, for transporters, animal handlers, farmers etc.
  - **Issue official orders to better protect the animals during transport**, e.g.:
    - ✓ To only transport the animals at night during extreme/hot weather
    - ✓ To require journey-specific route and contingency plans
  - **Carry out regular, risk-based AW inspections of animal transports**, e.g.: at markets, during loading, on road checks and at destination.
    - ✓ Identify recurring problems, high-risk routes or operators
    - ✓ Issue effective and dissuasive sanctions in cases of non-compliances with AW legislation.
  - **Share good practices and cooperate**, e.g. through networks, etc.

Animals are sentient beings  
who feel pain, fear, and distress.

Let's work together  
to provide them with the respect and  
care they deserve.

Thank you for your efforts to improve  
animal welfare during transport!

Any questions?

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[www.icfaw.org](http://www.icfaw.org)

