



Australian Government



BKPM
Indonesia Investment
Coordinating Board

INDONESIA AUSTRALIA RED MEAT & CATTLE PARTNERSHIP

Best practice guide for the transport of cattle in Indonesia



WARNING:
This publication contains images of animal slaughter.

The *Best practice guide for the transport of cattle in Indonesia* is a publication of the Indonesia Australia Partnership on Food Security in the Red Meat and Cattle Sector (the Partnership). The publication is produced in both English and Bahasa Indonesian.

This guide has been prepared as an educational tool and contains images of animal handling practices including animal slaughter.

This publication is freely available from www.agriculture.gov.au/partnership.

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Cataloguing data

This publication (and any material sourced from it) should be attributed as: *Best practice guide for transport of cattle in Indonesia* - July 2017, Australian Government Department of Agriculture and Water Resources. CC BY 4.0

ISSN 9781760031329 Best practice guide for the transport of cattle in Indonesia (print)

ISSN 9781760031336 Best practice guide for the transport of cattle in Indonesia (online)

This publication is available at:
www.agriculture.gov.au/publications

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Acknowledgements

The Partnership would like to acknowledge the following organisations that contributed to this guide:

- Australia Livestock Exporters' Council
- Australian Livestock Export Corporation Ltd
- Australian Rural Exports Pty Ltd
- PT Elders Indonesia
- Meat & Livestock Australia Limited

This guide was consolidated and prepared by Schuster Consulting Group Pty Ltd.

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Introduction

Animal welfare refers to how an animal is coping with the conditions in which it lives or in the case of transport, the conditions in which it is temporarily located.

According to international standards, an animal is in a good state of welfare if it is healthy, comfortable, well nourished, safe, able to express natural behaviour and not suffering pain, fear or distress.

Handling animals during transport according to this guide can deliver the following benefits:

- stress will be minimised
- better resistance to disease
- fewer injuries or deaths
- reduced weight loss
- safer work environment
- faster completion of tasks such as loading and unloading
- improved meat quality and shelf life which means a more profitable business and better job security for everyone in the supply chain.

The principles in this guide can be applied by all those responsible for planning journeys, those responsible for transport vehicles or vessels and those responsible for loading and unloading. Key principles fundamental to ensuring good animal welfare during transport include:

- sourcing appropriate cattle
- planning and preparation
- avoiding pre-transport stress
- the appropriate design, use and maintenance of facilities and equipment
- loading and unloading cattle to minimise stress and optimise movement
- monitoring the health and welfare of livestock before, during and after transport
- preventing or responding to emergency situations.

It is important to note that this guide provides an overview of best practice only but does not present the only way to deliver a good animal welfare outcome. Other methods and techniques may deliver an equally good outcome; however, in the absence of an alternative, this guide can be used as a basis for practices or as a checklist against which established practices may be compared. Different locations may also have different regulations that affect the transportation of livestock. These should always be considered to take precedence over this guide.

Purpose and scope

This guide has been developed by the Australian Government's Department of Agriculture and Water Resources in conjunction with the Indonesia Investment Coordinating Board (BKPM) under the Indonesia-Australia Partnership on Food Security in the Red Meat and Cattle Sector.

The purpose of this guide is to illustrate best practices for handling cattle during transport and in the design and construction of transportation facilities.

This guide covers livestock transport on land and at sea in Indonesia, from sourcing cattle through to discharge at their final destination. The guide focuses on and is relevant to both local and imported breeder or slaughter cattle and applies wherever transport may occur within Indonesia throughout the supply chain from ports through to farms, feedlots and abattoirs and everywhere in between.

This guide is applicable to organisations seeking to:

- Achieve good animal welfare outcomes during the transportation of livestock.
- Provide confidence to their suppliers and customers, as well as the general community, that they are committed to animal welfare and management outcomes.
- Increase profitability through improved productivity, increased meat yield and quality.
- Provide a safer work environment.
- Give advice or training on animal welfare and management outcomes.

This guide does not address:

- Transport of livestock by sea and air across international borders.
- Handling or welfare for production (such as at farms or feedlots) or at the point of slaughter.

How to use this guide

This guide is divided into eight sections each of which considers a different element of transportation.

Guides and the desired animal welfare outcome are provided in each section and further tools are included that can be used to achieve best practice.

A case study is included in section nine which provides practical working examples of how the principles contained within these guides can be implemented in the commercial environment to benefit the animals and the business.

SECTION 1: PLANNING AND SOURCING CATTLE

This section provides an overview of the planning required when sourcing livestock in advance of transportation, including the type of cattle which should be selected and how to minimise pre-transport stress.

SECTION 2: PRE-TRANSPORT PREPARATION

This section focuses on preparing for the transport journey and takes into consideration rest stops, feed and water curfews, transport facilities, vehicles and vessels as well as contingency planning measures.

SECTION 3: TRANSPORT INFRASTRUCTURE AND FACILITY DESIGN

This section addresses how transport infrastructure and facilities should be designed and constructed in order to optimise animal welfare and movement.

SECTION 4: HANDLING LIVESTOCK

This section focuses on handling animals efficiently and with minimum stress throughout the transportation process, including preventing animals from escaping and monitoring the health and welfare of livestock.

SECTION 5: SELECTING CATTLE FOR LOADING

This section focuses on ensuring cattle are fit for loading as well as identifying and managing those that are not, including humane emergency destruction when necessary.

SECTION 6: LOADING

This section considers loading facilities and their fitness for use, densities and groupings as well as the fundamentals of efficient handling to minimise stress during loading.

SECTION 7: IN-TRANSIT MANAGEMENT

This section provides an overview of driver responsibilities, managing extreme conditions and how to prevent or respond to breakdowns and emergency situations.

SECTION 8: DISCHARGE AND UNLOADING

This section considers unloading facilities and their fitness for use, the role of smooth and efficient unloading in minimising stress and the importance of monitoring the health and welfare of livestock during unloading.

SECTION 9: CASE STUDY

This section provides a practical working example of how the principles contained within these guides are implemented in the commercial environment to benefit the animals and the business.

TOOLS

A range of tools can be found after each section to assist in implementing the practices outlined in each section. These tools are examples only and some tools apply to more than one section.

Section reference

Not all sections are relevant to all people and situations. The table below provides a quick reference for readers to determine which sections may best apply to them depending on their area of responsibility.

Section relevant to an individual's area of responsibility

Area of responsibility	Relevant sections								
	1	2	3	4	5	6	7	8	9
Livestock sourcing and selection	✓	✓							✓
Journey planning and logistics		✓							✓
Livestock feeding and watering for transport		✓	✓				✓		✓
Transport facility design and maintenance		✓	✓			✓		✓	✓
Selecting cattle for loading		✓		✓	✓				✓
Animal handling during loading				✓	✓	✓			✓
Transport logistics and in-transit management		✓	✓	✓	✓	✓	✓	✓	✓
Driving transport vehicles or vessels				✓		✓	✓	✓	✓
Animal handling during unloading cattle				✓				✓	✓

01

Planning and sourcing cattle

Planning the sourcing and transport of cattle well in advance of the event will optimise welfare and productivity

KEY ACTIONS

- **Plan and prepare in advance**
- **Source cattle suited or acclimatised to conditions**
- **Avoid pre-transport stress**
- **Group animals appropriately for transport**

Plan and prepare in advance

Well before any actual transport takes place, consideration should be given to where the cattle will come from, how they will be sourced and the logistics associated with the acquisition.

Depending on where cattle will be sourced from, this could be undertaken 60-90 days in advance (if sourcing local cattle) or up to 12 months in advance (if importing cattle). The supply of cattle from other countries is often highly seasonal meaning forward planning is essential.

Generally such considerations include:

Initial planning

- Confirming supply capacity, as well as regulatory requirements and permits.
- Budgeting for purchase as well as operational costs such as feed, transportation and any training that may be required.
- Assessing transport infrastructure facilities and developing a checklist of improvements.
- Developing a preliminary journey plan, including contingency plans prior to cattle transport commencing.

Procurement

- Identifying all administrative processes required in procuring cattle and planning for these.
- Re-visiting transport infrastructure, facilities and sites such as depots and rest stop facilities to monitor any requested facility upgrades.
- Finalising journey plans, including contingency plans prior to cattle transport commencing.
- Ensuring contingency arrangements are in place e.g. in case of accidents or escaped animals.

Tool 1.1 provides a timeline for undertaking sourcing, procurement and transport planning activities for importing livestock or sourcing them domestically

Source cattle suited or acclimatised to conditions

The type, breed, geographical location and pre-travel history can affect the ability of cattle to cope with the stress of transport.

Temperature and humidity are two factors that can cause great stress during transport and once the livestock reach their destination. The most critical concern is stress caused through high temperatures and humidity; called heat stress. Low temperatures can cause cold stress although this is less common.

Consider breed suitability and animal acclimatisation

Some breeds are better suited to withstand high temperatures and humidity levels than others.

***Bos indicus* breeds are better suited to cope in these conditions than *Bos taurus* breeds.**



Bos indicus



Bos taurus

Bos indicus cattle are better suited to hot, humid conditions than *Bos taurus* cattle. *Bos taurus* cattle may be able to tolerate heat and humidity if they have been sourced from and are used to such conditions. Regardless of the breed, it is important to ensure the cattle are used to the conditions they will encounter at the end of the journey.

Select animals that have been acclimatised to warm weather conditions if they are to be transported to or through areas experiencing high temperature and humidity.

It is not always possible to source cattle that have been acclimatised to conditions. In this case, the following should be considered:

- Ensure the transport vehicle has appropriate air flow or ventilation which allows air to circulate over and around the animals.
- Wherever possible, ensure animals are shaded e.g. during loading, unloading and at driver and animal rest stops.
- Ensure adequate water is provided around the transport occurring, while also complying with curfew requirements. Cattle which have been drinking immediately prior to transport do not always travel well. Adhere to curfews.

If there is a risk of heat stress, stocking densities should be reduced by at least 15%.

Avoid pre-transport stress

Livestock which have suffered some form of stress during the period immediately prior to the main transport event will be much less able to cope with the normal stresses of travel.

Examples of such stresses include long distance vehicle travel to a consolidation point prior to transport, excessive handling, boggy yard conditions and severe weather conditions. These cattle will be more susceptible to injury and illness than similar, non-stressed animals.

Cattle that have not fully recovered from a stressful incident prior to transport should not be transported.

Group animals appropriately for transport

Appropriate grouping of cattle takes into consideration social groupings, horned and unhorned animals, gender, large or fat animals and pregnant animals. These factors all influence the animal's ability to cope with transport.

Maintain social groupings

Cattle are social animals and like to be kept with other cattle they have become familiar with. It typically takes 14 days for cattle to re-socialise when introduced into a new group. Re-socialisation can cause stress to the animal. Stress can impact the animal's ability to cope with transport and affect its condition and the quality of the meat.

Try to maintain animals in their social groups wherever possible.

It is not always possible to maintain these social groupings, in which case and where possible:

- Place animals in the groups they are to be transported in at least 14 days prior to transport to allow them time to adjust and socialise with their new groups.
- Carefully monitor behaviour when consolidating livestock prior to dispatch and consider segregating animals showing aggressive behaviour. This does not mean isolating the animal, as this can cause additional stress, but rather moving them to a different pen where they can maintain visual and audible contact with other cattle. These animals should be loaded into a separate pen or crate on the transport vehicle.

When regrouping cattle, continue to consider the animal's specific characteristics in a grouped environment, that is: horned and unhorned, gender, large or fat and pregnant. Wherever possible, like animals should be regrouped together and their specific characteristics accommodated.

Avoid transporting horned and unhorned animals together

It is better not to transport horned animals because horns are a major cause of bruising and other injury; however, this is not always possible.

Uhorned and horned animals should be transported separately or only mixed if they are compatible, for example they have been raised together or have previously been transported together with no identified issues.

If transporting horned animals, stocking densities should be reduced by 10%.



Horned and unhorned cattle should not be grouped together unless they are compatible



Uhorned cattle grouped together

Avoid transporting very large and or very fat animals

As the mature weight of adult cattle increases, their agility declines which can increase the risk of injury during transport. Over-fat animals are more susceptible to heat stress and less athletic than lean animals of the same body weight.

It is better to avoid transporting heavy and fat animals; however, commercial pressures may mean this is unavoidable.

If transporting very large or fat animals, stocking densities should be reduced by 10%.

Avoid transporting cattle in late pregnancy or cattle that have recently given birth

There are significant risks to the health and welfare of heifers and cows transported over long distances in late pregnancy:

- Feed and water requirements increase considerably in late pregnancy and there is an increased risk of dehydration of livestock transported while pregnant.
- A significant change in feed in late pregnancy can lead to metabolic disease.
- The stress of transportation may lower an animal's resistance to disease.

Cattle in late pregnancy (the last 10% of gestation or approximately 27 days) or that have given birth in the last week should not be transported.



Pregnant cow

If pregnant cattle are transported prior to late pregnancy:

- Ensure appropriate feeding before, during and after transport, preferably with the same diet they were consuming before transportation.
- Cows or heifers in the sixth and seventh month of pregnancy should not be deprived of water for more than 12 hours and should be spelled for 12 hours before reloading (this means they are provided with water, food and space to lie down and rest).
- Should cows or heifers in their eighth month of pregnancy or later, excluding the last two weeks of pregnancy, be required to be transported, they should only be transported under the following provisions:
 - » water-deprivation time should not exceed four hours
 - » feed and water should be provided immediately before loading and on unloading
 - » additional space should be provided on the vehicle (e.g. reduce stocking densities by 10%)
 - » they should be segregated from other types of cattle
 - » veterinary advice should be sought.

Cows or heifers that have given birth in the last week should only be transported under veterinary advice.

Exercise care when transporting calves

Calves should only be transported under certain circumstances:

- A calf with a navel which is not completely healed should not be transported.
- Calves of less than five days of age should only be transported when the calf:
 - » is fed a liquid feed within six hours before loading
 - » is provided with thick bedding and room to lie down
 - » is protected from cold and heat
 - » does not have a journey time greater than six hours.
- Calves between five and 30 days old should only be transported when the calf:
 - » is protected from cold and heat
 - » is in good health, alert and able to rise from a lying position
 - » has been adequately fed milk or milk replacer within six hours of loading
 - » is assembled and transported to ensure delivery in less than 18 hours from last feed with no more than 12 hours spent on transport.
- Calves aged 14 days or less should be accompanied by their mother on journeys of over eight hours.

Tool 2.2 provides further details on transport curfews when transporting pregnant cattle or calves

Tools

TOOL 1.1 TIMELINE FOR UNDERTAKING SOURCING, PROCUREMENT AND TRANSPORT PLANNING ACTIVITIES

Tool 1.1
Timeline for undertaking sourcing, procurement and transport planning activities

Activity/Task	Timing	Priority/Resource/Requirement	Notes
1. Identify and source animals	1-2 weeks	Access to reliable sources of animals, including local breeders and suppliers.	Ensure animals are sourced from reputable sources and meet the required specifications.
2. Procure animals	2-4 weeks	Access to transport vehicles and equipment, including trucks and trailers.	Ensure transport vehicles are suitable for the animals and meet the required specifications.
3. Plan transport routes and schedules	1-2 weeks	Access to maps and transport planning software.	Ensure transport routes are efficient and meet the required specifications.
4. Arrange transport	1-2 weeks	Access to transport companies and drivers.	Ensure transport companies and drivers are reliable and meet the required specifications.
5. Monitor transport progress	Ongoing	Access to communication tools, including mobile phones and internet access.	Ensure transport progress is monitored and any issues are resolved promptly.
6. Deliver animals to destination	1-2 weeks	Access to destination facilities and personnel.	Ensure animals are delivered to the destination in good health and meet the required specifications.

TOOL 1.2 WORK INSTRUCTION: SOURCE AND CONSOLIDATE ANIMALS APPROPRIATELY

Tool 1.2
Work instruction: Source and consolidate animals appropriately

The work instruction outlines steps which should be followed by the person responsible for sourcing and consolidating animals for transport.

- STEP 1** Source animals from reliable sources.
 - Identify and source animals from reputable breeders and suppliers.
 - Ensure animals meet the required specifications for transport.
- STEP 2** Consolidate animals in a suitable facility.
 - Ensure animals are consolidated in a clean, dry, and well-ventilated facility.
 - Provide animals with access to water and feed.
- STEP 3** Plan transport routes and schedules.
 - Identify the most efficient transport routes.
 - Plan transport schedules to ensure animals are transported in a timely manner.
- STEP 4** Arrange transport.
 - Identify reliable transport companies and drivers.
 - Ensure transport vehicles are suitable for the animals and meet the required specifications.
- STEP 5** Monitor transport progress.
 - Ensure transport progress is monitored and any issues are resolved promptly.
 - Communicate with transport companies and drivers.
- STEP 6** Deliver animals to destination.
 - Ensure animals are delivered to the destination in good health and meet the required specifications.
 - Provide animals with access to water and feed at the destination.

Additional tools to reference

TOOL 2.2 FEED AND WATER CURFEWS AND REST STOPS

Tool 1.1

Timeline for undertaking sourcing, procurement and transport planning activities

Importing livestock

Timeframe	Activity
INITIAL PLANNING	
365+ days	<p>Initiate discussions regarding supply capacity with suppliers to ensure the number of animals required will be available when required.</p> <p>Obtain further information on supply outlook, supply seasonality and import process including regulatory requirements and permits. This is important in anticipating and avoiding delays.</p> <p>Develop a pre/post arrival training plan for the supply chain (importers, handlers, transporters, farmers and extension staff).</p>
300-280 days	<p>Allocate budget for purchase of cattle and operational costs, e.g. feed, transportation, training.</p> <p>Finalise cattle specifications.</p> <p>Confirm customer or end user requirements and manage expectations. Assess port and quarantine facilities. Develop a checklist of improvements required.</p> <p>Begin preliminary discussions with transport provider (e.g. vehicle company) if required to ensure they are capable of handling the volume of cattle without delay. This should include contingency planning for vehicle breakdown.</p> <p>Develop preliminary journey plan including contingency plans.</p>

Sourcing livestock domestically

Timeframe	Activity
INITIAL PLANNING	
90-60 days	<p>Initiate discussions regarding supply capacity with suppliers to ensure the number of animals required will be available when required.</p> <p>Allocate budget for purchase of cattle plus operational costs, e.g. feed, transportation, training.</p> <p>Finalise cattle specifications.</p> <p>Confirm customer or end user requirements and manage expectations.</p> <p>Obtain further information on any necessary regulatory requirements and permits that may be required for domestic transport of livestock.</p> <p>Assess transport infrastructure and facilities. Develop a checklist of improvements.</p> <p>Assess transport conditions and routes including depots, rest stop facilities. Develop a checklist of improvements required.</p> <p>Plan viable transport routes.</p>
60 days	<p>Re-visit transport infrastructure, facilities and sites such as depots and rest stop facilities to monitor any requested facility upgrades.</p> <p>Develop preliminary journey plan including contingency plans.</p>

Importing livestock

Timeframe	Activity
PROCUREMENT	
275-100 days	<p>Start procurement process.</p> <p>In many cases, importers need at least 75 days to obtain an import license.</p> <p>Identify all administrative processes required and plan for these.</p> <p>Re-visit ports, quarantine and transport facilities to monitor any requested facility upgrades.</p> <p>Conduct pre-arrival training for all personnel involved e.g. animal handling and welfare, transportation, logistics, animal husbandry.</p> <p>Update preliminary journey plan including contingency plans if necessary.</p>
30 days	<p>Allow at least 30 days to source cattle in import markets according to specifications.</p>
14 days	<p>In many cases it can take around 14 days to prepare cattle according to productive cattle health protocol and import requirements.</p> <p>Finalise outstanding administrative processes.</p> <p>Undertake final inspections of port and quarantine facilities prior to cattle arrival using a checklist. Ensure any audit requirements have been satisfied.</p> <p>Finalise journey plan, including contingency plans prior to cattle arrival.</p> <p>Contact third parties included in the plan to ensure they understand the process e.g. the ship's captain, port authorities, trucking company, feedlot manager.</p> <p>Ensure contingency arrangements are in place e.g. in case of vehicle breakdown, escaped animals.</p>

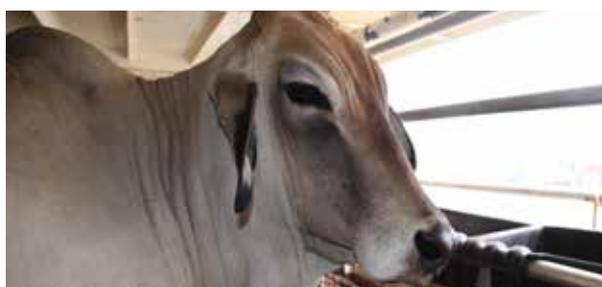
Sourcing livestock domestically

Timeframe	Activity
PROCUREMENT	
30-60 days	<p>Start procurement process.</p> <p>Identify all administrative processes required and plan for these.</p> <p>Conduct pre-transport training for all personnel involved e.g. animal handling and welfare, transportation, logistics, animal husbandry.</p> <p>Update preliminary journey plan including contingency plans if necessary.</p>
30 days	<p>Re-visit ports, quarantine and transport facilities to monitor any required facility upgrades.</p>
14 days	<p>Undertake final inspections of infrastructure and facilities prior to cattle transportation commencing or cattle arriving. Ensure any audit requirements have been satisfied.</p> <p>Finalise journey plan, including contingency plan prior to cattle transport commencing.</p> <p>Ensure contingency arrangements are in place e.g. in case of vehicle breakdown, escaped animals.</p>

Tool 1.2

Work instruction: Source and consolidate animals appropriately

This work instruction contains steps which should be followed by the people responsible for sourcing and consolidating animals prior to transportation.



STEP 1

Consider breed suitability and animal acclimatisation

- If cattle are to be located in hot and humid environments, select animals from similar environments, for example *Bos indicus*.
- If cattle are to be located in cold environments, select animals from similar environments, for example *Bos taurus*.
- Ensure the transport vehicle has appropriate air flow which allows air to circulate over and around the animals.
- Plan to reduce loading densities by at least 15% if there is a risk of heat stress.



STEP 2

Maintain social groupings

- Maintain social groupings wherever possible.
- Place animals in groups they are to be transported in at least 14 days prior to transport.
- Monitor livestock behaviour when consolidating livestock prior to dispatch and segregate any animal showing aggressive behaviour.



STEP 3

Avoid transporting horned and unhorned animals together

- Only mix unhorned and horned animals if they are compatible; that is they have been raised together; or they have previously been transported together with no identified issues.
- If transporting horned animals, plan to reduce stocking densities by at least 10%.



STEP 4

Avoid transporting very large and or very fat animals

- Group animals based on size and avoid heavy or fat animals where possible.
- If transporting very large or fat animals, plan to reduce stocking densities by at least 10%.



STEP 5

Avoid transporting cattle in late pregnancy or cattle that have recently given birth

- Do not transport cattle in the last 10% of gestation (approximately 27 days) or if they have given birth in the last week.
- If pregnant cattle are transported, provide appropriate curfews and rest stops.
- Provide additional space on the vehicle and segregate pregnant cattle from other types of cattle. Plan to reduce stocking densities by 10%.



STEP 6

Exercise care when transporting calves

- Do not transport a calf with a navel which is not completely healed.
- Ensure calves of less than five days of age are:
 - » fed a liquid feed within six hours before loading
 - » provided with thick bedding and room to lie down
 - » protected from cold and heat
 - » not subject to a journey time greater than six hours.
- Ensure calves between 5-30 days old are:
 - » protected from cold and heat
 - » in good health, alert and able to rise from a lying position
 - » adequately fed milk or milk replacer within six hours of loading
 - » assembled and transported to ensure delivery in less than 18 hours from last feed with no more than 12 hours spent on transports.
- Only transport calves under 14 days old with their mother on journeys over eight hours.



02

Pre-transport preparation

Adequate planning and preparation before transport helps to ensure good health and welfare is maintained throughout transport

KEY ACTIONS

- **Plan the journey**
- **Introduce cattle to any transport ration early**
- **Implement feed and water curfews and adequate rest stops**
- **Ensure transport facilities, vehicles and vessels are appropriate**

Plan the journey

Tool 2.1 provides a template for journey plans which includes a contingency plan

Good journey planning will help ensure the health and welfare of the cattle during transport.

An important part of planning is ensuring contingencies are in place to manage the situation when events do not go to plan.

Planning should ensure that livestock are transported to their destination as quickly as possible via the most suitable route and in accordance with local laws.

If border crossing points or receival facilities have fixed times of operation, the journey should be planned to accommodate these while also meeting the welfare requirements of the livestock.

Journey planning should take into consideration:

- the nature of the intended journey
- the class and condition of livestock
- transport vehicles and vessels that will be available, including type and condition, loading densities, number available and timing of arrival for loading or unloading
- appropriateness of transport facilities, infrastructure, vehicles and vessels
- the weather and road conditions anticipated during the journey, including heat, rain and traffic
- the time that livestock are off feed and water
- planned driver and animal rest stops
- specific load and or discharge plans that may influence factors such as timing and route.

Plan contingency arrangements

Part of good journey planning includes planning contingency arrangements, that is what steps should be taken if certain circumstances occur.

As part of the planning for each journey, arrangements to manage any delay, breakdown or other emergency should be established to minimise risks to livestock welfare.

Contingency arrangements may involve written or verbal agreements with transport operators, journey plans or details on consignment sheets.

Contingency arrangements should include actions, contacts and other written procedures relating to the following situations:

- breakdown or mechanical failure
- delays and lengthened journeys where this will affect arrangements for feeding and watering
- adverse weather - specifically, climatic conditions that may predispose livestock to heat or cold stress
- poor road conditions
- illness or injury
- humane emergency destruction
- other issues specific to the journey or livestock being transported.

Vehicle driver literacy must be considered. While it is important that these procedures be documented to ensure they are followed, it is also important to make sure they are understood by the drivers. This may require verbally explaining written procedures, providing training and periodically assessing the competency and performance of the drivers.

Plan rest stops

Animals that are very tired from extended periods of transport will be more susceptible to injury and illness if they are reloaded directly for transport. Rest stops allow the cattle to recover during a long journey. These include the provision of water and sometimes feed.

Rest stops must be planned for and should be documented in the journey plan or the facility's operating procedures.

Rest stops are based on the maximum time off water, including curfew, loading, travel time and unloading and depend on the type of cattle being transported. Regardless of this time off water, it is recommended that transport times in excess of 30 hours should allow for a rest stop to allow the animals to recover.

Table 2a: Maximum time off water and rest stop duration

	Maximum time off water (INCLUDING CURFEW AND JOURNEY TIME)	Minimum rest stop duration
Cattle over 6 months old (including cows and heifers less than 6 months pregnant)	48 hours	36 hours
Calves 30 days to 6 months old	24 hours	12 hours
Calves 5-30 days old travelling without mothers (14 days old and under, maximum journey of 8 hours 15-30 days old, maximum journey of 12 hours)	18 hours	-
Pregnant cows or heifers: 6-7 months pregnant	12 hours	12 hours
Lactating cows with calves at foot	24 hours	12 hours
Pregnant cows or heifers: 8 months pregnant (under veterinary advice)	4 hours	-

Tool 2.2 provides feed and water curfews and rest stop durations

Introduce cattle to transport ration early

While cattle will not often require feeding during transportation, there are occasions when they may.

This would include where cattle are to be held in an assembly point prior to transportation (such as at a quarantine facility) or between transportation (such as during an extended rest stop. During such occasions, it is important that the feed be selected carefully as unfamiliar feeds can place additional stress on the animal and cause metabolic diseases.

If cattle will require feeding during transport, ideally they should be fed the same ration they were being fed prior to transport.

If a specific transport ration is to be provided, this should be gradually introduced to the cattle prior to transportation so they are accustomed to it when transport commences. Three to four days of gradual introduction of new feed can be adequate but even one day of exposure to the new feed may improve health and welfare outcomes.



Feed ration

Tool 2.2 provides feed and water curfews and rest stop durations

Implement feed and water curfews and adequate rest stops

Cattle will generally travel better if they have had time off feed and water, otherwise known as a curfew.

Curfewed animals tend to be more agile which, combined with a reduction in the amount of urine and faeces on the floor of the transport vehicle, makes for a better journey.

When re-transporting cattle, the amount of time spent in curfew prior to the preceding journey as well as the time in transit must be considered in determining the time off feed and water and the need for a rest stop.

Apply curfews

Cattle should be held off feed and water for at least six hours before transportation from the farm or assembly depot. The feed and water curfew may be reduced or waived if:

- transportation time from loading to unloading is expected to be more than 24 hours, or
- the temperature and humidity are very high or expected to be very high during the journey.

Dry feed such as hay can be offered prior to loading even if water has been withheld. Curfews contribute to the maximum time off water before a rest stop is required and the animal is provided with water and feed.

Ensure adequate rest stops

Rest stops that form part of the journey plan must be taken once the maximum time off water (including curfew and journey time) has been reached.

Transported cattle should not be re-transported or loaded onto a transport vehicle until they have recovered from any prior transport.

The maximum time off water, including curfew, loading and unloading, depends on the type of cattle being transported, as shown in Table 2a. Regardless of this time off water, it is recommended that transport times in excess of 30 hours should allow for a rest stop to allow the animal to recover.

It is important to ensure there will be a sufficient number of pens available at the rest stop to accommodate the number of cattle being transported. Livestock must be unloaded during a rest stop. *Note: Livestock rest stops are different to driver rest stops (where livestock are not unloaded).*

During livestock rest stops:

- Holding pens should be available that allow for animals to stand up, lie down, turn around and access water.
- Clean, palatable water should be available and accessible to all animals at all times.
- All animals held over 12 hours should be provided with feed. Each animal should have access to feed at intervals appropriate to their physiological needs and at least once in every 24-hour period.
- If feed is provided, it should be palatable and free of contaminants, moulds and toxins.
- All animals held over 12 hours should be provided with space to exercise.



Animals held over 12 hours should be provided with feed

Ensure transport facilities, vehicles and vessels are appropriate

Prior to transportation, consideration should be given to ensuring transport facilities, vehicles and vessels used during all stages of the journey are appropriate.

During the journey planning process:

- Check and confirm that all loading and unloading facilities to be used on the journey will not cause injury to the animals and are clean.
- If required, confirm that rest stop facilities are appropriate for the size and class of livestock and have appropriate loading, unloading, holding, feeding and watering facilities.
- Check the type of transport vehicles or vessels that will be available during the entire journey, taking into consideration condition, loading densities, number available and timing of arrival for loading or unloading.
- Make provisions for non-slip bedding and driver awareness regarding the transport of cattle as required.
- Check that the type and number of animals to be transported and the relative space allowance (loading density) has been determined before loading begins.



Facility inspection



Make provisions for non-slip bedding

Tool 2.3 provides a checklist for assessing transport facilities, vehicles and vessels as part of the planning process

Tools

TOOL 2.1 JOURNEY AND CONTINGENCY PLAN TEMPLATE

Tool 2.1
Journey and contingency plan template
This tool is prepared to assist in the development of a journey and contingency plan for the transport of cattle.

Transport operator

Facility/Owner of livestock

Journey details

Contingency details

Pre-loading details

Post-unloading details

Details of any and other things to say

Details of any arrangements or items being carried

TOOL 2.2 FEED AND WATER CURFEWS AND REST STOPS

Tool 2.2
Feed and water curfews and rest stops

Activity	Start and End Time	Minimum Rest (hours)	Maximum Rest (hours)
Collection of livestock and unloading at destination (including any unloading at a rest stop)		0 hours	0 hours
Activities that occur in transit and at destination		0 hours	0 hours
Activities that occur at destination		0 hours	0 hours
Feeding and watering of livestock at destination		0 hours	0 hours
Unloading and other activities at destination		0 hours	0 hours
Unloading and other activities at destination		0 hours	0 hours
Unloading and other activities at destination		0 hours	0 hours
Unloading and other activities at destination		0 hours	0 hours

TOOL 2.3 TRANSPORT FACILITY, VEHICLE AND VESSEL CHECKLIST

Tool 2.3
Transport facility, vehicle and vessel checklist

Transport facilities

Transport vehicles and vessels

Facility/Owner of livestock

Transport operator

Details of any and other things to say

Details of any arrangements or items being carried

Tool 2.1

Journey and contingency plan template

Use this to prepare journey plans and contingency plans and to record outcomes.

Transport operator

NAME
ADDRESS
PHONE
VEHICLE REGISTRATION NUMBER

First loading details

FULL ADDRESS WHERE LOADED
DATE AND TIME OF LOADING
NUMBER LOADED
CLASS AND CONDITION OF LIVESTOCK

Details of any rest stops along the way

REST STOP 1 LOCATION
DATE AND TIME OF REST
<input type="radio"/> Remain loaded <input type="radio"/> Were unloaded
ANIMALS
<input type="radio"/> Feed <input type="radio"/> Water
OFFERED
COMMENTS / OBSERVATIONS

Facility/Owner of livestock

NAME
ADDRESS
PHONE
ALTERNATIVE CONTACT

Final unloading details

FULL ADDRESS WHERE UNLOADED
DATE AND TIME OF UNLOADING
NUMBER UNLOADED

REST STOP 2 LOCATION
DATE AND TIME OF REST
<input type="radio"/> Remain loaded <input type="radio"/> Were unloaded
ANIMALS
<input type="radio"/> Feed <input type="radio"/> Water
OFFERED
COMMENTS / OBSERVATIONS

ADD MORE REST STOP DETAILS, AS REQUIRED.

Journey details

ANTICIPATED CLIMATIC AND ENVIRONMENTAL CONDITIONS TO BE AWARE OF

ANTICIPATED ROAD CONDITIONS, CURFEWS AND BORDER CROSSINGS TO BE AWARE OF

Contingency details

--

ISSUE/RISK 1

--

ACTION TO BE TAKEN

--

ISSUE/RISK 2

--

ACTION TO BE TAKEN

Key contacts

--

FACILITY

--

LIVESTOCK SUPPLIER

--

EMERGENCIES

--

VETERINARIAN

--

LOCAL AUTHORITY

--

TRANSIT FACILITIES

Details of any emergencies or issues during journey

--

DATE AND TIME

--

WITNESS DETAILS

--

NATURE OF ISSUE

--

ACTIONS

--

OUTCOME

--

OBSERVATIONS

Tool 2.2

Feed and water curfews and rest stops

	Feed and water curfew	Maximum time off water (INCLUDING CURFEW AND JOURNEY TIME)	Minimum rest stop duration
Cattle over 6 months old (including cows and heifers less than 6 months pregnant)		48 hours	36 hours
Calves 30 days to 6 months old	6 hours	24 hours	12 hours
Calves 5-30 days old travelling without mothers (14 days old and under, maximum journey of 8 hours 15-30 days old, maximum journey of 12 hours)	The feed and water curfew may be reduced or waived if: <ul style="list-style-type: none"> transportation time is expected to be more than 24 hours (including loading, travel, waiting time on the vehicle and unloading), or the temperature and humidity are very high or expected to be high during the journey. 	18 hours	-
Pregnant cows or heifers: 6-7 months pregnant		12 hours	12 hours
Lactating cows with calves at foot		24 hours	12 hours
Pregnant cows or heifers: 8 months pregnant (under veterinary advice)		4 hours	

Tool 2.3

Transport facility, vehicle and vessel checklist

Transport facilities

(loading/unloading and rest stop facilities, pens, yards, ramps, races)

- Are there sufficient pens and yards for the number of animals expected?
- Are feed and water facilities available and are they adequate for the number, size and type of animals expected?
- Are pens, yards, ramps and races free of protrusions and damage that could cause injury to livestock?
- Is the angle of the ramp less than 20 degrees?
- Are the sides of ramps and races high enough to prevent animals escaping?
- Do side rails of ramps and races prevent animals from escaping or becoming stuck?
- Are surfaces non-slip design, stable and free from faults or flaws that could cause animals to trip or fall or cause an injury?
- Are facilities clean and hygienically managed?

Transport vehicles and vessels

- Will sufficient vehicles and vessels be available and ready?
- Does the vehicle or vessel have sufficient room for all animals to stand in a natural position?
- Are partitions used effectively for large group sizes? *They should provide support and prevent excess movement.*
- Does the construction of the vehicle or vessel un/loading arrangements allow for placement against the un/loading bay?
- Is the tail gate free of protrusions, sharp edges or broken catches?
- Is the tail gate constructed with barriers to prevent animals falling when the door is open?
- Where the tail gate forms part of the ramp, is it non-slip?
- Is the floor strong enough for the expected weight of the animals?
- Is the floor non-slip and free from damage (e.g. holes) and obstructions?
- Are tyres in good condition including appropriate tread and pressure?
- Is a spare tyre present and serviceable?
- Are vehicles and vessels clean and hygienically managed?
- Is the number of animals to be loaded appropriate for the vehicle/s or vessel/s they are being loaded onto?



03

Transport infrastructure and facility design

The design and construction of transport infrastructure and facilities as well as the ongoing maintenance, contributes significantly to delivering good animal welfare outcomes

KEY ACTIONS

- **Ensure transport infrastructure design safeguards animal welfare and optimises animal movement**
- **Use transport facilities that are clean and hygienic**

Ensure transport infrastructure design safeguards animal welfare and optimises animal movement

Transport infrastructure and facilities can be found at any point in the journey; at the port, on the farm or feedlot and at designated rest stops and include:

- ramps and raceways
- pens and yards.

Vehicles and vessels include those ships, trucks and crates or containers used to transport livestock.

Well designed animal transport infrastructure and the use of appropriate vehicles and vessels will help deliver a good animal welfare outcome and operational efficiencies.

All infrastructure, facilities, vehicles and vessels should be inspected as part of the pre-transport preparation process and prior to use. Issues should be identified and repaired before they are used, or alternative arrangements made until they are able to be repaired.

Consider infrastructure and facilities

Well designed infrastructure and facilities are those that:

- Are free from faults and flaws (such as sharp edges and protrusions) that may cause injury to the animal.
 - Minimise the opportunity for animals to escape (for example due to inadequate ramp height, space between rails in raceways and gaps between ramps).
- Minimise the occurrence of slips or falls with flooring:
 - » constructed of patterned concrete or overlaid weldmesh, or
 - » which includes wooden or metal cross bars for grip, or
 - » covered with rice hulls, coconut husk, saw dust or similar to improve grip, and
 - » that is free of gaps or broken surfaces, and
 - » that is clean and dry.
 - Encourage the continual flow of livestock (for example are consistently curved, have sufficient and even lighting and are free from distractions).
 - For pens and yards used to hold animals, enable livestock to stand up, turn around and access feed and water.



Ramps



Raceways



Pens/yards

Consider vehicles and vessels

Appropriate trucks and crates are those that:

- Are appropriate for the size and type of cattle and are designed to minimise the opportunity for animals to escape.
- Are free from faults and flaws (such as sharp edges, protrusions) that may cause injury of the animal.
- Have side rails designed and maintained to prevent animals from putting their heads and legs between them.
- Ensure that when the vehicle is running, exhaust gases do not significantly pollute the livestock crate.
- Consist of flooring that is non-slip (even when wet) and for long distance transport, provides suitable bedding to assist with the absorption of faeces and urine.
- Where the tail gate of the vehicle forms part of the ramp, the tail-gate is non-slip.
- Where they include an upper deck or roof:
 - » allow animals to assume their natural standing position without their head coming into contact with the upper deck or roof, and
 - » prevent soiling of animals on lower decks.
- Provide protection from exposure to adverse weather conditions such as heat or cold.
- Ensure good ventilation and airflow over and around the livestock.
- Are constructed to minimise the risk of pressure points that may cause bruising or injury to animals during the forward and backward movement associated with transport.
- Include fixed partitions to prevent excessive cattle movement when travelling in hilly or high-traffic areas, or carrying a small number of cattle and to allow for segregation as may be required.

Appropriate water vessels such as ferries are those that:

- For roll-on/roll-off vessels and containers, have securing points for attachment.
- Ensure vehicles are adequately secured to the vessel before the start of the journey.
- Have secondary ventilation systems in place in vehicles/crates on enclosed decks where natural ventilation alone is not sufficient.



Transport vehicle - empty



Non-slip surface of truck

Tool 3.1 provides example designs for transport infrastructure and facilities

Use transport facilities that are clean and hygienic

Services should be available to allow pens, ramps, races and yards as well as trucks, vessels and crates to be washed down as required.

All transport infrastructure and vehicles must be kept clean and be managed hygienically. This minimises the likelihood of the spread of infectious disease and helps ensure the smooth flow of animal movement by minimising slips and falls.

Cleaning should:

- Be carried out when cattle are not present or, if this is not possible, so as to cause minimal disturbance to the cattle.
- Be timed to suit the local climatic conditions. Wash down would ideally be timed to coincide with low humidity so the facilities dry more quickly.
- Use suitable cleaning products and disinfectants according to manufacturers label instructions.
- Ensure effluent and run-off is managed appropriately.



Cleaning a truck

Individual transportation services may have their own cleaning procedures and these should be followed. In the absence of such, an appropriate cleaning and disinfecting process may include:

- Rinsing the vehicle with high pressure water between 38-46 °C (100-115 °F).
- Applying a cleaning agent (e.g. detergent) with water between 49-77 (120-170 °F) or as per manufacturer's label.
- Rinsing the vehicle with low pressure water between 7-13 °C (45-55 °F).
- Allowing vehicle to dry.
- Spraying a disinfectant over the entire surface of the vehicle.

Refer to cleaning agent and disinfectant label recommendations for specific temperatures and application processes.

Tool 3.2 provides instructions for washing down livestock transport vehicles

Tool 3.1

Example transport facility designs

These example designs focus on the transport facilities, specifically handling pens, races and ramps and are examples only. They do not detail holding facilities where shelter, feed or water would be provided.

Yard design

Yards should be designed to make use of the animals' natural behaviour by eliminating tight or blind corners. Allow about 3.5 square metres per animal in holding or receiving yards and about 2 square metres per animal in the forcing or working yards.

Diagram 3a and 3b shows examples of yard designs for loading and unloading and drafting cattle.

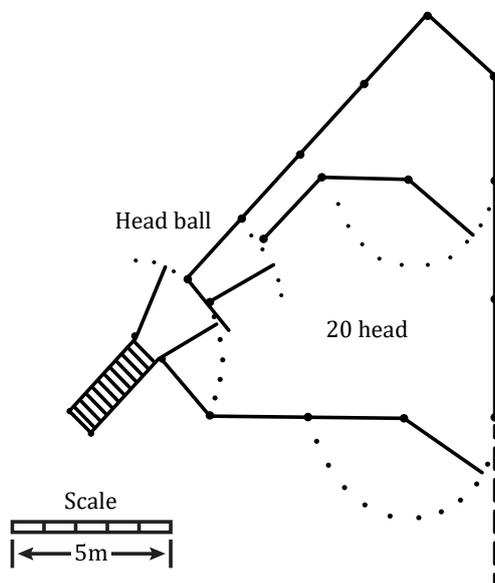


Diagram 3a: Can hold 20 cattle but has limited drafting capacity

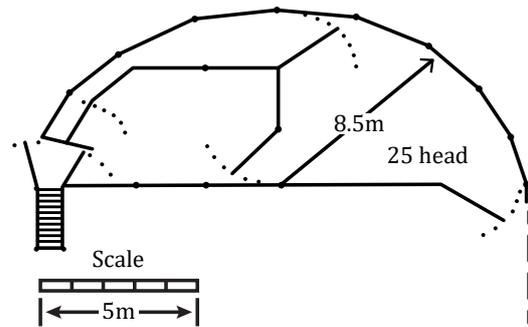


Diagram 3b: Can hold 25 cattle. Cattle work well around the curve and worked livestock can be retained

The top yard rail should be at least 1800 millimetres high as low panels encourage animals to try to escape.

Rails should be spaced close enough to prevent animals escaping, with the lower rails closer together and lower to keep in calves. Examples of rail spacing for wooden and steel rails are shown in Diagram 3c and 3d.

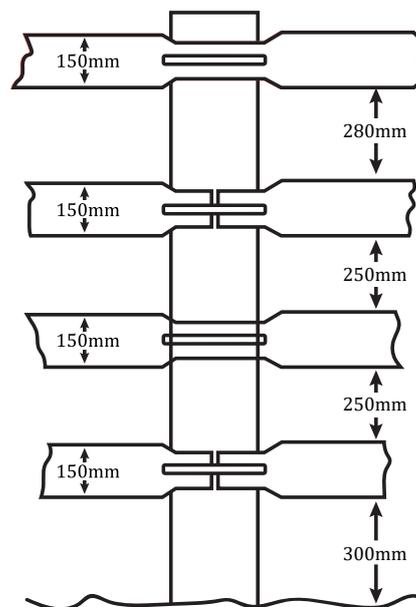


Diagram 3c: Wooden rail spacing. Heavy gauge wire can be used to hold rails to post

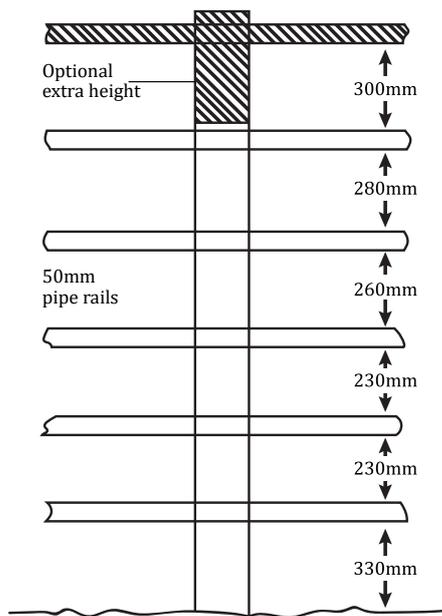


Diagram 3d: Steel rail spacing

Loading and unloading ramps

Ramps should have a slope no greater than 20 degrees. Ramps for unloading can be up to 3 metres wide, but loading ramps should be only 760 millimetres wide to prevent mature cattle turning round. The sides can be made from wooden rails, pipe or sheeting strong enough to stop the animals from escaping. Any sheeting on the side that the animal handlers work on should only be to half the height to allow the handlers easy access to the animals.

Details of a ramp suitable for loading and unloading are given in Diagram 3e.

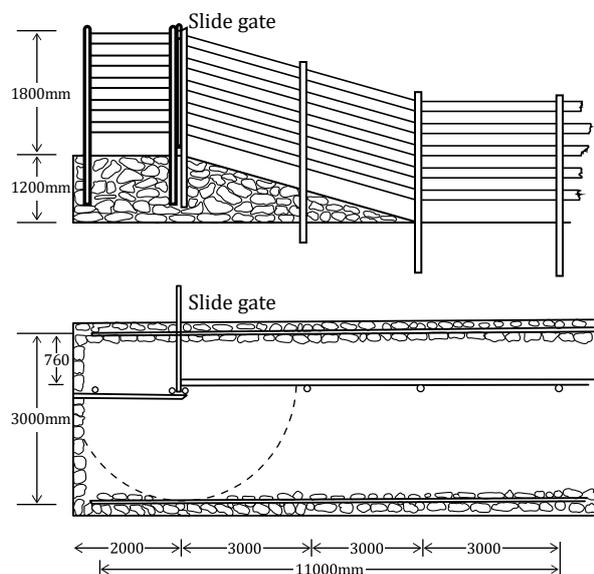


Diagram 3e: A design for a combined ramp for loading (760 millimetres wide) and unloading (3 metres wide)

The ramp should have a flat area at the top of about 1 metre in length and its height should be the same as the floor height of the vehicles for transporting cattle. Check the floor height of local vehicles before building the ramp.

Trans-shipping ramps

In some circumstances, it may be routine to unload small numbers of cattle from a larger truck onto smaller trucks or move cattle from one truck to another. Where the dimensions of the trucks are known and standardised, this can be done using a purpose-built ramp known as a trans-shipping ramp. This is designed such that the trucks can back up to the ramp and the specific cattle moved safely from one truck to another without having to unload the cattle into yards and then reload. One end of the ramp may be higher than the other if cattle are typically moved from larger and higher trucks to smaller trucks. An example of a trans-shipping ramp is shown below.



An example of a trans-shipping ramp

Races

Where many animals are to be handled, the race should consist of 4-5 panels each with a maximum length of 3 metres. Where less than 5 cattle would be handled, 1-2 panels would be adequate. The sides should be a minimum of 1800 millimetres high of materials strong enough to prevent the animals from escaping. The race should be 690-710 millimetres wide inside.

As the race will be under pressure from animal movement, posts should be cemented into the ground 800-900 millimetres deep. Thick-walled pipe is probably the easiest material to use but these should be capped or filled with cement to prevent them filling with water and rusting out.

The bottom 1-2 rails on the working side of the race should be removable so that animals can be released if they go down or turn over. All other rails should be secured or fully welded in place to give the race a smooth internal surface with a width of 760 millimetres.

Details of race dimensions are given in Diagram 3f.

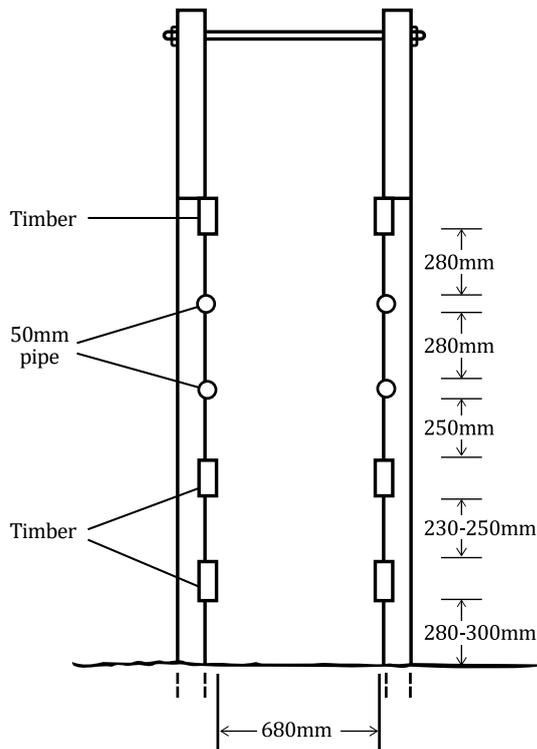


Diagram 3f: Race dimensions

The working area of the race should be covered to provide protection from sun and rain. Curved races and sheeting of fences in strategic positions make use of the animals' natural behaviour and allow animals to move more easily. This will reduce stress and injury to both animals and people, and remove holdups where animals can be distracted or attempt to join other animal groups.

Gates

Animals should be able to see where the handler wants them to go. Gates should be placed in corners so that animals move along a fence line and then through the gate; the fences assist the handler to maintain control of the animals.

The gates must be wide enough to allow a number of animals through together at one time. The gateway entrance to a yard need only be about 3000 millimetres wide and most other gates between 2000-2500 millimetres wide depending on the number of animals to be handled and where they are being used in the yard design.

Smaller gates (700-800 millimetres wide) allow handlers easy access and quick exit. These should have a strong spring to ensure they are self-closing and to prevent animals becoming stuck in this small gap.

Examples of wooden and steel gate construction and gate latches are shown in Diagrams 3g-3j.

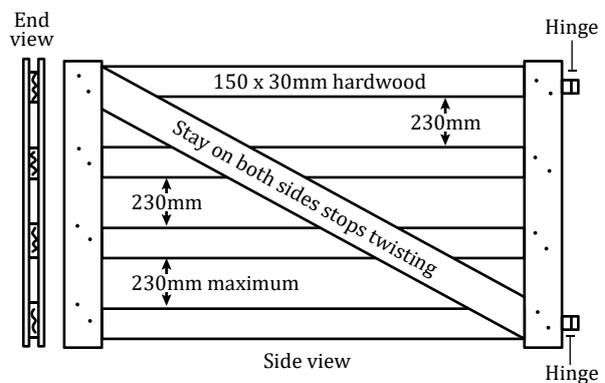


Diagram 3g: Dimensions for a wooden gate

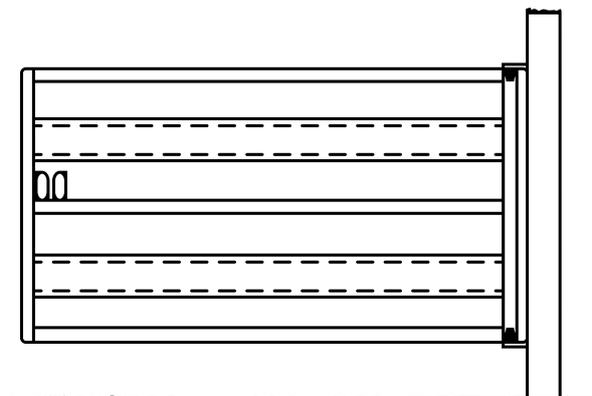


Diagram 3h: Example steel gate

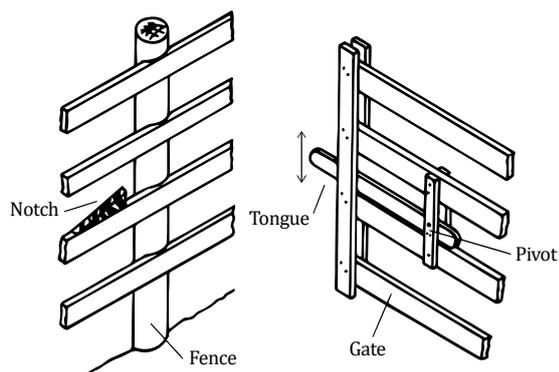


Diagram 3i: Details of latches for a wooden gate

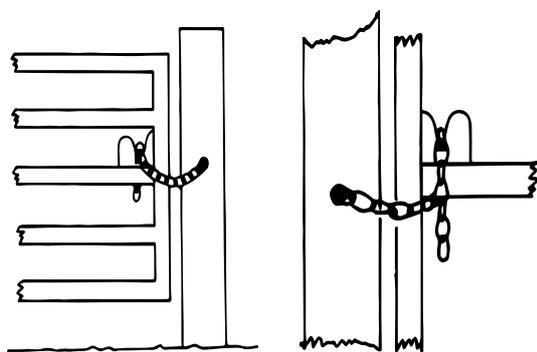


Diagram 3j: Details of latches for a steel gate

Yard posts

Gateway posts should have a cap rail attached to prevent posts from spreading apart. The cap rail should be high enough to allow a person on a horse or tractor to drive under it. If the cap rail is made of pipe it can be bolted or welded to the gate posts.

All pipe posts should be covered at the top or filled with cement to prevent them filling with water and rusting.

The base of all posts should be surrounded by a ring or collar of concrete to prevent rusting and rotting at ground level. This collar should be 200-300 millimetres high and 200-300 millimetres in diameter.

Tool 3.2

Work instruction: Wash down for livestock transport vehicles

This work instruction contains steps which should be followed by the people responsible for washing down vehicles used to transport livestock.



STEP 1

Rinse vehicle

- Rinse all surfaces of the vehicle with high pressure water.
- Ensure water temperature is between 38-46 °C (100-115 °F).
- Rinse all surfaces of the vehicle inside and outside.
- Repeat rinse if build up has dried or become stuck.



STEP 2

Apply cleaning agent

- Dilute cleaning agent with water or use undiluted cleaning agent according to manufacturer's label.
- Ensure water temperature is between 49-77 °C (120-170 °F) or as per manufacturer's label.
- Apply cleaning agent to all surfaces inside and outside including the under carriage.
- This should be applied by using a brush, mop or sponge.



STEP 3

Rinse vehicle

- Rinse all surfaces of the vehicle with low pressure water.
- Ensure the water temperature is between 7-13 °C (45-55 °F).
- Rinse all surfaces of the vehicle inside and outside where the cleaning agent has been applied.
- Allow vehicle to dry.



STEP 4

Apply disinfectant

- Apply the disinfectant to all surfaces inside and outside of the vehicle according to manufacturer's instructions.
- This may be applied by spraying or by using a brush, mop or sponge.
- Allow the vehicle to dry.

04

Handling livestock

Livestock should be handled well during transport to achieve a good animal welfare outcome and optimise meat quality

KEY ACTIONS

- Move animals efficiently and with minimum stress
- Prevent animals from escaping
- Monitor the health and welfare of the livestock

Move animals efficiently and with minimum stress

Transport is a critical step in which there is a higher risk of injury occurring so good handling is crucial to minimising this occurrence.

Handling will impact loading and unloading efficiency and good handling will minimise stress during the process. An understanding of animal behaviour is important when handling animals.

The main factors to consider when moving livestock are:

- flight zone and fear reaction
- vision and reaction to movement.

These factors are best considered in relation to the animal's flight zone, blind spot and point of balance.

Flight zone

Whether an animal moves and where they move to, in response to human interaction is influenced by the animal's 'flight zone'.

The flight zone is an area close to the animal that, if pressured by a handler, will make the animal move.

Animals only move if they want to move away from a human, but it is how they move away from the human that is important.

Animals can be moved by the handler moving into or toward the flight zone. This is referred to as 'pressure' - that is, the handler is applying pressure to the animal's flight zone.

To stop the movement, the animal can be 'rewarded' by the handler moving away from the edge of the flight zone. This is referred to as 'release' - that is the handler is releasing pressure from the flight zone.

By slowly pressuring and releasing the flight zone, the handler can make an animal move calmly and effectively.

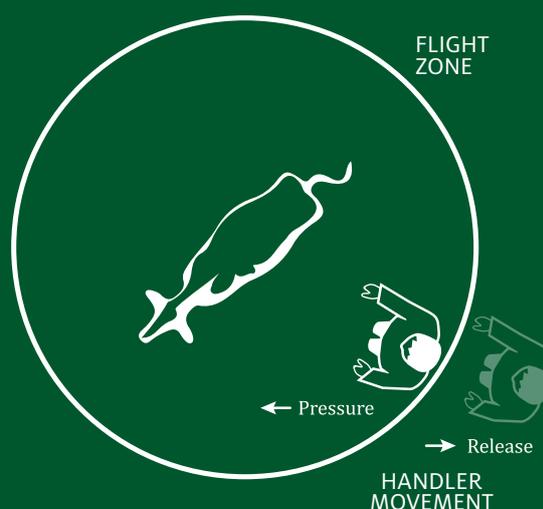


Diagram 4a: Flight zone

Handlers pressuring the flight zone too quickly or loudly will startle the animal and cause the animal to panic. When cattle react in such a way, they may become unpredictable. Such pressure on the flight zone will not deliver calm and effective movement and can cause injury to the animal or the handler.

The flight zone can vary from animal to animal and herd to herd. Some cattle may have a very small flight zone (Diagram 4b) as they are used to people being around them constantly, whereas other cattle may have a much larger flight zone (Diagram 4c) of at least several metres due to limited human contact.

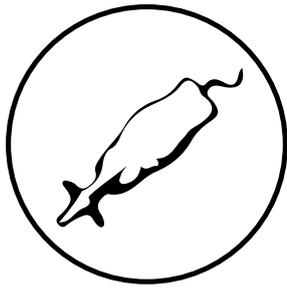


Diagram 4b: Animal with a smaller flight zone

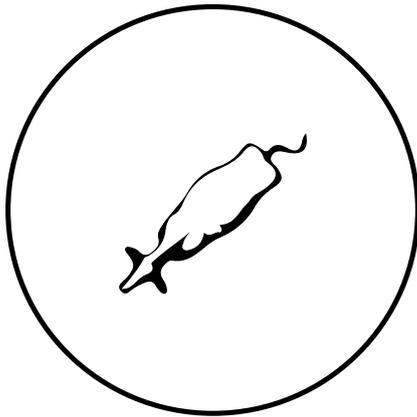


Diagram 4c: Animal with a larger flight zone

Blind spot

Cattle have what is called a 'blind spot'; that is they cannot see behind them.

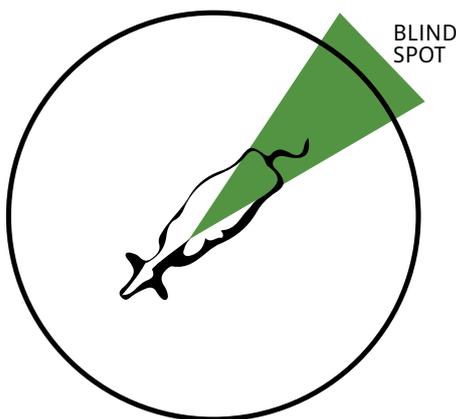


Diagram 4d: Blindspot

To aid calm and effective movement, handlers should avoid standing behind cattle and instead stand to the side of the animals so they can see the handler.

Point of balance

In addition to the flight zone and blind spot, another factor that influences calm and effective movement is a concept called the 'point of balance'.

The point of balance is an imaginary line drawn across the animal's shoulders which, when used in combination with the flight zone, helps move livestock forwards or backwards.

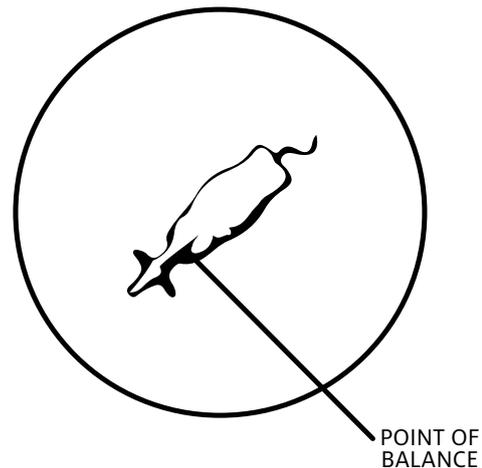


Diagram 4e: Point of balance

When the handler moves in front of the animal's point of balance, the animal will move backwards, or attempt to turn around. If the handler moves to a position behind the animal's point of balance, the animal will move forwards.

Handlers can use an animal's point of balance to help move that animal by recognising and positioning themselves either in front or behind the animal's point of balance.

Combine flight zone, blind spot and point of balance to create movement

Combining the animal's blind spot and point of balance with pressuring and releasing the flight zone will cause the animal to move in the direction the handler wants it to go.

When the pressure on the flight zone and position in respect to the point of balance and blind spot is correct, the animals will move calmly.

When moving a group of animals, handlers move across the back of the group from left to right and right to left, applying pressure to the flight zone.



Walking calmly around livestock to begin moving them



Moving cattle using point of balance and flight zone

Move livestock calmly

Use the flight zone, blind spot and point of balance along with calm movements to ensure livestock move calmly. This means:

- Work on the side of the animal so you are not standing directly behind it (i.e. in its blind spot) or directly in front of it as this does not provide direction to the animal.
- When moving animals from pens into a gateway or race, work around the edge of the flight zone so that the animals move away but do not run.
- Apply pressure to a group of cattle by moving left to right across the back of the group.
- Move out of (i.e. release) the flight zone to make an animal stop.
- Do not try to make animals move (by moving into the flight zone) or hit an animal if they have nowhere to go or are already moving in the right direction.
- Be aware if animals are crowding at the ends of the raceway. Cattle can be crushed or suffocated if they fall beneath others.
- Keep people not necessary to the handling process out of the way.
- Do not chase lone animals, or cause an animal to become isolated from the group. Always move the last two animals in a pen or race together. Avoid leaving a single animal in the pen or race.
- Keep sudden movements and loud noises to a minimum. Do not whistle loudly, shout or bang gates.
- Always be aware of your surroundings and remember to close gates behind you.
- To move cattle through races, move down the side of the race in the opposite direction the animals are required to go (Diagram 4f).

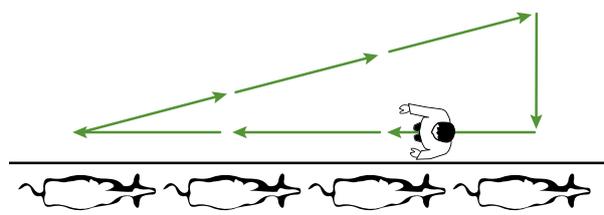


Diagram 4f: Moving animals through a race

Use livestock handling tools appropriately

Livestock handling tools are non-electric implements designed to encourage livestock movement by making the handler appear bigger.



Example of a livestock handling tool

Livestock handling tools should not be used:

- to force animals to move if they have nowhere to go
- to hit or apply unnecessary pressure to animals already moving in the correct direction
- in a manner that causes harm, distress or injury to the animal
- in a manner that causes pain and suffering.

Use electric goads sparingly

Electric goads are battery operated electric batons designed to encourage animals to move, through the administration of an electric shock.



Examples of electric goads

Electric goads should:

- only be used on adult cattle
- only be used on animals that are refusing to move
- only be used when the animal has room to move
- be limited to battery-powered instruments
- be used only on the hind quarters of the animal and never applied to sensitive parts of the animal such as the eyes, ears, mouth, nose, genitals, udders or anus
- not be used repeatedly on the same animal
- be picked up when required and returned after use
- be administered as a short application and not held on the animal after the initial contact
- only be used by personnel that have been given specific instruction on the appropriate use of electric goads.

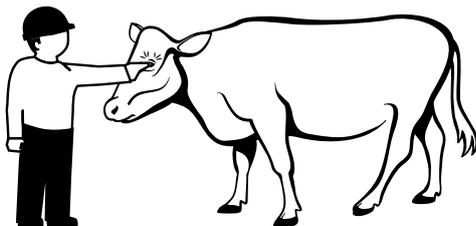
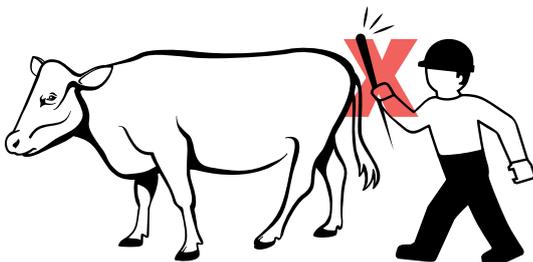
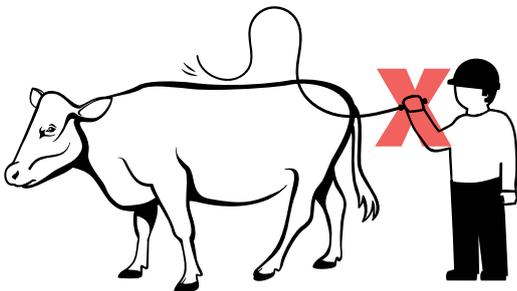
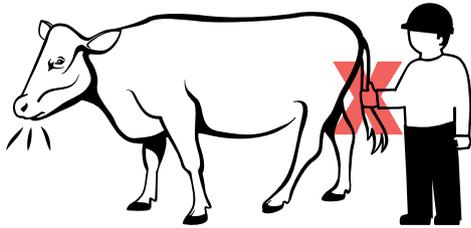
Avoid unacceptable practices

Unacceptable practices are those that may cause harm, distress, pain, suffering or injury to the animal and must be avoided.

These unacceptable practices include but are not limited to:

- dragging livestock by the hair, head, neck, horns, ears or limbs
- application of an injurious object or irritant substance, especially to sensitive areas such as the eyes, mouth, ears, anogenital region or belly of the animal
- applying pressure to eyes, ears or genitalia
- whipping, tail twisting and pulling
- nose twitches
- dragging, tripping, dropping or throwing
- hitting or kicking
- forcing livestock to walk over others
- using livestock handling tools in a manner that causes harm, distress or injury

- using equipment that causes suffering which includes but is not limited to:
 - » large sticks
 - » sticks with sharp ends
 - » lengths of metal piping
 - » fencing wire
 - » heavy leather belts.
- causing injury such as cutting or severing the spinal cord (e.g. using a puntilla or dagger), breaking legs or leg tendon
- stunning using anything but an appropriate livestock stunning device (e.g. sledge hammer)
- forcing water into an animal's mouth or up its nose in an attempt to make it stand or move.



Examples of unacceptable practices

Prevent animals from escaping

Poor handling or inappropriate facilities or vehicles can provide opportunities for escape during loading or unloading.



Inadequate facilities with gaps could allow livestock to escape



Gap between truck and ramp gates could allow livestock to escape

Escape can be prevented by ensuring:

- handlers do not panic livestock, causing them to try to jump out of races, ramps or off vehicles
- the sides of races, ramps and vehicles are of sufficient height so that livestock are unable to jump over the top
- vehicles have some form of cover on the top to prevent animals jumping out
- gaps between rails in races and on vehicles are such that livestock cannot go through them
- vehicles are aligned to ramps so that there are no gaps present
- the height of the vehicle floor is the same as the height of the loading ramp
- gates in loading facilities are closed and latched when not in use and transport vehicle doors are latched before the vehicle moves away.



Vehicle not secure which would allow the livestock to jump out



Ensuring there are no gaps between vehicles and ramps will prevent escapes



Ensuring cover over the top of vehicles will prevent escapes

Managing escaped animals

If an animal escapes, handlers should work as a team to move the escaped animal back to a pen and keep unnecessary people out of the way.

Handling escaped animals should be done in a calm and efficient manner so as to avoid stress or injury to the animal.

Handlers should not try to isolate an escaped animal; instead they should try to move it back towards a group of animals, preferably those from which it escaped. When in a confined area, releasing a few animals with the escaped one can make it calmer and easier to return.

Ensure the health and welfare of the livestock

Livestock should be observed during handling and checked to ensure they are not showing signs of injury.

If an animal falls during handling:

- handling activities should cease and the animal be given the opportunity to regain its footing without pressure from handlers or other livestock,
- the animal should not be subject to unacceptable practices such as hitting or dragging or lifting by the horns, legs or tail, and
- where relevant, ramp or race sides should be opened to allow the animal space in which to regain its footing.

If an animal is found to have a serious injury or if a fallen animal is unable to rise on its own or walk unaided, the animal should:

- not be moved if moving will cause further pain or distress and be humanely destroyed in situ, or
- be moved to a hospital pen, only if such movement will not cause further pain or distress, and treated or allowed to rest and transported when recovered and fit to load, or
- only be transported after obtaining veterinary advice.



Animal unable to rise in loading yards

Perform emergency destruction humanely

The humane emergency destruction of an animal involves using a method that results in rapid loss of consciousness followed by death while unconscious.

This involves appropriately restraining the animal and, where legally allowed, either:

- stunning an animal with an appropriate stunning device and then cutting its throat, or
- shooting an animal with an appropriate firearm, or
- if stunning or shooting are not able to be undertaken then, in emergency situations, cutting the animal's throat with a sharp knife.

Stunning

Where legally allowable, stunning should be performed using either a non-penetrating percussion stunning device or a penetrating captive bolt stunning device which is:

- appropriate to the size and class of livestock
- accompanied by appropriate restraint
- applied in the frontal or poll positions (Diagram 4g) in contact with the skull according to the manufacturer's instructions.

Stunning should ensure the animal is unconscious and be followed by an effective procedure to cause death while unconscious, such as cutting the throat in a manner which severs both carotid arteries.

Firearm

Where legally allowable, a firearm can be used for humane emergency destruction and should be undertaken with a firearm which is:

- of the appropriate size and calibre
- held in the frontal, poll or temporal positions
- held such that the end of the firearm barrel and the animal is between 10cm and 100cm.

Following appropriate destruction using a firearm, the animal should be confirmed dead.

Position for stunning or firearm

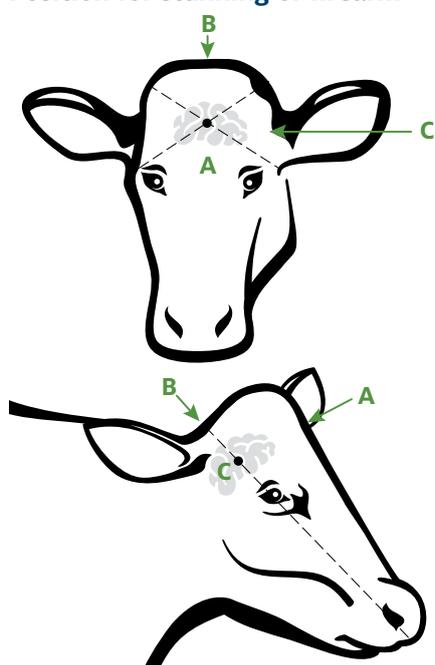


Diagram 4g: Positions for firearm or stunning

A: Position for frontal method - firearm or stunning

B: Position for poll method - firearm or stunning

C: Position for temporal method - firearm only

Throat cut

Following stunning, or where stunning or shooting is not available and the animal requires immediate destruction, the animal's throat can be cut using:

- a sharp knife of sufficient length so the point of the knife remains outside of the incision during the cut, and
- a single, deep, uninterrupted, fast stroke of the knife which severs both carotid arteries (Diagram 4h) and results in the presence of a strong flow of blood from the wound.

Single means one stroke or a reciprocal pass of the blade provided the blade does not leave the wound during the process.

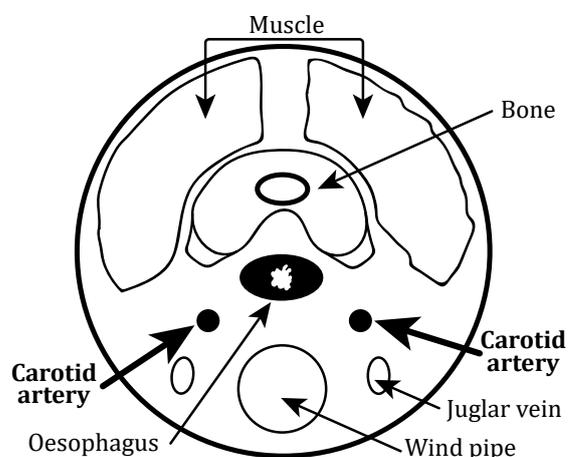


Diagram 4h: Bisection of an animal's throat showing both carotid arteries

Following this, the animal should be left to bleed out until unconscious. The animal should not be moved until it has been confirmed dead.

Assessing unconsciousness

Signs that an animal is unconscious include two or more of the following:

- immediate collapse and no attempts to regain or to retain upright body posture
- absence of tracking by the eye of movements in the vicinity (often accompanied by spontaneous blinking)
- no spontaneous blinking and no blink in response to waving a hand in front of the eye
- when stunned, no rhythmic breathing.

Confirming death

Animals should be confirmed as dead following humane emergency destruction processes. Signs of death include:

- cessation of a strong flow of blood from the wound
- permanent absence of brain stem reflexes (such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging).

Tools

TOOL 4.1 WORK INSTRUCTION: HANDLING LIVESTOCK

Tool 4.1
Work instruction: Handling livestock

These instructions are intended to provide a general overview of the handling of livestock. For more detailed information, refer to the relevant chapters in the manual.



STEP 1
Approach the animal calmly and slowly. Do not make sudden movements or loud noises. Speak to the animal in a calm, steady voice. If the animal is nervous, use a lead rope to guide it. Do not touch the animal until it is calm and ready to be handled.

STEP 2
Use the correct technique to restrain the animal. For example, use a lead rope to guide the animal into a chute or race. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

TOOL 4.2 WORK INSTRUCTION: HANDLING ESCAPED ANIMALS

Tool 4.2
Work instruction: Handling escaped animals

These instructions are intended to provide a general overview of the handling of escaped animals. For more detailed information, refer to the relevant chapters in the manual.



STEP 1
Identify the animal and its location. Use a lead rope to guide the animal back to the facility. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

STEP 2
Use the correct technique to restrain the animal. For example, use a lead rope to guide the animal into a chute or race. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

TOOL 4.3 STANDARD OPERATING PROCEDURES FOR HUMAN EMERGENCY DESTRUCTION

Tool 4.3
Standard operating procedures for humane emergency destruction

These instructions are intended to provide a general overview of the standard operating procedures for humane emergency destruction. For more detailed information, refer to the relevant chapters in the manual.



STEP 1
Identify the animal and its location. Use a lead rope to guide the animal back to the facility. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

STEP 2
Use the correct technique to restrain the animal. For example, use a lead rope to guide the animal into a chute or race. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

TOOL 4.4 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING STUNNING

Tool 4.4
Work instruction: Humane emergency destruction using stunning

These instructions are intended to provide a general overview of the humane emergency destruction using stunning. For more detailed information, refer to the relevant chapters in the manual.



STEP 1
Identify the animal and its location. Use a lead rope to guide the animal back to the facility. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

STEP 2
Use the correct technique to restrain the animal. For example, use a lead rope to guide the animal into a chute or race. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

TOOL 4.5 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING A FIREARM

Tool 4.5
Work instruction: Humane emergency destruction using a firearm

These instructions are intended to provide a general overview of the humane emergency destruction using a firearm. For more detailed information, refer to the relevant chapters in the manual.



STEP 1
Identify the animal and its location. Use a lead rope to guide the animal back to the facility. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

STEP 2
Use the correct technique to restrain the animal. For example, use a lead rope to guide the animal into a chute or race. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

TOOL 4.6 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING THE THROAT CUT METHOD

Tool 4.6
Work instruction: Humane emergency destruction using the throat cut method

These instructions are intended to provide a general overview of the humane emergency destruction using the throat cut method. For more detailed information, refer to the relevant chapters in the manual.



STEP 1
Identify the animal and its location. Use a lead rope to guide the animal back to the facility. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

STEP 2
Use the correct technique to restrain the animal. For example, use a lead rope to guide the animal into a chute or race. Do not use force or excessive restraint. If the animal is aggressive, use appropriate restraint techniques to ensure the safety of the handler and the animal.

Tool 4.1

Work instruction: Handling livestock

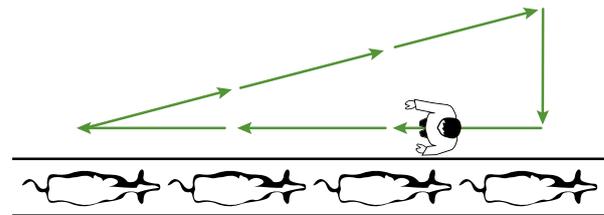
This work instruction contains steps which should be followed by people responsible for the handling of livestock.



STEP 1

Move animals in pens and yards

- Work on the side of the animal to avoid standing in the animal's blind spot or directly in front of it.
- Work around the edge of the flight zone so that the animals move away but do not run.
- Apply pressure to the group by moving left and right across the back of the group.
- Move out of the flight zone to make an animal stop.
- Observe each animal as it walks past for signs of lameness and injury.
- Be aware if animals are crowding at the ends of the raceway. Cattle can be crushed or suffocated if they fall beneath others.
- Keep sudden movements and loud noises to a minimum. Do not whistle loudly, shout or bang gates.



STEP 2

Move animals along raceways and ramps

- To move animals along the raceway and ramp, calmly move down the side of the race or ramp in the opposite direction the animals are required to go.
- Allow animals to move at their own speed.
- Do not try to make animals move or hit an animal if they have nowhere to go or are moving in the right direction.
- Use livestock handling aids to encourage movement where necessary, but not to hit the animal.

Tool 4.2

Work instruction: Handling escaped animals

This work instruction provides a general series of steps that could be followed if an animal escapes during transport. There is no single method or general approach that will work for all circumstances.



STEP 1

Prevent escape

- Escape should be prevented where possible by utilising good handling practices and facilities, consider the following:
 - » Do not panic livestock and cause them to try to jump out of races, ramps or off vehicles.
 - » Ensure the sides of races, ramps and vehicles are of sufficient height so that livestock are unable to jump over the top.
 - » Ensure vehicles have some form of cover on the top to prevent animals jumping out.
 - » Ensure gaps between rails in races and on vehicles are such that livestock cannot go through them.
 - » Align vehicles to ramps so that there are no gaps present.
 - » Ensure the height of the truck floor is the same as the height of the loading ramp.
 - » Close and latch gates in loading facilities when not in use and ensure transport vehicle doors are latched before the vehicle moves away.



STEP 2

Notify appropriate personnel and prepare equipment

- At the port, notify the:
 - » ship stockman or supervisor
 - » cattle owner or representative.
- During road transport, the driver should notify the:
 - » cattle owner or representative
 - » appropriate authorities.
- Ensure equipment which will aid in the capture of escaped animals is available and prepared.
- This equipment may include:
 - » livestock handling aids
 - » injection guns (with sedative) – only to be used by trained personnel
 - » portable gates
 - » cargo net and ropes.



STEP 3

Capture at the port

- Ask the port authority to close the gates to prevent the animal from leaving the premises.
- Calmly move the animal into a secure area.
- Block off and secure the area to allow the animal to calm down.
- Make a plan to capture the animal using the best resources available, use appropriate equipment and competent handlers.



STEP 4

Capture after a vehicle escape

- If a number of animals escape, allow them time to regroup before attempting to capture them.
- It may be necessary to allow them to settle for a couple of days.
- Once their movements and the location are understood it may be possible to establish a portable yard trap to catch them.
- Make a plan to capture the animal using the best resources available, use appropriate equipment and competent handlers.



STEP 5

Capture after escape at rest stop facilities

- Close the perimeter gate to contain the animal within the premises.
- If the animal leaves the premises then leave the gate open. Generally, an animal will return to an area where other animals are present.
- Make a plan to capture the animal using the best resources available, use appropriate equipment and competent handlers.



STEP 6

Following capture, assess injuries

- Assess the animal for injuries.
- If an animal is found to be seriously injured then it will be necessary to perform humane emergency destruction in order to prevent further suffering.

Tool 4.3

Standard operating procedures for humane emergency destruction

Handlers and/or drivers must:

- a. Assess if the animal has a high chance of recovery given appropriate treatment (this may require vet or welfare advisor's input in order to make this decision). This assessment may be made prior to or during loading/unloading and during the journey.
- b. Decide if the animal will experience severe stress if the journey continues. Humane destruction is required if continuing the journey will cause the animal further severe stress.

Only perform emergency destruction on the vehicle or vessel if the process does not result in serious stress to the remaining cattle in the vehicle or vessel or pose personal danger to the driver.

- c. Select the procedure most appropriate for the circumstances (e.g. stunning, firearm or throat cutting).
- d. Select a method to restrain the animal depending on the destruction method being used, available personnel and the location. The safety of the personnel should always take priority.
- e. Restrain the animal and perform the selected procedure.

If the animal is down in the vehicle or vessel and is unable to stand or walk unaided, then destruction must be performed before the animal is moved.

f. For destruction by stunning:

- i. Use either a non-penetrating percussion stunning device or a penetrating captive bolt stunning device:
 - » appropriate to the size and class of livestock
 - » applied in the frontal or poll positions in contact with the skull according to the manufacturer's instructions
 - » applied in contact with the skull.
- ii. After stunning, check that an animal is unconscious by confirming the presence of two or more of the following:
 - » immediate collapse and no attempts to regain or to retain upright body posture
 - » no rhythmic breathing,
 - » absence of tracking by the eye of movements in the vicinity (often accompanied by spontaneous blinking)
 - » no spontaneous blinking and no blink in response to waving a hand in front of the eye.
- iii. If these are not present, re-stun the animal immediately, if the stunning device is faulty use another device or destroy the animal with a firearm or cutting its throat in accordance with item h.
- iv. Once confirmed unconscious, cut the animal's throat using:
 - » a sharp knife of sufficient length so the point of the knife remains outside of the incision during the cut, and
 - » a single, deep, uninterrupted, fast stroke of the knife which severs both carotid arteries and results in the presence of a strong flow of blood from the wound.

Single means one stroke or a reciprocal pass of the blade provided the blade does not leave the wound.

- v. Leave the animal to bleed out and confirm that the animal is dead by ensuring the presence of signs of death which include:
 - » cessation of a strong flow of blood from the wound
 - » permanent absence of brain stem reflexes (such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging).
- g. For destruction by firearm:
 - i. Use a firearm of the appropriate size and calibre and held:
 - » in the frontal, poll or temporal positions
 - » such that the end of the firearm barrel and the animal is between 10cm and 100cm.
 - ii. Confirm that the animal is dead through the permanent absence of brain stem reflexes (such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging).
 - iii. If the animal is not dead, reshoot the animal immediately ensuring the firearm is in the correct position.
- h. For destruction by throat cut:
 - i. Cut the animal's throat using:
 - » a sharp knife of sufficient length so the point of the knife remains outside of the incision during the cut, and
 - » a single, deep, uninterrupted, fast stroke of the knife which severs both carotid arteries and results in the presence of a strong flow of blood from the wound.
 - ii. Leave the animal to bleed out. While the animal is bleeding out, the animal should remain undisturbed and its head held in extension to ensure the edges of the wound do not touch.
 - iii. Confirm that the animal is unconscious by ensuring the presence of two or more of the following:
 - » immediate collapse and no attempts to regain or to retain upright body posture
 - » absence of tracking by the eye of movements in the vicinity (often accompanied by spontaneous blinking)
 - » no spontaneous blinking and no blink in response to waving a hand in front of the eye.
 - iv. Before the animal is moved it should be confirmed as dead by ensuring the presence of signs of death which include:
 - » cessation of a strong flow of blood from the wound
 - » permanent absence of brain stem reflexes (such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging).

Single means one stroke or a reciprocal pass of the blade provided the blade does not leave the wound.

Tool 4.4

Work instruction: Humane emergency destruction using stunning

This work instruction contains steps which should be followed by the people responsible for performing humane emergency destruction using a stunning device when required during the transport process.



STEP 1

Assess the animal

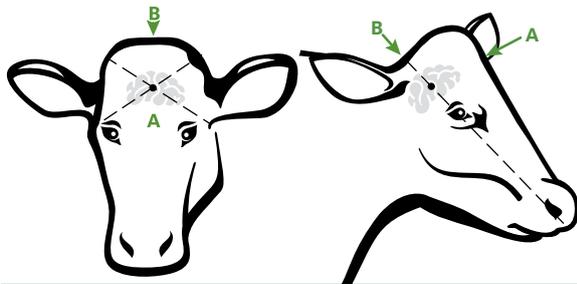
- Assess if the animal has a high chance of recovery given appropriate treatment.
- Visually inspect the animal and consider if it is able to bear weight on all legs, or if moving or continuing the journey is likely to cause severe stress.
- If required, seek veterinarian or welfare advisor's input in order to make this decision.
- This assessment may be made prior to or during loading/unloading and during the journey.



STEP 2

Select stunning method

- Use either a non-penetrating percussion stunning device or a penetrating captive bolt stunning device which is appropriate to the size and class of livestock.



STEP 3

Restrain and stun the animal

- If the animal is able to bear weight on all legs and moving it will not cause severe stress, move the animal to a restraint device appropriate to the stunning method.
- If the animal is unable to be moved, consider the best method of restraint such as physically holding the animal still.
- Place the stunning equipment in the correct position (A or B, above) on the animal's head and wait until the animal stops moving its head before discharging the device.
- Do not 'chase' the animal's head with the stunning device.



STEP 5

Cut the throat

- Cut the animal's throat using:
 - » a sharp knife of sufficient length so the point of the knife remains outside of the incision during the cut, and
 - » a single, deep, uninterrupted, fast stroke of the knife which severs both carotid arteries and results in the presence of a strong flow of blood from the wound.
- Single means one stroke or a reciprocal pass of the blade provided the blade does not leave the wound.



STEP 4

Confirm the animal is unconscious

- Check the animal is unconscious by ensuring two or more of the following:
 - » immediate collapse and no attempts to regain or to retain upright body posture
 - » no rhythmic breathing
 - » absence of tracking by the eye of movements in the vicinity (often accompanied by spontaneous blinking)
 - » no spontaneous blinking and no blink in response to waving a hand in front of the eye.



STEP 6

Confirm the animal is dead

- Allow the animal to bleed out and then confirm that the animal is dead.
- Check for signs of death, being:
 - » cessation of a strong flow of blood from the wound
 - » permanent absence of brain stem reflexes (such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging).

Tool 4.5

Work instruction: Humane emergency destruction using a firearm

This work instruction contains steps which should be followed by the people responsible for performing humane emergency destruction using a firearm when required during the transport process.



STEP 1

Assess the animal

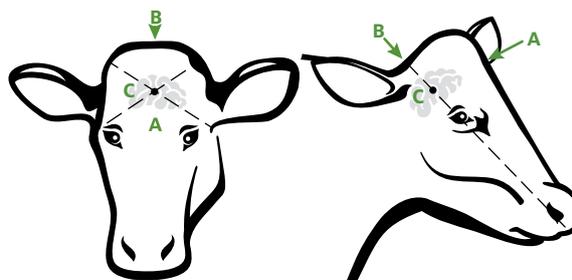
- Assess if the animal has a high chance of recovery given appropriate treatment.
- Visually inspect the animal and consider if it is able to bear weight on all legs, or if moving or continuing the journey is likely to cause severe stress.
- If required, seek veterinarian or welfare advisor's input in order to make this decision.
- This assessment may be made prior to or during loading/unloading and during the journey.



STEP 3

Confirm the animal is dead

- Confirm the animal is dead through the permanent absence of brain stem reflexes (such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging).
- If the animal is not dead, reshoot the animal immediately ensuring the firearm is in the correct position.



STEP 2

Hold the firearm in the correct position

- Select appropriate size and calibre and hold the firearm:
 - » in the frontal (A), poll (B) or temporal (C) positions
 - » such that the end of the firearm barrel and the animal is between 10cm and 100cm.

Tool 4.6

Work instruction: Humane emergency destruction using the throat cut method

This work instruction contains steps which should be followed by the person responsible for performing humane emergency destruction using the throat cut method when required during the transport process.



STEP 1

Assess the animal

- Assess if the animal has a high chance of recovery given appropriate treatment.
- Visually inspect the animal and consider if it is able to bear weight on all legs, or if moving or continuing the journey is likely to cause severe stress.
- If required, seek veterinarian or welfare advisor's input in order to make this decision.
- This assessment may be made prior to or during loading/unloading and during the journey.



STEP 3

Confirm unconsciousness

- Leave the animal to bleed out and confirm that the animal is unconscious by ensuring the presence of two or more of the following:
 - » immediate collapse and no attempts to regain or to retain upright body posture
 - » absence of tracking by the eye of movements in the vicinity (often accompanied by spontaneous blinking)
 - » no spontaneous blinking and no blink in response to waving a hand in front of the eye.
- While the animal bleeds out it should remain undisturbed and its head held in extension to ensure the edges of the wound do not touch.



STEP 2

Restrain the animal and cut the animals throat

- Restrain the animal appropriately.
- Cut the animal's throat using:
 - » a sharp knife of sufficient length so the point of the knife remains outside of the incision during the cut, and
 - » a single, deep, uninterrupted, fast stroke of the knife which severs both carotid arteries and results in the presence of a strong flow of blood from the wound.
- Single means one stroke or a reciprocal pass of the blade provided the blade does not leave the wound.



STEP 4

Confirm the animal is dead

- Confirm that the animal is dead by ensuring signs of:
 - » cessation of a strong flow of blood from the wound
 - » permanent absence of brain stem reflexes such as no blink in response to waving a hand in front of the eye and no rhythmic breathing or gagging.



05

Selecting cattle for loading

Selecting cattle that are fit for the intended journey will minimise stress, injury and disease while optimising productivity

KEY ACTIONS

- **Ensure cattle are fit for loading**
- **Humanely manage animals that are not fit for loading**

Ensure cattle are fit for loading

The person who assesses fitness must be familiar with cattle and be able to judge signs of good health.

It is essential that animals be judged fit for the intended journey prior to loading and that all reasonable efforts be made to maintain this fitness throughout the journey.

An animal is not fit to travel if it:

- is not strong enough to undertake the journey
- cannot walk normally, bearing weight on all four legs
- is severely emaciated or visibly dehydrated (sunken eyes, skin 'tenting' when pinched)
- is suffering from disease or severe injury
- cannot keep up with the mob
- is blind in both eyes
- is in a condition that could cause increased pain or distress during transport
- is in late pregnancy, being in the last 10% of gestation (e.g. approximately 27 days)
- is a newborn with an unhealed navel
- is a cow or heifer travelling without young but has given birth within the previous 48 hours.

Animals should be individually inspected prior to loading for the following:

- signs of lameness
- signs of disease, such as coughing, or injury
- signs of weakness or being unable to keep up with the mob
- blindness in both eyes
- unusual behaviour which may be symptomatic of a condition which may cause problems during transport
- signs of heat stress (e.g. tonguing).

Do not load animals showing signs of disease, lameness or severe injury

Animals showing signs of disease, lameness or severe injury should not be loaded. Lameness means that the animal cannot walk normally and is not bearing weight on all legs.



Swollen joints



Lameness and ill thrift



Injury



Open wound

Do not load animals that are severely emaciated or visibly dehydrated

Animals that are emaciated (abnormally thin) or those showing visible signs of dehydration should not be loaded. Signs of dehydration include eyes sunken into orbits and skin which remains tented indefinitely when lifted.



Emaciated livestock

Do not load animals with conditions likely to cause increased pain or distress during transport

In addition to lameness, emaciation, dehydration and signs of disease or injury, cattle showing other conditions that are likely to cause increased pain or distress during transport should not be loaded.



Injured or ingrown horns



Exhaustion or weakness

Do not load cattle which are blind in both eyes

Animals which are completely blind in both eyes should not be loaded. Animals that are able to see out of one eye are able to be loaded provided the condition is not due to an active disease or recent injury or is likely to cause increased pain or distress during transport.



Blindness

Do not load cows or heifers in late pregnancy

Cows or heifers in the last 10% of gestation (approximately 27 days) should not be loaded.



Pregnant cow

Humanely manage animals that are not fit for loading

If an animal is not fit for transport, it must not be transported.

Livestock that are not fit for transport must:

- not be moved if moving will cause further pain or distress or if they are unable to walk unaided, in which case they must be destroyed in situ, or
- be moved to a hospital pen, only if such movement will not cause further pain or distress, and treated or allowed to rest and transported when recovered and fit to load, or
- be transported only after obtaining veterinary advice.

The humane emergency destruction of an animal involves using a method that results in rapid loss of consciousness followed by death while unconscious. This can include, where legally allowed:

- stunning an animal with an appropriate stunning device and then cutting its throat
- shooting an animal with an appropriate firearm
- if stunning or shooting are not able to be undertaken, then cutting the animal's throat with a sharp knife.

Tools

TOOL 5.1 FIT TO LOAD CHECKLIST



Additional tools to reference

TOOL 4.3
STANDARD OPERATING
PROCEDURES FOR HUMANE
EMERGENCY DESTRUCTION

TOOL 4.4
WORK INSTRUCTION:
HUMANE EMERGENCY
DESTRUCTION USING
STUNNING

TOOL 4.5
WORK INSTRUCTION:
HUMANE EMERGENCY
DESTRUCTION USING
A FIREARM

TOOL 4.6
WORK INSTRUCTION:
HUMANE EMERGENCY
DESTRUCTION USING THE
THROAT CUT METHOD

Tool 5.1

Fit to load checklist

Yes	No	Is any animal showing signs of:
<input type="radio"/>	<input type="radio"/>	Lameness. Look for any animal that cannot walk normally and is not bearing weight on all legs. This may be due to swollen joints, arthritis, deformity, broken limbs or other injuries.
<input type="radio"/>	<input type="radio"/>	Emaciation or dehydration. Look for animals that are abnormally thin (able to see ribs or bones protruding) or have eyes sunken into orbits or skin remains tented indefinitely.
<input type="radio"/>	<input type="radio"/>	Disease or severe injury. Look for growths or lesions on the hide particularly around the head and backside and along limbs, open wounds, broken limbs or other injuries.
<input type="radio"/>	<input type="radio"/>	Conditions which may cause increased pain or distress. Look for animals that are acting differently from the group; they may be hunched over, coughing or panting excessively, limping for no apparent reason, hanging back from the group, moving more slowly than the rest of the group or unable to stand easily. Also look for livestock that have ingrown horns or swollen appendages or are showing extreme nasal, eye or mouth discharge.
<input type="radio"/>	<input type="radio"/>	Complete blindness. Look for animals that are completely blind in both eyes; they may hesitate more than others, walk into the sides of pens and races, stumble or show visual signs of blindness such as injury to the eyes or milky eyes.
<input type="radio"/>	<input type="radio"/>	Late pregnancy. Look for cows or heifers that may be in late pregnancy. This can be confirmed through discussions with or paperwork from the seller. If in doubt, consult a veterinarian.
<input type="radio"/>	<input type="radio"/>	An unhealed navel (in newborn calves). Look for the presence of an umbilical cord.
<input type="radio"/>	<input type="radio"/>	Having given birth within the previous 48 hours but is not travelling with a calf. This can be confirmed through discussions with or paperwork from the seller. If in doubt, consult a veterinarian.
DO NOT LOAD	CAN LOAD	IF IN DOUBT LEAVE IT OUT



06

Loading

Loading is a critical stage in maintaining the health and welfare of cattle. The health and welfare of the cattle can be safeguarded by ensuring loading is undertaken calmly and effectively using appropriate infrastructure

KEY ACTIONS

- **Ensure loading facilities are fit for purpose**
- **Ensure appropriate loading densities and groupings**
- **Load the transport vehicle or vessel efficiently and with minimum stress**

Ensure loading facilities are fit for purpose

The process of moving from yards, usually up a ramp and onto the back of a vehicle is not natural for cattle as they are moving into a confined space which can make them nervous.

The surface under foot and smells will also change. These are unavoidable stimuli; however, the effect of these can be managed through ensuring loading facilities are fit for purpose.

Loading facilities will generally be purpose built and should present an obvious and risk-free pathway for cattle to move from the yards onto the back of the vehicle.

Inspect facilities prior to loading

Before loading livestock, check the infrastructure, facilities and vehicles to ensure they will not cause injury to the animals.

This is best done by walking through and around the yards and vehicles used before and during loading. It can be useful to follow the path the cattle will take as this often allows issues that may otherwise remain undetected to be identified and fixed.

Inspecting infrastructure and facilities

Walk around and through the transport infrastructure and facilities including the ramps, raceways, pens and yards and:

- Check for damage to flooring, such as holes, that can cause animals to stumble and fall, as well as damage to metal rails and panels which can cause bruising or injury.



Inspecting facilities



Open gutters and trash can cause animals to baulk, slip or fall

- Identify areas that may result in animals escaping. This includes gaps in gates or rails or items protruding from loading ramps which would leave a gap between the ramp and the vehicle.
- Check there is sufficient lighting and that it is even and subdued without hard shadows so as to encourage movement.
- Check that the slope of the ramp is as even as possible and does not exceed approximately 20 degrees.
- Make sure raceways and ramp surfaces are non-slip. Even where there are non-slip surfaces in these areas, such as patterned concrete, ensure they are free of manure and pooled water.

- Remove or rectify any distractions from the facilities, common distractions that can impact efficient cattle movement include:
 - » reflections on puddles or metal
 - » dark entrances
 - » moving people or equipment up ahead
 - » dead ends
 - » items hung on the race
 - » items such as rubbish in the race or areas where cattle will move through
 - » uneven floors or a sudden drop in floor level
 - » noisy equipment or loud radios.

Inspecting vehicles

Inspect around and inside the trucks, vessels and crates and:

- Check that they are clean prior to loading livestock. This will minimise the likelihood of the spread of infectious disease during transport.
- Ensure they are appropriate for the size and type of cattle to be loaded and minimise any opportunity for animals to escape.
- Check for any signs of damage and wear that could injure animals. Damage to vehicles may include:
 - » holes in the floor
 - » sharp metal protrusions
 - » damage to the partitions, ramps or tail-gate
 - » bald or perished tyres
 - » flimsy or unstable stock crates.



Inspecting vehicles



Issue with vehicle tyres

- Check that hatches and latches of partitions, crates and gateways do not project into the pathway of animals as this can cause injury.
- Check that side rails do not allow animals to put their heads and legs between them.
- Ensure flooring is not slippery. An appropriate amount (e.g. 30cm) of dry material placed on the surface, for example rice hulls, coconut husks or saw dust, will help the animal to grip during transport. Welded mesh or timber cross-members fixed to the floor can also provide the animals with a good grip.
- For long distance transport, ensure suitable bedding such as rice hulls, coconut husks or saw dust is provided to assist in the absorption of faeces and urine.
- Where the tailgate of the vehicle forms part of the ramp, make sure the tailgate is not slippery. The tailgate may need to be modified through the addition of mesh or timber struts for additional grip.
- Ensure vehicles and vessels have been checked for mechanical soundness prior to transporting livestock. A maintenance logbook or record of servicing should be kept for the vehicle or vessel.

Rectify issues if they are identified

If any issues with infrastructure or vehicles are identified that are likely to cause injury or enable escape, they must be fixed immediately or alternative arrangements made which may include:

- using different facilities to load cattle, or
- using another vehicle or vessel to transport cattle.

Ensure appropriate loading densities and groupings

Vehicles should be loaded taking into consideration the groupings established during pre-transport preparation. These include social groupings, horned and unhorned animals, gender, large or fat animals and pregnant animals.

Vehicles should also be loaded so that cattle can stand up again if they fall down. If animals are loaded too tightly, animals that fall cannot stand up and will be trampled. If animals are loaded too loosely, they can be thrown around during transport.

Livestock loading densities should be such that:

- animals give each other mutual physical support during transport, and
- when standing, animals have sufficient space to adopt a balanced position.

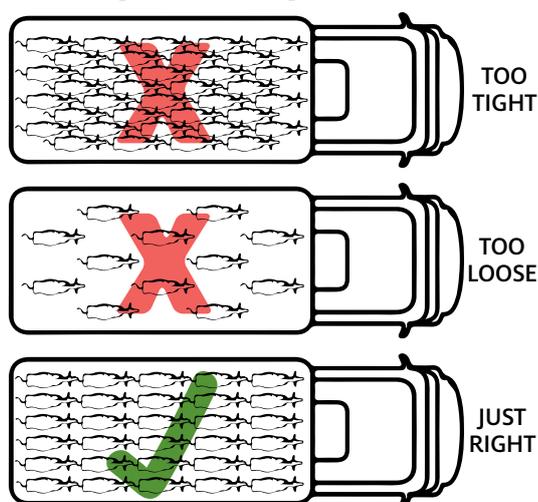


Diagram 6a: Loading densities

Partitions in vehicles may be used to ensure stocking density is evenly spread and minimise the risk of injury caused by forward and backward movement. Partitions may also be used to separate groupings of animals during transport (such as separating large animals from small animals).

The number of animals which should be transported on a vehicle and their allocation to compartments must be determined before loading begins. Loading density requirements must take into account:

- class of livestock (e.g. steers, bulls, cows, heifers)
- size and body condition
- presence of horns
- likely climatic conditions during the journey
- nature and duration of the journey
- road conditions
- design and condition of the stock crate
- provision of bedding.

Table 6a: Indicative loading rates based on live weight

Mean live weight (kg/head)	Floor area (m ² /head)
200	0.70
250	0.77
300	0.86
350	0.98
400	1.05
450	1.13
500	1.23
550	1.34
600	1.47
650	1.63
700	1.81

Load the transport efficiently and with minimum stress

Livestock should be handled well during loading to achieve a good animal welfare outcome and optimise meat quality. Loading is a critical step in which there is a higher risk of injury occurring.

The loading process should be monitored to ensure it is efficient and results in minimum stress to the animal.

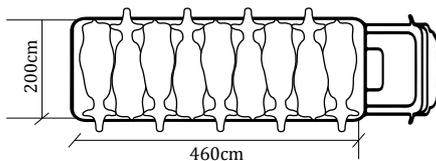
Livestock themselves should also be observed as they walk past as a final check to ensure they are fit for loading. This should only be a final check for fitness to load as the primary check should have occurred well before loading.

The following should be considered during loading:

- Loading should not commence until suitable ramps and vehicles are in place to avoid unnecessary delays. Vehicles should be planned to arrive to allow for the smooth flow of livestock from the loading facility or vessel onto the vehicle.
- Animals should be loaded onto vehicles calmly and efficiently and should not spend extended periods in raceways or on ramps.
- Only move the number of cattle appropriate to the size of the vehicle or crate.
- Vehicles should be aligned with the lip of the ramp with no gap that animals could fall through and injure themselves or escape.
- If loading races are long, make sure the number of animals placed in the race is not too large so as to avoid unnecessary delays.
- Animals should be loaded in the groupings determined as part of the pre-transport preparation process.

SMALL TRUCK LOAD

9–10 head of 300-350kg cattle
or 8 head of 450-500kg cattle



LARGE TRUCK LOAD

16 head of 300-350kg cattle
or 13 head of 450-500kg cattle

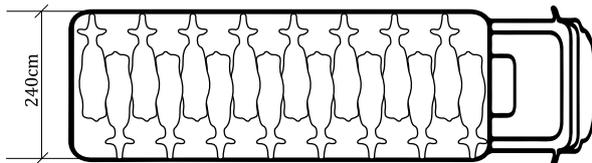


Diagram 6b: Loading densities for small and large trucks

Don't load so many cattle so that they cannot move at all, or so few that they have no support when the truck moves.

In some cases, the number of animals loaded may need to be reduced by 10% for pregnant or large cattle, or 15% when high temperatures and humidity are expected during the journey.

Ensure appropriate handling

An understanding of animal behaviour is important when handling animals. Handling will impact loading efficiency and good handling will minimise stress during the process.

Handling should be calm, taking into consideration the following:

- Livestock may hesitate at the entrance to the raceway and vehicle as they familiarise themselves with their surroundings before moving on. This is acceptable and not considered baulking.
- Do not try to make animals move or hit an animal if they have nowhere to go or are already moving in the right direction.
- Be alert to animals crowding at the ends of raceways. Cattle can be crushed or suffocate if they fall beneath others.
- Keep people not necessary to the unloading process out of the way.
- Keep sudden movements and loud noises to a minimum. Do not whistle loudly, shout or bang gates.
- Use livestock handling tools appropriately and do not use them to force animals to move if they have nowhere to go or to hit or apply unnecessary pressure to animals already moving in the right direction.
- Ensure electric goads are only used on adult cattle that are refusing to move and have room in which to move.
- Avoid unacceptable practices, including dragging, tripping, dropping, throwing, whipping, tail twisting and pulling, nose twitches, hitting or kicking.
- Do not force animals to walk over the top of others.
- Do not force water into an animal's mouth or up its nose in an attempt to make it stand or move.

- Prevent animals from escaping, if an animal does escape, move the animal back to a pen in a calm and efficient manner so as to avoid stress or injury to the animal.
- Manage animals that are unable to rise or walk unaided humanely.

Section 4 provides further information on handling that will assist during the loading process.

Avoid tethering animals in transport vehicles

Tethering or tying an animal once inside a transport vehicle should be avoided. This is because:

- If the tethered animal falls during the journey they can:
 - » become tangled in the tether which can cause injury
 - » be unable to rise and be injured due to the pressure from the tether or be trampled by other animals.
- The tether can become tangled around other animals and cause injury to both the tethered and tangled animals.
- The animal may struggle and stress, particularly if they are not used to tethering, causing injury to themselves and animals around them.



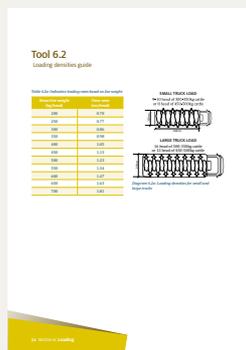
Avoid tethering cattle on transport vehicles

Tools

TOOL 6.1 WORK INSTRUCTION: INSPECTING VEHICLES AND TRANSPORT EQUIPMENT



TOOL 6.2 LOADING DENSITIES GUIDE



Additional tools to reference

TOOL 2.3 TRANSPORT FACILITY, VEHICLE AND VESSEL CHECKLIST

TOOL 4.2 WORK INSTRUCTION: HANDLING ESCAPED ANIMALS

TOOL 4.3 STANDARD OPERATING PROCEDURES FOR HUMANE EMERGENCY DESTRUCTION

TOOL 4.4 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING STUNNING

TOOL 4.5 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING A FIREARM

TOOL 4.6 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING THE THROAT CUT METHOD

TOOL 6.3 WORK INSTRUCTION: HANDLING LIVESTOCK DURING LOADING



TOOL 6.4 LOADING CHECKLIST



Tool 6.1

Work instruction: Inspecting vehicles and transport equipment

This work instruction contains steps which should be followed by the people responsible for performing vehicle inspections.



STEP 1

Inspect the vehicle

- A vehicle inspection should be completed in around 10-15 minutes.
- Use the inspection checklist from Tool 2.3 to assist, specifically:
 - » Walk around the outside of the vehicle and check the external condition including tyres, lights, windscreen and the crate livestock will be held in.
 - » Also check breaks, steering, presence of a spare tyre.
 - » Check the undercarriage.
 - » Walk inside the vehicle, inspect the floor, sides, partitions and roof.



STEP 2

Check the tyres

- Check the tyres for signs of unacceptable wear and lack of tread.
- Perform a visual check of tyre pressure – are any of the tyres very low or flat?
- Ensure spare tyres are present and serviceable.



STEP 3

Inspect the ramp

- Does the construction of the vehicle loading arrangements allow for placement against the loading bay?
- Check the ramp for protrusions and damage that could cause injury to livestock.
- Check that the ramp provides a stable surface – this should be inspected during loading if possible.
- Check that the angle of the ramp is less than 20 degrees.



STEP 4

Inspect the tail gate

- Check the tail gate for protrusions, sharp edges or broken catches.
- Is the tail gate constructed with barriers to prevent animals falling when the load-door is open?
- Ensure that the inside surface of the tail gate is non-slip when forming part of the ramp. Apply non-slip bedding if necessary.



STEP 5

Check the flooring

- Check if the floor is strong enough for the weight of the animals.
- Check that the floor is free from damage (e.g. holes) and obstructions.
- Check that the floor is non-slip (e.g. in the form of weldmesh or a sufficient covering of sand, rice hulls, saw dust or similar material, or fixed or removable 'matting').

Tool 6.2

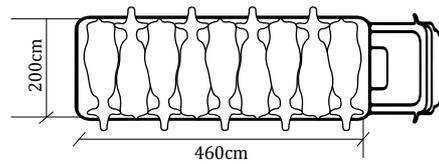
Loading densities guide

Table 6.2a: Indicative loading rates based on live weight

Mean live weight (kg/head)	Floor area (m ² /head)
200	0.70
250	0.77
300	0.86
350	0.98
400	1.05
450	1.13
500	1.23
550	1.34
600	1.47
650	1.63
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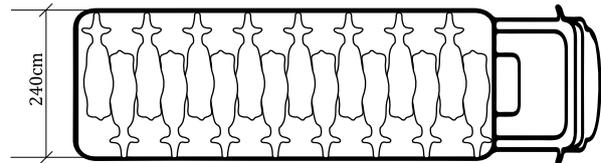


Diagram 6.2a: Loading densities for small and large trucks

Tool 6.3

Work instruction: Handling livestock during loading

This work instruction contains steps which should be followed by people responsible for the handling of livestock during loading.



STEP 1

Undertake pre-loading checks

- Ensure appropriate infrastructure and facility inspections have been completed and any issues identified have been rectified or alternative arrangements made.
- Ensure appropriate and competent handlers are ready.
- Ensure appropriate livestock groupings are in place.
- Ensure the appropriate number and sizes of vehicles are ready or will be ready when loading commences.



STEP 2

Ensure vehicles are positioned correctly

- Back vehicles right up to the ramps and open the vehicle loading doors.
- Ensure there is no gap between the ramp and the vehicle through which animals may escape.
- Close any gaps, gates or railings to prevent animals escaping.
- Check the position of the vehicle and realign if not correct.
- Ensure people are not standing in the way of where cattle will move.



STEP 3

Move animals out of pens and yards

- Open appropriate gates leading from pens or yards and into loading raceways and ramps. This should be done in order of pens to be unloaded.
- Ensure livestock groupings are maintained as they are moved out of pens and yards.
- Work on the side of the animal to avoid standing in the animal's blind spot or directly in front of it.
- Work around the edge of the flight zone so that the animals move away but do not run.
- Apply pressure to the group by moving left to right across the back of the group.
- Move out of the flight zone to make an animal stop.
- Observe each animal as it walks past for signs of lameness and injury.
- Be aware if animals are crowding at the ends of the raceway. Cattle can be crushed or suffocated if they fall beneath others.
- Keep sudden movements and loud noises to a minimum. Do not whistle loudly, shout or bang gates.



STEP 4

Load animals onto vehicles smoothly

- Load animals out of pens and yards into raceways which feed onto the loading ramp.
- Ensure livestock groupings are maintained as they are moved out of raceways and onto the vehicle.
- To move animals along the raceway and ramp, calmly move down the side of the race or ramp in the opposite direction the animals are required to go.
- Allow animals to move onto vehicles at their own speed.
- Do not try to make animals move or hit an animal if they have nowhere to go or are already moving in the right direction.
- Use livestock handling aids to encourage movement, but not to hit the animal.
- Secure partitions as animals are loaded.



STEP 5

Check livestock on the vehicle

- Immediately after loading, check that the animals on-board the vehicle have sufficient room to stand with their head raised in a natural position without touching the roof.
- Check that partitions are used effectively for the group size - they should provide support and prevent excess movement.
- Close the tailgate of the truck before it moves away from the ramp to minimise the chance of animals escaping.

Tool 6.4

Loading checklist

Check

- Have transport infrastructure, facilities and vehicles been checked and are they suitable for use?
.....
- Have curfews been in place, as per the journey plan?
.....
- Have all animals presented for loading be assessed as fit for loading?
.....
- Are all animals segregated into appropriate groups, as per the journey plan?
.....
- Are sufficient vehicles and vessels available and ready?
.....
- Is the driver aware of contingency plans including actions for breakdowns, emergencies and humane emergency destruction of cattle if required?
.....
- Is the driver aware of appropriate rest stops, as per the journey plan?
.....
- Has a final check of weather and road conditions been undertaken?
.....
- Have all animals to be loaded been accounted for?
.....

07

In-transit management

Appropriately managing cattle during transit, including ensuring good driving techniques, using rest stops and managing extreme environmental conditions, breakdowns and emergencies, will assist in delivering good animal welfare outcomes

KEY ACTIONS

- **Drivers are responsible for animal welfare**
- **Manage extreme environmental conditions to ensure good welfare outcomes**
- **Prevent or respond to breakdowns and emergency situations**

Drivers are responsible for animal welfare

Vehicle drivers are responsible for the welfare of the animal while in-transit.

Drivers should:

- Have readily available contact details and agreed procedures for contacting a representative of the owner of the cattle in the event of an emergency.
 - Ensure their driving technique is smooth and controlled, avoid jerks, sudden stops and turns. Unsmooth or erratic driving can cause animals to lose their balance, slip or fall which can result in injury.
 - Plan the journey, taking into consideration that some roads and intersections may not be capable of accommodating the vehicle either due to road condition, vehicle size and mass, overhead clearance, climatic conditions or road works.
 - Carry out a check of the animals soon after commencement of the journey.
 - Adhere to planned rest stops.
 - Wherever possible, park in shaded areas during driver and animal rest stops.
- Monitor livestock throughout the journey, including each time the driver has a rest stop or re-fuels and during livestock rest stops. During these events, check to ensure:
 - » the animals are properly confined and their physical condition is satisfactory
 - » flooring remains non-slip and bedding (where relevant) remains clean
 - » temperature and humidity does not cause undue stress to the animal and, where temperatures and humidity are likely to cause such issues, action is taken to avoid this occurrence. This may require cattle to be unloaded at the nearest rest stop and allowed to cool down and rest before reloading and continuing the journey during a cooler time of the day
 - » animals are provided with access to feed and water as required in the journey plan and, where necessary, unloaded and allowed to rest and exercise before reloading
 - » sick, injured or dead animals are identified and:
 - » sick or injured animals are managed in accordance with their condition. It may be necessary to segregate them for the remaining part of the journey or humanely destroy them before recommencing the journey. An additional vehicle may be required to off load sick or injured animals and this should be considered in the journey planning
 - » dead animals are managed in accordance with the pre-transport plans.

Drivers should be competent

Drivers should be competent and demonstrate that they can effectively respond and adequately manage animal welfare during transport and in emergency situations.

This means drivers should be able to identify sick or injured animals, manage these animals or undertake humane slaughter of the animal.

In particular, drivers should be knowledgeable and skilled in:

- appropriate driving techniques for transporting livestock
- handling livestock and minimising livestock stress
- contingency plans including procedures for responding to emergency situations
- rest stop requirements both for the driver and the animals
- feed and water requirements during rest stops
- procedures for receipt and/or dispatch of animals
- identifying sick or injured animals
- humane destruction of animals
- operation of emergency equipment.

Use good driving techniques

- Ensure the vehicle crosses bridges and negotiates curves in a gentle, safe and smooth manner.
- Do not drive under a bridge or structure if the vehicle height is the same or exceeds the height limit of the overhead structure or any warning signs.
- Ensure the clearance for overhead structures such as cables, wires and trees is at least 200mm greater than the height of the vehicle and ensures safe passage.
- Ensure animals cannot extend their head or jump up from top decks as this can be hazardous for the cattle and other road users. This can be achieved by covering the top of the crate with mesh.

Manage extreme conditions to ensure good welfare outcomes

Weather is an important consideration when managing transport and extreme weather may impact animal welfare. Low temperatures with wind and rain may cause the animals to become chilled, while a heatwave may result in severe heat stress.

Transporting livestock during extreme weather conditions should be avoided and contingencies put in place should extreme weather occur.

This means:

- Journey plans should consider weather forecasts for the duration of the journey.
- Transport vehicles and vessels should suit the expected weather conditions, for example they may:
 - » have ventilation that ensures good air flow over the tops of the animals
 - » be enclosed with a roof to avoid exposing animals to wind, rain or sun
 - » have enclosed sides to reduce exposing animals to wind or rain.
- The journey should be planned to avoid travelling during the worst of the weather, for example, heat may be avoided by travelling early in the morning, late in the evening or overnight.
- Loading densities should be adjusted to suit the expected conditions, for example reduce loading densities by 15% if high temperatures and humidity are expected.

Prevent or respond to breakdowns and emergency situations

Breakdowns and emergencies can generally be related to:

- mechanical breakdowns
- accidents.

Protecting human and animal welfare is crucial in these situations. During transport, the driver is primarily responsible for ensuring this occurs in the first instance.

Prevent situations from occurring

It is not possible to predict every type of breakdown or emergency but good maintenance and journey plans, including contingency arrangements, can minimise risk.

Preventing or avoiding breakdowns and minimising the risk of accidents is essential and can be achieved by:

- ensuring regular inspections and maintenance of vehicles and vessels
- undertaking repairs before vehicles and vessels are used
- keeping critical spare parts and tools on-hand
- ensuring the vehicle has sufficient fuel and water for the journey and including re-fuelling stops in the journey plan
- being aware of weather forecasts and warnings and considering these prior to travel
- rerouting or rescheduling travel as required
- driving safely and competently and being alert for possible issues at all times.

Respond if situations do occur

Where an emergency situation does occur, an appropriate response is critical. The initial response should be to ensure the immediate safety and welfare of people and animals. Once this has been achieved and the situation stabilised, recovery can commence.

Mechanical breakdowns

The initial response to a mechanical breakdown should, wherever possible, be:

- Find a safe and suitable place to pull over and park the vehicle. This will keep the driver, animals and vehicle safe and out of the way of other road users. This should be undertaken carefully, slow down and indicate your intention to pull over. If possible, stop in a shaded area.
- Use hazard lights or other warning mechanisms such as hazard signs to alert other road users to the issue.
- Keep vehicle lights on to maximise the visibility of the vehicle.
- Check the animals and assess them for signs of injury or stress and humanely destroy any animal that is injured such that it would no longer be fit to transport.
- Repair the cause of the breakdown.
- Call for assistance and notify the owner of the cattle or the owners representative (e.g. the feedlot manager or abattoir operator) of the situation.



Truck breakdown due to tyre

Following the initial response and if the breakdown is likely to result in a lengthy delay, contingency arrangements, such as transferring the cattle to a replacement vehicle, should be made in conversation with the vehicle owner and the owner of the cattle or the owners representative.

Accidents

If the livestock transport vehicle is involved in an accident, wherever possible:

- Find a safe and suitable place to pull over and park the vehicle. This will keep the driver, animals and vehicle safe and out of the way of other road users. This should be undertaken carefully, slow down and indicate.
- Use hazard lights or other warning mechanisms such as hazard signs to alert other road users to the issue.
- Keep vehicle lights on to maximise the visibility of the vehicle.
- Check for injuries to any people involved in the accident and ensure people are made safe in the first instance.
- Check the animals and assess them for signs of injury or stress.
- Report the accident to the appropriate authority.
- Exchange details with the driver of the other vehicle.
- Report the incident to the owner of the vehicle and the representative of the owner of the cattle.
- If the vehicle has not been damaged in any way that renders it unroadworthy or unsafe to use, continue the journey.



Truck accident

If the vehicle is damaged such that it is no longer safe to use, contingency arrangements, such as transferring the cattle to a replacement truck, should be made in conversation with the vehicle owner and the representative of the owner of the cattle.

Depending on the severity of the accident, there may be injury to people or animals. In such a case:

- call emergency services for assistance
- render assistance to any person injured
- call the owner of the vehicle and the owner of the livestock or the owner's representative
- check the animals and assess for signs of injury or stress
- humanely destroy any animal that is injured such that it would no longer be fit to transport.

In some cases, accidents can result in animals escaping the vehicle. In this case:

- report the accident to the appropriate authority
- call the owner of the vehicle and the owner of the livestock or the owners representative
- check the remaining animals and assess for signs of injury or stress
- work with authorities and livestock owners to assist, where possible, in the retrieval of livestock
- humanely destroy any animal that is injured such that it would no longer be fit to transport.

Section 4 provides information on humane emergency destruction of animals and Tools 4.3, 4.4, 4.5 and 4.6 provide procedures and instructions for humane destruction.

Tools

TOOL 7.1 STANDARD OPERATING PROCEDURES FOR BREAKDOWNS AND EMERGENCIES



Additional tools to reference

TOOL 4.2 WORK INSTRUCTION: HANDLING ESCAPED ANIMALS

TOOL 4.3 STANDARD OPERATING PROCEDURES FOR HUMANE EMERGENCY DESTRUCTION

TOOL 4.4 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING STUNNING

TOOL 4.5 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING A FIREARM

TOOL 4.6 WORK INSTRUCTION: HUMANE EMERGENCY DESTRUCTION USING THE THROAT CUT METHOD

Tool 7.1

Standard operating procedures for breakdowns and emergencies

Mechanical breakdowns

- If possible, find a safe and suitable place to pull over and park the vehicle. This will keep the driver, animals and vehicle safe and out of the way of other road users. This should be undertaken carefully, slow down and indicate your intention to pull over. If possible, stop in a shaded area.
- Use hazard lights or other warning mechanisms such as hazard signs to alert other road users to the issue.
- Keep vehicle lights on to maximise the visibility of the vehicle.
- If safe to do so, check the animals and assess them for signs of injury or stress and humanely destroy any animal that is injured such that it would no longer be fit to transport.
- If safe to do so, repair the cause of the breakdown.
- Call for assistance and notify the owner of the cattle or the owners representative of the situation.

If the breakdown is likely to result in a lengthy delay, contingency arrangements, such as transferring the cattle to a replacement vehicle, should be made in conversation with the vehicle owner and the owner of the cattle or the owner's representative.

Accidents

- If possible, find a safe and suitable place to pull over and park the vehicle. This will keep the driver, animals and vehicle safe and out of the way of other road users. This should be undertaken carefully, slow down and indicate.
- Use hazard lights or other warning mechanisms such as hazard signs to alert other road users to the issue.
- Keep vehicle lights on to maximise the visibility of the vehicle.
- If safe to do so, check for injuries to any people involved in the accident and ensure people are made safe in the first instance.

- If safe to do so, check the animals and assess them for signs of injury or stress.
- Report the accident to the appropriate authority.
- Exchange details with the driver of the other vehicle.
- Report the incident to the owner of the vehicle and the representative of the owner of the cattle.
- If the vehicle has not been damaged in any way that renders it unroadworthy or unsafe to use, continue the journey.

Contingency arrangements, such as transferring the cattle to a replacement truck, should be made in conversation with the vehicle owner and the representative of the owner of the cattle.

Depending on the severity of the accident, there may be injury to people or animals. In such a case:

- call emergency services for assistance
- render assistance to any person injured
- call the owner of the vehicle and the owner of the livestock or the owners representative
- check the animals and assess for signs of injury or stress
- humanely destroy any animal that is injured such that it would no longer be fit to transport.

In some cases, accidents can result in animals escaping the vehicle. In this case:

- report the accident to the appropriate authority
- call the owner of the vehicle and the owner of the livestock or the owners representative
- check the remaining animals and assess for signs of injury or stress
- work with authorities and livestock owners to assist, where possible, in the retrieval of livestock
- humanely destroy any animal that is injured such that it would no longer be fit to transport.



08

Discharge and unloading

Unloading is a critical stage in maintaining the health and welfare of cattle. The health and welfare of the cattle can be safeguarded by ensuring unloading is undertaken calmly and effectively using appropriate infrastructure

KEY ACTIONS

- **Ensure unloading facilities are fit for purpose**
- **Ensure smooth and efficient flow of livestock with minimum stress**
- **Monitor the health and welfare of the livestock**

Ensure unloading facilities are fit for purpose

The process of moving cattle from a vehicle down a ramp and into a facility can make them nervous due to new sights, smells and sounds, and a new surface underfoot.

These are unavoidable stimuli; however, the effect of these can be managed through ensuring unloading facilities are fit for purpose.

Unloading facilities will generally be purpose built, often can be used for loading and unloading and should present an obvious and risk-free pathway for cattle to move from the back of the vehicle into the facility.

Inspect facilities prior to arrival and unloading

Before livestock arrive and are unloaded, check the infrastructure and facilities to ensure that they will not cause injury to the animals and will encourage animal movement (e.g. free of obstacles).

This is best done by walking around and through races, ramps and pens and:

- Checking for damage to flooring, such as holes that can cause animals to stumble and fall, as well as damage to metal rails and panels which can cause bruising or injury to the cattle.
- Identifying areas that may result in animals escaping. This includes gaps in gates or rails or items protruding from loading ramps which cause there to be a gap between the ramp and the vehicle.



Inspecting facilities



Open gutters and trash can cause animals to baulk, slip or fall

- Ensuring there is sufficient lighting and that it is even and subdued without dark shadows so as to encourage movement.
- Checking that the slope of the ramp is as even as possible and does not exceed approximately 20 degrees.
- Making sure raceways and ramp surfaces are non-slip. Even where there are non-slip surfaces in these areas such as patterned concrete, ensure they are free from build up of manure and any standing water is cleared.

- Removing or rectifying any distractions from the facilities, common distractions that can impact efficient cattle movement include:
 - » reflections on puddles or shiny metal
 - » dark entrances
 - » moving people or equipment up ahead
 - » dead ends
 - » items hung on the race
 - » items such as rubbish in the race or areas where cattle will move through
 - » uneven floors or a sudden drop in floor level
 - » noisy equipment and radios.

It can be useful to walk through the facilities as the cattle would as this allows identification of issues and distractions that will be obvious to the cattle but may not be obvious from outside the facilities.

Rectify issues if they are identified

All infrastructure and facilities should be inspected prior to use. Issues should be identified and repaired before they are used or alternative arrangements made until they are able to be repaired. This may include using different facilities to unload the cattle.

Ensure smooth and efficient flow of livestock and minimum stress

The unloading process should be monitored to ensure it is efficient and results in minimum stress to the animal to achieve a good animal welfare outcome and optimise meat quality. Unloading is a critical step in which there is a higher risk of injury occurring.

The following should be considered during unloading:

- Unloading should not commence until suitable ramps and vehicles are in place to avoid unnecessary delays. Vehicles should be planned to arrive to allow for the smooth flow of livestock from the vessel or vehicle and into the unloading facility.
- Animals should be unloaded calmly and efficiently and should not spend extended periods in raceways or on unloading ramps.
- Only move the number of cattle appropriate to the number and size of pens and yards available.
- Vehicles should be aligned with the lip of the ramp with no gap that animals could fall through and injure themselves or escape.
- Animals should be unloaded in the groupings determined as part of the pre-transport preparation process.

Ensure appropriate handling

An understanding of animal behaviour is important when handling animals. Handling will impact unloading efficiency and good handling will minimise stress during the process.

Handling should be calm, taking into consideration the following:

- Livestock may hesitate at the exit of the vehicle as they familiarise themselves with their surrounds before moving on. This is acceptable and not considered baulking.
- Do not try to make animals move or hit an animal if they have nowhere to go or are already moving in the right direction.
- Be alert to animals crowding at the ends of raceways. Cattle can be crushed or suffocate if they fall beneath others.
- Keep people not necessary to the unloading process out of the way.
- Keep sudden movements and loud noises to a minimum. Do not whistle loudly, shout or bang gates.
- Use livestock handling tools appropriately and do not use them to force animals to move if they have nowhere to go or to hit or apply unnecessary pressure to animals already moving in the right direction.
- Ensure electric goads are only used on adult cattle that are refusing to move and have room in which to move.
- Avoid unacceptable practices, including dragging, tripping, dropping, throwing, whipping, tail twisting and pulling, nose twitches, hitting or kicking.
- Do not force animals to walk over the top of others.
- Do not force water into an animal's mouth or up its nose in an attempt to make it stand or move.
- Prevent animals from escaping, if an animal does escape, move the animal back to a pen in a calm and efficient manner so as to avoid stress or injury to the animal.
- Manage animals that are unable to rise or walk unaided humanely.

Section 4 provides further information on handling that will assist during the unloading process.

Monitor the health and welfare of the livestock

Livestock should be observed as they walk past during unloading and checked to ensure they are not showing signs of injury.



Check animals during unloading

If an animal falls during unloading:

- Handling activities should cease and the animal be given the opportunity to regain its footing without pressure from handlers or other livestock.
- The animal should not be subjected to unacceptable practices including but not limited to hitting or dragging or lifting by the horns, legs or tail.
- Where relevant, ramp or race sides should be opened to allow the animal space in which to regain its footing.

If a fallen animal is unable to rise on its own or walk unaided the animal should:

- not be moved if moving will cause further pain or distress and be humanely destroyed in situ, or
- be moved to a hospital pen, only if such movement will not cause further pain or distress, and be treated if improvement is likely or be allowed to rest.



Animal unable to rise in loading yards

The humane emergency destruction of an animal involves using a method that results in rapid loss of consciousness followed by death while unconscious. This can include, where legally allowed:

- stunning an animal with an appropriate stunning device and then cutting its throat
- shooting an animal with an appropriate firearm
- if stunning or shooting are not able to be undertaken, then cutting the animal's throat with a sharp knife.

Tools

TOOL 8.1 RECEIVAL AND UNLOADING CHECKLIST



TOOL 8.2 WORK INSTRUCTION: HANDLING LIVESTOCK DURING UNLOADING.



Additional tools to reference

TOOL 2.3
TRANSPORT FACILITY,
VEHICLE AND
VESSEL CHECKLIST

TOOL 4.5
WORK INSTRUCTION:
HUMANE EMERGENCY
DESTRUCTION USING
A FIREARM

TOOL 4.2
WORK INSTRUCTION:
HANDLING ESCAPED
ANIMALS

TOOL 4.6
WORK INSTRUCTION:
HUMANE EMERGENCY
DESTRUCTION USING THE
THROAT CUT METHOD

TOOL 4.3
STANDARD OPERATING
PROCEDURES FOR HUMANE
EMERGENCY DESTRUCTION

TOOL 6.1
WORK INSTRUCTION:
INSPECTING VEHICLES
AND TRANSPORT
EQUIPMENT

TOOL 4.4
WORK INSTRUCTION:
HUMANE EMERGENCY
DESTRUCTION USING
STUNNING

Tool 8.1

Receival and unloading checklist

Check

- Is everyone aware of the arrival time of the transport vehicle or vessel?
.....
- Is everyone aware of how many vehicles, vessels, crates and animals will be unloaded?
.....
- Has an inspection been undertaken of the receival and unloading infrastructure and facilities?
.....
- Are only people required for the handling process interacting with the cattle?
.....
- Are handlers competent in animal handling practices during unloading?
.....
- Is the capacity of the unloading facilities appropriate for the number of cattle being unloaded?
.....

Tool 8.2

Work instruction: Handling livestock during unloading

This work instruction contains steps which should be followed by people responsible for the handling of livestock during unloading.



STEP 1

Undertake pre-unloading checks

- Ensure appropriate infrastructure and facility inspections have been completed and any issues identified have been rectified or alternative arrangements made.
- Ensure appropriate and competent handlers are ready when cattle are expected to arrive.
- Ensure appropriate number of pens and yards for the expected number of livestock are available.
- Ensure gates from ramps through to pens are open to allow the first load of cattle to move smoothly off the vehicle, through the races and into the appropriate pens. Make sure all other gates are closed securely.



STEP 2

Ensure vehicles are positioned correctly

- Back vehicles right up to the ramps.
- Ensure there is no gap between the ramp and the vehicle through which animals may escape.
- Close any gaps, gates or railings to prevent animals escaping.
- Check the position of the vehicle and realign if not correct.
- Ensure people are not standing in the way of where cattle will move.
- Open the vehicle unloading doors.



STEP 3

Move animals off the vehicle smoothly

- Allow animals to move off the vehicle at their own speed.
- Do not try to make animals move or hit an animal if they have nowhere to go or are already moving in the right direction.
- Use livestock handling aids to encourage movement, but not to hit the animal.
- Ensure livestock groupings are maintained as they are moved off the vehicle.
- To move animals along the raceway and ramp, calmly move down the side of the race or ramp in the opposite direction the animals are required to go.
- Inspect livestock as they move through ramps and raceways for any signs of injury.
- Be aware if animals are crowding at the ends of the raceway. Cattle can be crushed or suffocated if they fall beneath others.



STEP 4

Move animals into yards and pens smoothly

- Open appropriate gates leading from raceways and ramps into pens and yards. This should be done in order of pens to be unloaded.
- Ensure livestock groupings are maintained as they are moved out of raceways and into pens and yards.
- Work on the side of the animal to avoid standing in the animal's blind spot or directly in front of it.
- Work around the edge of the flight zone so that the animals move away but do not run.
- Apply pressure to the group by moving to and fro across the back of the group in a cross style (left to right) pattern.
- Move out of the flight zone to make an animal stop.
- Observe each animal as it walks past for signs of lameness and injury.
- Keep sudden movements and loud noises to a minimum. Do not whistle loudly, shout or bang gates.
- As livestock are moved into their appropriate pens, securely close gates to prevent escape.



09

Case study

Business overview

Organisation:

PT Elders Indonesia

Location:

Bogor, Indonesia

Operations:

- Importer of cattle from Australia
- Feedlot and abattoir operator handling cattle from Australia and some local cattle
 - » PT Elders Indonesia Feedlot, Lampung. Capacity 8,200 head
 - » Abattoir on the grounds of the Agricultural University Bogor (IPB), West Java

Introduction

PT Elders Indonesia was established in 2001 and, among other activities, imports, fattens and sells Australian cattle. They also process cattle in their abattoir at Bogor and sell boxed chilled beef.

Local cattle are also handled, although in small numbers for the wet market and as breeders.

Transport by road and ferry within Indonesia is a critical part of PT Elders Indonesia's business and ensuring this is managed efficiently delivers a good animal welfare and commercial outcome for the business. As Jason Hatchett, Operations Director, PT Elders Indonesia says "Good animal welfare makes good business sense. Moving cattle from A to B with minimal stress and maximum efficiency increases the production of saleable meat, maximises quality and minimises costs. By getting transport right, both the animals and the business benefits."

Imported cattle travel by ship to Bakauheni Port in South Lampung and from there to the PT Elders Indonesia Feedlot, Lampung, a journey of about 1.5 hours by road from the port to the feedlot. These cattle are then fed on and ultimately supplied by truck to local abattoirs in Sumatra or transported by road and ferry to the PT Elders Indonesia abattoir at Bogor West Java where they are processed into chilled and frozen beef and marketed under the Kooyong brand.

The small numbers of local cattle that move through the supply chain are supplied by local farmers in central Java. These cattle are fed to desired weights in the feedlot and then supplied to local abattoirs.

Pre-transport preparation and transport facilities

Achieving a good outcome in the discharge of livestock from the vessel at the port and transport by truck to the feedlot begins well before the ship arrives. Plans are put in place to achieve this including securing the services of a trusted and reliable trucking company which can ensure continuous discharge by dedicating sufficient vehicles to the task. This typically requires 8-10 vehicles per hour cycling from the port to the feedlot.

Contingency arrangements are communicated to the trucking companies, such as the procedures for handling breakdowns and emergencies during transport.

Enough pens to accommodate all cattle to be unloaded are made ready at the feedlot. This involves checking the unloading ramp, pens and races and making sure the pens are clean and ample amounts of fresh bedding, water and feed are on hand. It is recognised that the cattle will be tired from the voyage upon arrival at the feedlot and that rest and easy access to feed and water are important. The cattle are therefore allowed to recover for 7-10 days before they are handled.

Prior to the vessel arriving, management staff maintain contact with the ship's captain to ensure the timing of the vessel coming along side is well understood. This is communicated to the trucking company and the feedlot to ensure they are prepared.

Inspecting facilities and vehicles and monitoring livestock

Several PT Elders Indonesia representatives are stationed at the port to supervise discharge and loading. This includes:

- Conducting a final inspection of the trucks prior to animals being loaded to ensure they are in good condition and appropriate for transporting cattle.
- Ensuring handling is undertaken calmly and effectively during unloading from the vessel and loading onto vehicles.
- Monitoring livestock as they move off the vessel and onto vehicles and checking to ensure they are fit to load and transport. One of these representatives is equipped with a stunner to assist in the humane emergency destruction of any animals that are identified as unfit for transport, an intervention which to-date has not been required.

Once vehicles are loaded they make the 1.5 hour journey to the feedlot before returning to the port.

People responsible for animal welfare operate throughout PT Elders Indonesia's supply chains and ensure the condition of the receival facilities, including unloading ramps and yards, are adequate. Internal audits and external audits ensure an appropriate standard is maintained throughout the supply chain.

Journey planning and management

Trucks are loaded at the feedlot to supply the Sumatran wet markets and the Bogor abattoir.

Bogor is integrated supply chain and use two select trucking companies to transport cattle from the feedlot to the abattoir with which service level agreements are maintained, including relevant insurances. These long-term relationships are based on trust and proven reliability.

While the trucks used to carry the cattle on the 15 hour trip from the feedlot in Lampung to the abattoir in Bogor are not exclusive livestock trucks, procedures are in place to ensure the trucks and drivers are appropriate for the task. If the drivers are unfamiliar with transporting cattle when they arrive at the feedlot, they are informally trained by the feedlot staff. The staff also inspect all trucks, especially the flooring and crates, and ensure a minimum of 30cm of coconut husk is added as bedding. Provision of bedding has been shown to minimise slippage and prevent cattle from going down during transport. The amount of bedding and other truck requirements are detailed in the feedlot standard operating procedures.

The journey from Lampung to Bogor includes a ferry crossing from Sumatra to Java. Cattle are not unloaded for this crossing but rather, the truck is driven onto the ferry and is secured on board for the journey of about two hours.

Wet market trucks are supplied by the customer and these are usually specialised livestock trucks. The same truck and driver tend to work for the same buyer so long-term relationships are established between the feedlot staff and the driver.

Trucking from the feedlot is timed so that this occurs almost exclusively at night to ensure cooler conditions during transport and fewer delays due to lighter traffic conditions. On longer journeys, dispatch is timed to ensure the majority of the journey occurs at night.

Contingency arrangements

While vehicle breakdowns are rare, they can happen and substitute vehicles are available to ensure no disruption to discharge and minimise the disruption to the journey. Vehicle drivers have constant contact as required with the feedlot and trucking company via mobile phone. When a breakdown does occur, the drivers contact the feedlot manager or trucking company and a substitute truck is dispatched immediately.

Unloading animals from the inoperable vehicle onto the substitute vehicle is a crucial step as animals may escape and injure themselves. To avoid this, the substitute vehicle is backed up to the inoperable vehicle and the cattle walked across from one to the other without any gaps that they can escape through. Once all cattle have been moved across and checked and the vehicle has been secured, the journey may continue.

Sick or injured cattle are not consigned for slaughter. Such cattle are identified at the feedlot and either managed to recovery or slaughtered at the feedlot or feedlot abattoir, depending upon the circumstances.

If sick or injured animals are detected in transit, the truck drivers are able to contact feedlot management throughout the journey to discuss the condition of the cattle and seek advice.

There is 24 hour security at Bogor which is trained in the receipt of animals and able to initiate emergency procedures should an animal arrive at any time of the day requiring emergency attention.

Grouping animals

Cattle tend to stay in the same pen groups from the time they are discharged from the vessel, loaded onto vehicles, moved into pens at the feedlot and ultimately slaughtered. This assists to minimise stress as the animals have become socialised, or use to each other, and prevents aggressive behaviour. Cattle are not sorted prior to trucking to the wet market or Bogor. The pens in the feedlot hold about 12 head which is equivalent to the average transport vehicle size so it is often the case that the whole pen will be moved to the dispatch area, weighed and consigned on the one vehicle.

If less than a pen is consigned to the wet market, the cattle will be taken from the next pen to be consigned until that pen is empty. Buyers are not permitted to pick and choose from pens as this can destabilise social groups and cause unnecessary stress.

Optimising animal welfare during transport

PT Elders Indonesia recognise that good animal welfare is good for business. "Content cattle deliver higher weight gains, improved yields and higher quality meat," Jason said.

"For our business, the journey begins and ends with transport and it is critical that we get this part of the business right. Careful planning and pre-transport preparation, good facilities and vehicles and good handling during loading and unloading as well as good management during transit all make for happy cattle and higher yields."

Key points

- Choose your cattle carefully and make sure they are fit to load.
- Make sure the facilities and vehicles used throughout the journey are appropriate for the cattle being transported.
- Don't mix cattle that should not be mixed during transport.
- Planning for successful transportation is important – good transportation does not just happen, it is planned to happen.
- Good animal welfare is good for business.

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