# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Principles relating to the transport of pigs</td>
<td>3</td>
</tr>
<tr>
<td>Objectives</td>
<td>5</td>
</tr>
<tr>
<td>Standards</td>
<td>5</td>
</tr>
<tr>
<td>Guidelines</td>
<td>5</td>
</tr>
<tr>
<td>Responsibilities of all people involved in pig transport</td>
<td>5</td>
</tr>
<tr>
<td>Responsibilities of pig consignors (suppliers)</td>
<td>6</td>
</tr>
<tr>
<td>Responsibilities of drivers and transporting companies</td>
<td>6</td>
</tr>
<tr>
<td>Responsibilities of receivers (persons and companies at destination)</td>
<td>7</td>
</tr>
<tr>
<td>Responsibilities of people who plan journeys</td>
<td>7</td>
</tr>
<tr>
<td>Contingency arrangements</td>
<td>8</td>
</tr>
<tr>
<td>Stock-handling competency</td>
<td>9</td>
</tr>
<tr>
<td>Objective</td>
<td>9</td>
</tr>
<tr>
<td>Standard</td>
<td>9</td>
</tr>
<tr>
<td>Guidelines</td>
<td>9</td>
</tr>
<tr>
<td>Transport vehicles and facilities for pigs</td>
<td>10</td>
</tr>
<tr>
<td>Objective</td>
<td>10</td>
</tr>
<tr>
<td>Standard</td>
<td>10</td>
</tr>
<tr>
<td>Guidelines</td>
<td>10</td>
</tr>
<tr>
<td>Pre-transport selection of pigs</td>
<td>13</td>
</tr>
<tr>
<td>Objective</td>
<td>13</td>
</tr>
<tr>
<td>Standards</td>
<td>13</td>
</tr>
<tr>
<td>Guidelines</td>
<td>13</td>
</tr>
<tr>
<td>Selection of pigs for transport</td>
<td>14</td>
</tr>
<tr>
<td>Feed, water and rest considerations</td>
<td>14</td>
</tr>
<tr>
<td>Loading, transporting and unloading pigs</td>
<td>16</td>
</tr>
<tr>
<td>Objective</td>
<td>16</td>
</tr>
<tr>
<td>Standards</td>
<td>16</td>
</tr>
<tr>
<td>Guidelines</td>
<td>18</td>
</tr>
<tr>
<td>Loading livestock</td>
<td>18</td>
</tr>
<tr>
<td>Loading density</td>
<td>18</td>
</tr>
<tr>
<td>Pig handling</td>
<td>18</td>
</tr>
<tr>
<td>Special classes of pigs</td>
<td>19</td>
</tr>
<tr>
<td>Weak, ill or injured pigs</td>
<td>20</td>
</tr>
<tr>
<td>Segregation during transport</td>
<td>20</td>
</tr>
<tr>
<td>Driving management</td>
<td>20</td>
</tr>
<tr>
<td>Weather conditions</td>
<td>21</td>
</tr>
<tr>
<td>In-transit inspections</td>
<td>21</td>
</tr>
<tr>
<td>Feed, water, rest, stops and spells during or after the journey</td>
<td>21</td>
</tr>
<tr>
<td>Humane destruction</td>
<td>24</td>
</tr>
<tr>
<td>Objective</td>
<td>24</td>
</tr>
<tr>
<td>Standards</td>
<td>24</td>
</tr>
<tr>
<td>Guidelines</td>
<td>24</td>
</tr>
</tbody>
</table>
Introduction

Purpose

The purpose of this document is to describe standards and guidelines that ensure the welfare of pigs during land transport. The standards provide the basis for developing and implementing consistent legislation and enforcement across Australia, and guidance for all those responsible for pigs during land transport. They reflect available scientific knowledge, current practice and community expectations. The standards and guidelines may be reflected in the industry-based quality-assurance programs that include pig welfare provisions.

Scope

These standards and guidelines cover the transport of pigs by road, and by livestock transport vehicle aboard a ship. The standards apply to all those responsible for the care and management of pigs that are transported, including drivers, transport companies, owners, agents and livestock handlers at farming enterprises, depots, saleyards, feedlots and livestock-processing plants. The chain of responsibility for pig welfare in transport begins with the owner or their agent, and extends to the final receiver of the pigs. These standards and guidelines should be considered in conjunction with other requirements for transporting pigs, and related Commonwealth, state and territory legislation, including:

- for transport — the Australian Standards for the Export of Livestock, livestock health and biosecurity requirements, and regulated livestock loading schemes and driver regulations
- for other enterprises — model codes of practice or standards and guidelines for livestock species, saleyards, livestock processing (slaughter) establishments and the Australian Standards for the Export of Livestock.

Where legislation requires a higher standard than these standards, the higher standard will apply. Where there is a conflict with another standard in meeting the pig welfare standards, the welfare of pigs must be the first consideration unless there is an occupational health and safety requirement.

Interpretation

This document has been derived from the Australian Animal Welfare Standards and Guidelines Land Transport of Livestock. The general standards and guidelines that apply to all livestock and the specific standards and guidelines that relate to pigs are included. There is also a glossary containing definitions and other relevant information relevant to pigs and their transportation. Each chapter contains the following information:

- Heading
- Objective — the intended outcome(s) for each section of the standards and guidelines.
- Standards — the acceptable animal welfare requirements designated in this document. The requirements that must be met under law for pig welfare purposes. The standards are intended to be clear, essential and verifiable statements; however, not all issues are able to be well defined by scientific research or are able to be quantified. Standards use the word ‘must’.
- Guidelines — the recommended practices to achieve desirable animal welfare outcomes. The guidelines complement the standards. They should be used as guidance. Guidelines use the word ‘should’. Non-compliance with one or more guidelines will not in itself constitute an offence under law.
- Notes — Explanations of the context of the standards and guidelines (the notes are advisory statements for selected background information).

**Principles relating to the transport of pigs**

Transport can be stressful to pigs; it is therefore essential that effective management practices are in place to minimise any risks to their welfare. Pigs can be transported more effectively and with lower risk to their welfare if:

- the preparation of the pigs before transport is adequate for the intended journey
- competent selection of pigs is done before loading
- pigs are handled correctly at all times using well-designed and maintained facilities
- pigs are managed and handled by competent stock handlers
- road transport facilities and vehicles are designed and maintained for safe transport of pigs
- the journey is planned to ensure prompt delivery of the pigs, and undertaken to ensure appropriate timing of arrival with consideration of situations that may affect their welfare
- consideration is given to feed and water requirements, provision of adequate shelter, and protection from, or treatment of, injury and disease.

The risk of adverse animal welfare outcomes is related to:

- competency of personnel involved in any phase of pigs transport
- selection and preparation of the pigs for the journey
- journey duration
- food and water-deprivation time
- timing of water, feed and rest before transport and at unloading
- class of the pigs being transported
- road conditions and terrain
- weather conditions
- vehicle and facility design and maintenance
- space allowance on the vehicle
- ability to observe the pigs en route and take action to remedy any problem.

These risk factors can be cumulative and they apply across all stages of land transport as defined in the standards, from assembly before the journey to unloading at the destination. From an animal welfare perspective, land transport of pigs is a process that begins before the physical journey and only ends some time after this physical journey is complete.

Managing these risk factors is a shared responsibility between all the people involved, including owners, managers, handlers, agents and drivers. The risk factors for pig welfare during land transport also need to be managed within and across state and territory borders. At the start of the journey, the owner or agent should communicate to the driver accurate information on water provision, to ensure appropriate water management throughout the journey. The pre-transport phase has an important impact on the successful management of pigs during transport.

The provision of water is a key requirement for pig welfare; the transport process means that pigs are often deprived of water. The transport process includes activities from the time that pigs are first deprived of water before loading, until the time that they have access to water at the end of the journey.

From a pig welfare perspective, the stages in the transport process and the responsibilities of persons can be described clearly, as follows:

- mustering, assembling, handling and preparation of pigs, including selection as ‘fit for the intended journey’, feed and water provision, and holding periods (consignor)
- loading, transport and unloading, including assessing pigs during the loading process that they are ‘fit for the intended journey’ and additional inspections of livestock and spelling periods (transporter / driver)
- after unloading (receiver).
When pigs are transported on land, a competently operated and suitably designed vehicle should be used. At all times, pigs must be handled to prevent injury and minimise stress. These principles apply to all journeys involving pigs.
1 Responsibilities and planning

Objectives
People responsible for the care and management of the pigs at all stages of the transport process are identified, are aware of and are accountable for their responsibilities.

Adequate planning is carried out and contingency measures are in place to minimise risks to pig welfare.

Standards

| SA1.1 | A person in charge must exercise a duty of care to ensure the welfare of pigs under their control and compliance with the livestock transport standards. The responsibility for pig welfare in the transport process is:
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>the consignor for the:</td>
</tr>
<tr>
<td></td>
<td>a) mustering and assembling of pigs; and</td>
</tr>
<tr>
<td></td>
<td>b) handling; and</td>
</tr>
<tr>
<td></td>
<td>c) preparation, including inspection and selection as ‘fit for the intended journey’; and</td>
</tr>
<tr>
<td></td>
<td>d) feed and water provision; and</td>
</tr>
<tr>
<td></td>
<td>e) holding periods before loading; and</td>
</tr>
<tr>
<td>ii)</td>
<td>the transporter is responsible for:</td>
</tr>
<tr>
<td></td>
<td>a) the loading including final inspection during loading as ‘fit for the intended journey’; and</td>
</tr>
<tr>
<td></td>
<td>b) the loading density; and</td>
</tr>
<tr>
<td></td>
<td>c) additional inspections of the pigs; and</td>
</tr>
<tr>
<td></td>
<td>d) unloading</td>
</tr>
<tr>
<td>iii)</td>
<td>the master of the marine vessel is responsible for the pigs on roll-on/roll-off livestock transport vehicles during a sea journey</td>
</tr>
<tr>
<td>iv)</td>
<td>the receiver after unloading.</td>
</tr>
</tbody>
</table>

SA1.2 If a person in charge reasonably expects the journey time to exceed 24 hours, the transporter must possess a record which is accessible at the roadside and that specifies:

| i)    | the date and time that the pigs last had access to water; and |
| ii)   | the date and time of pigs inspections and any welfare concerns and actions taken; and |
| iii)  | emergency contacts. |

A person in charge who is transferring responsibility for pigs to be further transported for a total journey time of longer than 24 hours must provide a record with this information to the next person in charge.

Guidelines

Responsibilities of all people involved in pig transport

GA1.1 All people involved in planning a journey and mustering, assembling, handling, selecting, loading and transporting pigs have a responsibility for their welfare. They should communicate effectively to support those with key responsibilities, and should ensure that management systems are in place to minimise risks to pig welfare.

*Note: Many people and many tasks are involved in successfully transporting pigs.*
Responsibilities of pig consignors (suppliers)

GA1.2 The consignor is responsible for the pigs until they are to be loaded onto the transport vehicle. This responsibility should include but is not restricted to:

- selecting pigs to make sure that they are fit for the intended journey
- providing feed, water and rest before curfew or loading, as appropriate
- providing suitable holding and loading facilities that do not predispose livestock to injury
- handling pigs according to these standards and guidelines
- communicating feed, water provision times and other relevant information
- completing required documentation accurately for each pig consignment, including transferring the responsibility for their welfare
- making sure that any pigs that are unsuitable for loading following preloading inspection at the assembly point are appropriately managed, treated or humanely destroyed.

Note: Pig consignors may include owners, agents, drivers and transport companies, and personnel from properties, saleyards, depots and livestock-processing plants who handle pigs to be transported. There is a ‘chain of responsibility’ for those managing pigs welfare. In some parts, the responsibility for their welfare is clearly shared; for example, during loading between the consignor and the driver. Responsibility exists but is less clear when the impact of earlier decisions affects the welfare of pigs at a later time.

Responsibilities of drivers and transporting companies

GA1.3 The driver or transporting company is responsible for the pigs from the point of loading (including inspection and assessment of the pigs during loading), to the point of unloading and notifying the receiver of the pigs at the destination. This responsibility should include but is not restricted to:

- being competent in their tasks and key activities to meet the provisions of these standards and guidelines
- taking action to determine the time that pigs were deprived of water, from the previous owner or person responsible, including time without water during assembly, holding, loading or previous transport
- inspecting and assessing pigs at loading to ensure that they are fit for the intended journey
- inspecting pigs during the journey as required and taking action if a problem arises that affects their welfare
- making sure that the management, care or humane destruction of any pigs that are judged as weak, ill or injured during the journey is appropriate
- informing the consignor and receiver of any problem encountered during the journey in relation to the welfare of the pigs, including where pigs may not have met the specified fitness requirements for loading
- completing required documentation accurately for each pig consignment transported, including journey plans, as specified in these standards
- making sure that the plan for the journey takes into consideration the condition, class of the pigs, nature of the journey, weather conditions and the provisions in these standards, such as water-deprivation time and loading density
- driving in a manner that minimises impact on the welfare of the pigs, including appropriate driving techniques for the road conditions, managing pigs during weather that may predispose them to heat or cold stress, and considering rest-stops and the nature of the journey
- recording and communicating to the person(s) responsible when there are inappropriate holding, loading or unloading facilities at the property of origin or destination, so that corrective action can be taken
- having the contact details of owners or agents and customers at the source and destination for assistance as required
• notifying and transferring the responsibility for the pigs to the responsible person at the destination on unloading, including after-hours arrangements for receiving the pigs.

Note: If the time pigs were deprived of water is unknown at the time of loading, or if it differs across the consignment, this should be noted on the documentation. Transporting companies are mentioned because they may provide general or specific policy direction to their employed drivers in these areas; hence they bear a responsibility for pig welfare.

Responsibilities of receivers (persons and companies at destination)

GA1.4 The person at the destination is responsible for the pigs from the point of unloading and notification of pigs being received. This responsibility should include but is not restricted to:

• providing drivers, transport companies, agents, pick-up crews and carriers with contact details of relevant personnel at the destination, including personnel to be available out of hours, should a problem arise during the transport journey or assistance be needed on arrival
• communicating with the transport company or driver and providing effective instructions on the practices and arrangements for unloading and managing pigs if arriving out of hours
• handling and managing pigs in accordance with the provisions specified in these standards and guidelines
• providing water, feed and other requirements during holding as required
• providing suitable unloading or loading and holding facilities that do not predispose pigs to injury
• informing the transport company, driver and consignor of any adverse impacts on pig welfare from the journey that are first observed after arrival
• making sure that any pigs that are weak, ill or injured at unloading are identified, managed, treated or humanely destroyed at the first opportunity
• removing dead pigs from the vehicle.

Note: Persons at destination are responsible for receiving the pigs; they may include owners, operators and staff of properties, saleyards, depots and livestock-processing plants. There is also a responsibility for pig welfare that extends to company management at the destination.

Responsibilities of people who plan journeys

GA1.6 People responsible for planning journeys should:

• take into consideration
  o the nature of the intended journey
  o the class and condition of pigs
  o the weather and road conditions anticipated during the journey
  o the time that pigs are deprived of feed and water
  o planned rest stops and spells
• make sure that a sufficient number of personnel are available for each stage of the journey and at the planned time
• make sure, when planning the transport of pigs as a salvage operation, that the journey enables quick and direct transport, and avoids saleyards or holding depots.

GA1.7 Planning should ensure that pigs are transported to their destination as quickly as possible and via the most suitable route within legal limits.

GA1.8 Where information is not provided on water and feed provision for pigs being transported, the transport company, driver or agent should take action to obtain these times. This will allow determination of:

• the total time off feed and water, including mustering
• when the pigs have to be fed.
GA1.9 If interstate crossing points have fixed times of operation, the journey should be planned to accommodate these times, but should also meet the other requirements for welfare of the pigs.

Note: People responsible for planning the transport of pigs may include owners, agents, transport companies and drivers, livestock-processing plant, depot and saleyard personnel.

Contingency arrangements

GA1.13 As part of the planning for each journey, arrangements to manage any delay, breakdown or other emergency should be established to minimise risks to pig welfare during all transport. Contingency arrangements may involve written arrangements, journey plans, and details on consignment sheets or arrangements that are in place for rest stops, particularly for long-distance journeys.

GA1.14 Contingency arrangements should include, but are not restricted to, 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 predispose pigs to heat or cold stress
- poor road conditions
- illness or injury
- other issues specific to the journey or pigs being transported.

GA1.15 For all journeys, the transport company and driver should have the relevant contact details of owners or agents and customers at the origin and destination.

GA1.16 The transport company or driver should ensure that there are contingency arrangements in place for humane destruction. Such arrangements may include one or more of the following:
- people competent in humane destruction are available
- equipment for humane destruction is maintained and operational
- instructions on the recommended procedures for humane destruction are in the vehicle for reference
- contact details of competent persons that may assist in humane destruction are available
- contingency arrangements are in place at locations along the journey or at the destination for assistance with humane destruction.

GA1.17 If unexpected delays occur, such as vehicle breakdown, the driver should make every reasonable effort to minimise the delay and ensure that water is provided within the times specified in the standards.

GA1.18 Essential mechanical maintenance during the journey of a routine nature should be possible to prevent undue delays and minimise the risk to the welfare of livestock (e.g. tyre changes).

GA1.19 A maintenance logbook or record of servicing should be kept for the vehicle.
2 Stock-handling competency

Objective

Persons responsible for handling, managing or transporting pigs are competent.

Standard

SA2.1 A person involved in any part of the pig transport process must be competent to perform their required task, or must be supervised by a competent person.

Guidelines

GA2.1 Elements of competency for each phase of the pig transport process should include:

- understanding responsibilities for pig welfare
- planning journeys that satisfy the welfare standards and address contingencies that may arise, with consideration of extremes of weather, nature of the journey, class and condition of pigs, and time off feed and water
- contingency procedures and the ability to carry out the activities required to maintain the welfare of pigs during delay, breakdown or other emergencies
- maintaining records and taking action to determine the time pigs were deprived of water and food and calculating total time off for water and food
- pig handling and, where necessary, using handling aids and other equipment appropriately
- inspecting and assessing pigs for their fitness for the intended journey, and determining whether they meet the specified requirements
- identifying weak, injured or ill pigs and other behavioural signs of distress, that are relevant for assessment as being fit for the intended journey and taking the appropriate remedial action as relevant
- humane destruction by the choice of appropriate methods or the actions that need to be taken to contact or advise people who are competent
- vehicle operation and basic maintenance.

GA2.2 Supporting evidence of competency should include any of the following:

- records of on-the-job training
- relevant experience
- recognised training and staff training registers
- induction training
- supervisor sign-off for specific tasks.

Note: Further details relevant to elements of stock-handling competency are covered in other chapters, including those in Part B.
Transport vehicles and facilities for pigs

Objective

Pig transport vehicles and facilities for holding, loading and unloading are constructed, maintained and operated to minimise risks to pig welfare.

Standard

SA3.1 A person in charge must ensure that the vehicles and livestock handling facilities are constructed, maintained and operated in a way that minimises risk to the welfare of pigs. Vehicles and facilities must:

i) be appropriate to contain pigs; and

ii) have effective airflow; and

iii) have flooring that minimises the likelihood of injury or of pigs slipping or falling; and

iv) be free from internal protrusions and other objects that could cause injury; and

v) have sufficient vertical clearance for pigs to minimise the risk of injury.

Guidelines

GA3.1 Facilities, vehicles, crates and containers should provide a suitable environment to minimise the risk to the welfare of pigs from extremes of temperature, weather and humidity.

GB9.9 In hot weather, strategies should be considered to minimise heat stress and avoid windburn and sunburn. Strategies should include, but are not restricted to, deferring loading or travel during cooler times of the day or at night; using tarpaulins and shade cloth, hoses, sprays, misters; wetting bedding in accordance with biosecurity regulations, providing water; and making sure vehicles transporting pigs are not stationary. As a guide, 5% fewer pigs should be loaded in very hot weather.

GA3.2 Materials used in the construction of vehicles, crates and containers should be able to be cleaned effectively. There should be a cleaning program for livestock crates and containers between journeys.

GA3.3 Internal sheeting should be smooth to reduce the risk of pressure points and bruising.

GA3.4 Vehicle gates and facilities should be sufficiently wide to ensure easy movement of livestock and to minimise injuries.

GA3.5 Vehicle exhaust gases should not significantly pollute the livestock crate, to avoid respiratory distress.

GA3.6 The livestock crate should be designed to ensure that pigs can rise from lying in a normal manner without contacting overhead deck structures.

GB9.13 The space between the pig and the roof or upper deck should be sufficient to allow clearance at the top of the rump.
GA3.7 Limbs of pigs should not protrude from the livestock crate. Limbs should be contained within the livestock crate using an appropriate crate design, sound side paneling and appropriate loading densities.

GA3.8 Flooring and surfaces should be designed to maximise grip and minimise slipping and falling. Strategies to improve grip include slats or grooves in the surface. If pigs are seen to be slipping and falling, the floor surface and handling of pigs should be examined and appropriate action taken to prevent the problem.

GA3.9 The floor of multi-deck vehicles should be constructed and maintained in a way that prevents the soiling of pigs on lower decks.

GB9.11 Appropriate flooring should be provided when transporting pigs longer than 24 hours. This should include, but is not restricted to, rubber matting, bedding or other material as may be appropriate. There should be a cleaning program for livestock crates in accordance with biosecurity regulations.

GA3.11 Fixed partitions should be available in the livestock crate for use when travelling in hilly or high-traffic areas or when carrying small numbers of pigs, to prevent them being thrown around or injured. Partitions should also be used for segregation when required.

GA3.12 For pigs that are susceptible to cold, transport vehicles should have either fully enclosed fronts or the ability for the vehicle front, roof or canopy to be covered to prevent wind chill and cold stress.

GB9.10 In cold weather, loading strategies that minimise cold stress should be considered for classes of pigs that are likely to be more at risk (e.g. piglets). These strategies should include, but are not restricted to, using vehicles with enclosed fronts; covering sides of the vehicle with tarpaulins or other cover; and providing bedding according to biosecurity regulations. Pigs should not be fed before transport as they often get motion sickness and nausea resulting in vomiting.

GA3.13 Solid yard extensions should be used to cover any gaps between the loading ramp floor and the floor of the vehicle through which a pig or part of a pig might go down.

GA3.14 Railings on ramps and raceways should be of appropriate height, with the gaps sufficiently narrow at the bottom to prevent pigs being caught, slipping through or becoming injured.

GA3.15 Ramps need to be wide enough to ensure easy movement and should be of an appropriate slope for the class of pigs.

GB9.12 The loading ramp should be appropriate to the vehicle and allow optimal movement of pigs. Ideally, ramps should be 900–1000 mm wide and 20 degrees or less in slope.

GA3.16 Avoidable visual or noise distractions to pigs should be removed or reduced.
4 Pre-transport selection of pigs

Objective

Pigs are prepared and selected for transport, are fit for the intended journey.

Standards

Fit for the intended journey requirements as detailed in Part B.

SA4.1 Pigs must be assessed as fit for the intended journey at every loading by a person in charge. An pig is not fit for a journey if it is:
   i) unable to walk on its own by bearing weight on all legs; or
   ii) severely emaciated; or
   iii) visibly dehydrated; or
   iv) showing visible signs of severe injury or distress; or
   v) suffering from conditions that are likely to cause increased pain or distress during transport; or
   vi) blind in both eyes; or
   vii) known to be, or visually assessed to be near (within two weeks) parturition, unless time off water and journey is less than four hours duration to another property.

SA4.2 Any pig assessed to be not fit for the intended journey must only be transported under veterinary advice.

SA4.3 The consignor must only supply pigs that are fit for the intended journey.

SA4.4 A person in charge must not load, nor permit to be loaded, pigs that are not fit for the intended journey except under veterinary advice.

SA4.5 If an pig is assessed to be not fit for the intended journey before loading, a person in charge must make appropriate arrangements for the care, treatment or humane destruction of the pig at the first reasonable opportunity.

Note: Being ‘fit for the intended journey’ is an important issue for pigs’ welfare. Many factors may affect pig’s fitness for the intended journey at different stages of a journey. The species requirements are further set out in Part B. Selection of fit pigs is a responsibility shared between the consignor and the driver. Loading includes vehicle-to-vehicle transfers.

Guidelines

Fitness

GB9.12 Health conditions that could cause pig welfare to decline during transport and should be considered unfit for transport include any of the following:

- lameness conditions where a pig is able to walk on its own by bearing weight on all legs
- tail bite wound
- fresh rectal, vaginal or perineal prolapse

---

2 This information is based on a yet unpublished, pictorial, fit-to-load guide from Portec Australia, which will be used as a reference once published.
• umbilical, scrotal or traumatic hernias that are ulcerated or injured or of a size greater than 30 cm in diameter should not be loaded and should be destroyed on-farm.

GB9.2 Transporting sows about to farrow or more than 80 days pregnant should be avoided. Transport of sows should be over short distances. Additional care should be provided, and may include space to lie down on the vehicle, and appropriate feed and water.

GB9.3 Transport of lactating sows with piglets should be avoided. If transported, the lactating sows should be segregated from all other pigs and the piglets protected appropriately. Additional care should be provided, and may include space to lie down on the vehicle, and appropriate feed and water.

Selection of pigs for transport

GA4.1 Before loading pigs, the consignor should notify the driver of any concerns about fitness of pigs to be transported. Any special requirements for a consignment should be agreed between the consignor and the driver.

GA4.2 Records should be maintained of any pigs that are transported under special circumstances.

GA4.3 Effective management options for pigs considered not fit for the intended journey should include, but is not restricted to:

• effective containment in a suitable holding area
• rest
• provision of shelter, feed and water
• veterinary treatment
• humane destruction.

GA4.4 Pigs with broken limb bones should be humanely destroyed unless veterinary advice recommends alternative measures.

Feed, water and rest considerations

GA4.5 Pre-transport spell (water and rest) periods should be provided for the following classes of pigs, if the travel time is expected to be of a long duration and approaching the maximum water-deprivation time for their class:

• pigs that are pregnant, have recently given birth, are lactating or with young at foot
• immature pigs as defined in Part B
• pigs that are unaccustomed to handling
• pigs that are stressed or fatigued from mustering or handling
• weak pigs.

Note: Water and feed curfews can be an important part of pig management for transport. Issues include faecal and urine contamination of pigs, vehicles and roads, and slipping and falling of pigs in wet livestock crates. Water curfews must be managed in the context of the total time off water.

GA4.6 Where water is provided, it should be easily accessible to all pigs and pigs should be able to drink with normal posture.

GA4.7 Pigs should be monitored to determine whether they are drinking as expected and, if they are not drinking, action should be taken to encourage water intake. Actions may include:
• ensuring pigs can access the water facilities (e.g. through stocking density, trough size and space)
• checking observable water quality (e.g. by flushing water lines, keeping troughs clean)
• adding electrolyte or molasses, providing water on the ground or providing feed.
Where there is a general problem with pigs from many sources not drinking, water chemistry should be examined.

GA4.8 Where food is provided, it should be of adequate quality and amount for the species. Where food offered during the transport process is different from normal rations, food intake should be encouraged during a period of familiarity training.

Note: Providing water is a key determinant of pig welfare during transport. Water provision times and spell periods are defined in Part B.

Time off water is calculated as the total time that pigs are not provided with water, further specified in the Glossary, Chapter 5 and in Part B. The elements of this calculation may include:
• mustering (away from water)
• assembly in holding areas and yards (where water is not provided)
• curfews
• time on the vehicle, either moving or stationary (where water is not provided)
• time for unloading into new holding areas at the destination until water is provided.
A pre-transport spell period is recommended for the best welfare of the pigs and may be required to ensure periods for water provision are not exceeded. A minimum acceptable spell period is defined as four hours of access to water with space to lie down and rest. Food and shelter should also be considered. Further details are provided in Part B.
5 Loading, transporting and unloading pigs

Objective

Pigs are handled, loaded, transported and unloaded in a manner that minimises risks to their welfare.

Standards

Water, food and rest provisions and handling requirements are detailed in Part B.

<table>
<thead>
<tr>
<th>Class</th>
<th>Maximum time off water (hours)</th>
<th>Minimum Spell duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigs</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Lactating sows and piglets</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Weaners</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

SB9.1 A person in charge must ensure time off water does not exceed the time periods given below for each class of pig:

SB9.2 and SA5.1 If pigs have been off water for the maximum time permitted, the person in charge must ensure the pigs are provided with a spell for 12 hours (water, food, space to lie down and rest) before continuing the current journey or before starting another journey.

SB9.3 Journey time may be extended to 72 hours only if each of the following conditions are satisfied:
   i) pigs must have access to water and food on the vehicle within every 24 hours; and
   ii) there must be space for all pigs to lie down; and
   iii) pigs must be assessed regularly to be fit for the remainder of the intended journey; and
   iv) pigs must be provided with water, food and rest for 24 hours before starting another journey.

SA5.2 The person in charge must manage time off water to minimise risk to the welfare of the pigs according to:
   i) the increased risk to their welfare of longer journeys close to the permitted maximum time off water; and
   ii) the assessment of whether the pigs are fit for the remainder of the intended journey; and
   iii) the predicted climatic conditions, especially heat or cold; and
   iv) the class of pigs, especially if weak, pregnant, recently having given birth, lactating or immature; and
   v) the nature of the intended journey.

SA5.3 If no records are provided indicating the last time the pigs had access to water, pigs at a livestock handling facility (saleyard, spelling facility or staging point) must be provided with reasonable access to water by the person in charge within 24 hours at the facility, or within the maximum time off water relevant class of pig if this is less than 24 hours.

SA5.4 The driver must assess the loading density for each pen or division in the livestock crate. The assessment is based on average live weight of the intended loading, and must be managed to minimise risk to the welfare of the pigs. Determination of loading density must consider all of the following factors:
i) class
ii) size and body condition
iii) predicted climatic conditions
iv) nature of the intended journey
v) design and capacity of the vehicle.

SA5.5 The driver must have the final decision on the loading density.

SA5.6 The driver must segregate pigs by sufficient internal partitions to minimise risk to their welfare. Determination of segregation must consider all the following factors:
   i) class and size
   ii) general health of the pigs
   iii) level of aggression
   iv) nature of the intended journey.

SA5.7 A person who handles pigs in the transport process must do so in a manner that is appropriate to the class, and minimises pain or injury. Specifically:
   i) pigs must not be lifted by only the head, ears, neck or tail; or
   ii) pigs must not be lifted off the ground by a single leg, they weigh less than 15 kilograms; or
   iii) mechanical lifting of pigs must ensure that the pig is supported or secured as necessary; or
   iv) pigs must not be thrown or dropped; or
   v) pigs must not be struck in an unreasonable manner, punched or kicked; or
   vi) pigs which are unable to stand must not be dragged, except in an emergency to allow safe handling, lifting, treatment or humane destruction.

SB9.4 A person loading, transporting or unloading pigs must not use an electric prodder except where:
   i) individual pigs weigh 60 kgs (live weight) or more; and
   ii) other reasonable action to cause movement have failed; and
   iii) there is reasonable risk to the safety of the driver or the pig(s)
and (SA5.8) A person who handles pigs in the transport process must not use an electric prodder:
   i) on genital, anal or facial areas; or
   ii) on pigs that are unable to move away; or
   iii) excessively on an animal.

SA5.9 A person in charge must ensure that a dog is under control at all times during loading, transporting and unloading pigs.

SA5.10 A transporter must ensure that a dog is not transported in the same pen as pigs.

SA5.11 A person in charge must ensure that a dog that habitually bites is muzzled if working with pigs.

SA5.12 A transporter must ensure that the ramp and the vehicle are properly aligned, and that any gap between the ramp and the vehicle is sufficiently narrow to minimise the likelihood of injury to pigs during loading and unloading.

SA5.13 The transporter must:
   i) inspect the pigs crate immediately before departure, to ensure that doors are closed and secured; and
ii) inspect the receival yard immediately before unloading, to ensure that there is free access and sufficient space for the pigs intended to be unloaded; and

iii) take reasonable steps to notify a receiver of the arrival of the pigs at the destination.

SA5.14 The transporter must inspect pigs:

i) on the vehicle before departure; and

ii) except when pigs travel on roll-on/roll-off livestock transport vehicles during a sea journey, within the first hour of the journey and then at least every three hours or at each driver rest stop, whichever comes first; and

iii) at unloading; and

iv) at each driver or vehicle change over stop.

SA5.15 Upon identifying a distressed or injured pig at an inspection, a person in charge must provide or seek assistance at the first reasonable opportunity. Weak, ill or injured pigs must be identified to the person receiving the pigs.

SA5.16 A person in charge must take reasonable steps to minimise the impact of extreme weather conditions on the welfare of pigs during the transport process.

SA5.17 The receiver of pigs must make arrangements at the first reasonable opportunity for separating weak, ill or injured pigs for rest and recovery, appropriate treatment, or humane destruction and disposal of dead stock.

Guidelines

Loading livestock

GA5.1 Before loading, the driver should inspect the condition of the livestock crate and ensure it is correctly set up and fully operational. If inspecting the vehicle at night or where light is insufficient, a portable source of lighting should be available.

GA5.2 Pigs should be loaded and unloaded from the transport vehicle in a calm and quiet manner to ensure that stress and injuries are minimised.

GA5.3 The driver should ensure that limbs of the pigs are not protruding from the crate before each departure.

Loading density

GA5.4 Where the area available on the vehicle or in the livestock container is small and the effective space available to the pigs is reduced by irregularly shaped boundaries, loading density should be reduced.

GA5.5 Pigs on the vehicle should not be loaded either too loosely or too tightly because this may increase the risk of injury. In general, over-loading is the greater risk to their welfare. The numbers per pen or container should be sufficient to provide stability for the class of pigs and the intended journey. Internal gates should be closed during transport to ensure stock density is evenly spread. When not in use, internal gates should be secured.

GB9.7 The following space allowances based on the standing position specified in the table below should be provided:
Average live weight (kg) | Space allowance (m²/head) | Number of head per 12.5 m x 2.4 m deck
---|---|---
5 | 0.04 | 750
15 | 0.09 | 333
25 | 0.12 | 250
50 | 0.22 | 136
75 | 0.29 | 103
100 | 0.35 | 85
125 | 0.42 | 71
150 | 0.48 | 62
175 | 0.55 | 54
200 | 0.61 | 49
225 | 0.68 | 44
250 | 0.74 | 40
275 | 0.81 | 37
300 | 0.87 | 34

a Based on the standing position

GB9.8 Care should be taken to provide adequate space so that pigs can lie down on transport, particularly when planning for extended journeys.

**Pig handling**

GA5.6 Pigs should be handled in a manner that minimises stress. Pigs with no room to move should not be forced, prodded, pushed or excessively handled. Where excessive handling effort occurs, facility design should be examined. Excessive yelling, noise making and sudden movements should be avoided.

GB9.14 Pigs should be handled quietly at all times. Pigs should be managed as far as is reasonably possible to ensure that aggression between pigs does not lead to injury or stress during assembly, mixing, loading, penning on the vehicle, transport and unloading.

GA5.7 Pig handlers should ensure that bystanders or items that may cause pigs to balk do not impede their smooth loading and unloading. Avoidable distractions should be minimised.

GA5.8 Weaner pigs, and weak or injured pigs may be carefully lifted and placed on or off the vehicle if they cannot negotiate loading ramps.

GA5.9 Pigs should not be pushed or pulled by the ears or tail.

GB9.15 When handling or moving pigs, stockpersons should use moving boards, flappers and canes.

*Note: Most herd livestock have a strong following instinct and all pigs have a ‘flight zone’ that must be understood and used for efficient handling.*

**Handling aids**

GA5.10 Handling aids should be used that are suitable for the class of pigs being handled. Handling aids should be used with care. Aids for moving pigs may include electric prodders, polypipes, sticks, flappers, backing boards, rattlers and canes with flags attached; hand, arm or body of the handler; and dogs.
Electric prodders

GA5.11 Electric prodders should not be used repeatedly on a single pig.

GA5.12 Electric prodders should be used sparingly and as a last resort. Alternative handling aids and methods should be selected first.

GA5.13 Electric prodders should not be used on pigs under six months old.

Dogs

GA5.14 Dogs should be appropriately trained to move pigs and be responsive to commands. Dogs should be provided with water and rest after working.

Special classes of pigs

GA5.15 Transport arrangements (including spells) should be appropriate for the class and condition of the pigs. In all circumstances, transport of the following classes of pigs should be carefully managed to minimise risk to their welfare:
- pigs in third trimester of pregnancy
- pigs that have recently given birth
- pigs that are lactating and with young at foot
- immature pigs
- weak pigs.

GA5.16 Young, recently weaned pigs, and weak pigs should be handled carefully and transported directly to their destination.

GA5.17 If pigs are born in transit, special arrangements should be made to protect the newborn pigs as soon as possible. These arrangements may include separate penning with the mother in the livestock crate, unloading at a spell stop, or humane destruction of the newborn.

Note: Requirements for the transport of special classes of livestock are detailed in Part B.

Weak, ill or injured pigs

GA5.18 Weak, ill or injured pigs should be managed to minimise risks to their welfare. Management may include shortening the journey by transporting directly to the destination, providing additional spells, protecting from extreme weather, not mixing with stronger pigs and not consigning to saleyards.

GA5.19 Weak, ill or injured pigs that are able to walk, do not have broken limbs and are not in pain should be assessed individually.

GA5.20 Weak, ill or injured pigs that are able to walk, do not have broken limbs and are not in pain but have a higher risk of poor welfare should be transported only if necessary for the better management of the animal.

GA5.21 Where there is concern about the assessment of fitness for the intended journey, veterinary advice should be sought.

Segregation during transport

GA5.22 Mixing unfamiliar groups and aggressive pigs should be avoided, unless appropriately managed through handling and segregation arrangements.
GA5.23 Pigs that are particularly susceptible to disease, stress or injury, or that are being transported for veterinary treatment, should be penned separately on the vehicle, and either loaded last or first, to minimise any adverse welfare effects.

**Driving management**

GA5.24 Drivers should use smooth driving techniques, without sudden turns or stops, to minimise excessive movements of pigs and to prevent injuries, bruising, slipping and falling.

GA5.26 Airflow should be appropriate at all times, including when the vehicle is stopped.

GA5.27 Where there is any road accident involving the transport vehicle, all pigs should at the first opportunity be:
- assessed, in the standing position if possible
- removed for treatment, or
- humanely destroyed at the accident site.

**Weather conditions**

GA5.28 Weather conditions should be taken into consideration when transporting pigs if there is a risk of heat or cold stress.

GA5.29 Weather conditions during a stop should be considered and action taken to ensure pigs are not subject to heat or cold stress.

GA5.30 In hot weather, the journey should be managed to minimise the risk of heat stress. This may include loading and transporting susceptible pigs during the cooler parts of the day, not stopping, and providing shade and other cooling strategies.

GA5.31 In extremely hot or humid weather, careful attention should be paid to the airflow of the transport unit; the speed of travel; the number, location and conditions of planned stops; loading density; and the condition of the pigs being carried.

GA5.32 During cold weather, care should be taken to avoid cold stress and wind chill, particularly for weaner pigs. This might include providing cover for the vehicle, enclosing the front of the vehicle, providing food before loading, avoiding colder weather or avoiding loading wet pigs, or stopping the vehicle.

**In-transit inspections**

GA5.33 A source of lighting should be available to carry out inspections at night or in poor light.

GA5.34 Drivers should inspect livestock as soon as practical after any unusual or difficult road or weather conditions.

GA5.35 If a problem with the pigs is identified during transit, even when the problem is rectified, additional checks should be made as necessary to ensure the welfare of the consignment. Drivers should notify ahead for assistance if necessary.

**Feed, water, rest, stops and spells during or after the journey**

GB9.6 Spells during transport of pigs should be avoided due to the risks of poor welfare associated with unloading and reloading and for biosecurity reasons. For rest stops or
unexpected stops, arrangements should be made to protect pigs from the extremes of heat and cold, and provide them with water and feed as necessary.

GB9.5 On unloading, pigs should be fed and watered within 24-hour intervals in accordance with the relevant standards for production, saleyard and processing sectors.

GA5.37 During a voluntary water stop, in addition to water and space to lie down, pigs should be provided with the following additional provisions:
• access to appropriate food if the stop is greater than 12 hours
• enough space for exercise
• separation appropriate to the travel group.

GA5.38 Drivers and transport companies should be flexible when determining timing and length of stops and spells in transit, to achieve the best possible welfare outcomes.

GB9.4 Additional considerations for pig welfare should be made for long-duration travel:
• for pigs after 12 hours off water
• for lactating sows, piglets and weaners after eight hours off water
• for pregnant sows after eight hours off water.
  These considerations should include:
• that the pigs are fit for the remainder of the intended journey
• that adverse hot weather conditions are not prevailing or predicted
• a longer spell time at the end of the journey
• the recent management of the pigs before first loading.

GA5.39 The timing and quality of spells for pigs that are to be transported on multiple, consecutive journeys should be carefully considered to maximise fitness for travel.

Note: If a journey is broken by unloading for short periods, such as occurs at a saleyard or en route to a livestock processing establishment, care should be taken that pigs are not deprived of feed and water beyond the limits specified.

GA5.40 Where pigs have been transported for extended periods, or are special classes of pigs, longer spell periods should be provided.

GA5.41 Where there is doubt about a pig’s fitness to resume a journey, the spell period should be extended, veterinary advice sought, and action taken to care for any pigs that are rejected.

GA5.42 Water should be easily accessible to all pigs and pigs should be able to drink with normal posture.

GA5.43 Pigs at a saleyard, spelling facility or staging point should be provided with reasonable access to water after 12 hours, and to feed after 36 hours at the facility.

GA5.44 During spells, pigs should be monitored to determine whether they are drinking as expected, and if they are not drinking, action should be taken to encourage water intake. Actions may include ensuring pigs can access the water facilities (through appropriate stocking density, trough size and space), checking observable water quality (by flushing water lines and keeping troughs clean), adding electrolyte or molasses, and providing water on the ground or providing feed. Where there is a general problem with pigs from many sources not drinking, water chemistry should be examined.
Note: A spell is the provision of water, food and space to lie down to rest for the minimum time periods defined by standards for each class of pigs and is a mandatory requirement when maximum time off water is reached, before starting a further journey. During a voluntary water stop, pigs should be unloaded, allowed access to water and space to lie down, if this is not able to be provided on the vehicle. Feeding is not recommended during short water stops of less than 12 hours. Pigs must be inspected for fitness for the remainder of the intended journey before reloading. Driver rest stops are different from voluntary water stops. During a driver rest stop, pigs are generally not unloaded. No water provision time credit is given for a driver rest stop. Pigs are inspected on the vehicle. Weather conditions during any stop or spell can have an important impact on pig welfare.

Unloading pigs
GA5.45 Before unloading, the driver should check the condition of the receival area and make sure appropriate pens and water supplies are available. When inspecting the yard at night or where light is insufficient, a portable source of lighting should be available.

GA5.46 At unloading, if the facility is unmanned or out-of-hours arrangements are to be followed, drivers should make sure that unloaded pigs have access to water.

GA5.47 Pigs should be unloaded promptly on arrival at the destination.

GA5.48 Pigs should be allowed to walk quietly and calmly off the vehicle to minimise stress and injury. Particular care should be taken during unloading as pigs will be fatigued from the journey.

GA5.49 At night, lighting should be positioned to give even illumination over ramps, races, yards and inside the transport vehicle, and should not shine into the eyes of pigs moving in the desired direction.

Note: Requirements relating to handling, loading facilities and inspections apply to the unloading of pigs.

Pigs that are not fit for the intended journey
GA5.50 In the case of an emergency, where an unexpected substantial delay has arisen during the journey, time off water may be extended, provided that:
• it is in the best welfare interests of pigs to be transported
• the reason, location, date, start and finish times of the delay is recorded.

GA5.51 Effective arrangements for pigs considered not fit to travel should include, but are not restricted to:
• effective containment in a suitable holding area
• rest
• provision of shelter, feed and water
• veterinary treatment
• humane destruction.

Identifying weak, ill or injured pigs on arrival
GA5.52 Pigs that cannot walk from the vehicle (‘downers’) should be destroyed humanely on the vehicle, where practical. Alternatively, facilities, equipment and sufficient personnel should be available for the humane unloading of these pigs and their humane destruction at the first opportunity.

GA5.53 Following the journey, feedback on livestock welfare should be provided by the driver to the consignor of the livestock.
6 Humane destruction

**Objective**
Where it is necessary to destroy pigs, it is done promptly, safely and humanely.

**Standards**

<table>
<thead>
<tr>
<th>SA6.1</th>
<th>A person in charge must ensure that humane destruction methods result in rapid loss of consciousness followed by death while unconscious.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA6.2</td>
<td>A person in charge must ensure a moribund pig is humanely destroyed by a competent person or under the direct supervision of a competent person at the first reasonable opportunity.</td>
</tr>
<tr>
<td>SA6.3</td>
<td>If a competent person is not immediately available to humanely destroy a pig, the person in charge must arrange for a competent person to carry out the procedure at the first reasonable opportunity; unless it is in the welfare interest of the pig and a competent person is not immediately available, and the person considers they have the capability to destroy it.</td>
</tr>
<tr>
<td>SA6.4</td>
<td>A person humanely destroying a pig must take reasonable action to confirm it is dead.</td>
</tr>
<tr>
<td>SA6.5</td>
<td>A person must only use blunt trauma to the forehead to destroy a piglet up to 15 kg live weight.</td>
</tr>
<tr>
<td>SA6.6</td>
<td>Pigs must not be destroyed by bleeding-out by neck cut.</td>
</tr>
</tbody>
</table>

**Guidelines**

**Humane destruction methods**

GA6.1 Humane destruction should be done with the minimum number of people present, and other distractions should be minimised.

GA6.2 The pig should be handled carefully and be appropriately restrained so that it is not unnecessarily distressed or alarmed. Where livestock are able to walk, they should be handled in a race or crush.

GA6.3 Pigs should be brain-shot by rifle or captive bolt in the approved positions, according to the standards in Part B.

*Note:* The primary consideration in humane destruction is to prevent the pig from suffering further pain or distress. Part B defines recommended methods for humane destruction for each class of pigs. In the context of the transport process, humane destruction is an emergency procedure. Many practical, safety and legal considerations will influence the choice of a humane destruction method. In the context of transport, it is accepted that pigs to be destroyed will be appropriately restrained for close handling. The most prompt, approved method to relieve suffering is recommended.

**Observing pigs after humane destruction**

GA6.4 Following use of a humane destruction method, pigs should be monitored for at least three minutes to ensure that death has occurred.
GA6.5 To determine whether humane destruction has caused death, two or more of the following signs should be observed (the first four signs are usually the most useful):

- loss of consciousness and deliberate movement (this sign alone is not sufficient, as the pig may just be stunned; involuntary movements may occur in a dead pig)
- absence of rhythmic respiratory movements (this sign alone is not sufficient, as there may be temporary respiratory failure)
- absence of corneal ‘blink’ reflex when the eyeball is touched
- maximum dilation of the pupil, nonresponsive to light
- absence of response to painful stimuli (although the withdrawal reflex is not reliable)
- absence of intentional vocalisation (pig may gasp but this should not be in a consistent pattern)
- tongue becomes limp and absence of jaw muscle tension (may be difficult to judge)
- absence of heartbeat (requires expertise to detect; heartbeat may persist for some minutes in a pig that is brain dead)
- absence of a pulse (requires expertise to detect, as for heartbeat)
- loss of colour in the mucous membranes, which become pale and mottled
- glazing of the eyes, where the cornea becomes opaque, dry and wrinkled (onset after some time, therefore not immediately useful)
- rigor mortis (onset after several hours, therefore not immediately useful).

GA6.6 Return of rhythmic breathing, corneal reflex, vocalisation or deliberate movement are the main signs that a pig is only stunned and requires the application of an approved method to ensure death.

GA6.7 If it is not certain that a pig is dead, then an approved method should be used immediately to ensure death in a rapid and humane manner. If necessary, bleeding-out or another technique should be used to ensure death in unconscious pigs.

Note: The confirmation of a pig’s death following a humane destruction procedure can be a difficult task to judge, and requires training and experience in pig responses. It is important that a pig is monitored in the three minutes immediately following the humane destruction procedure.

Recommended methods and procedures for humane destruction

Note: The following guidelines provide information on the recommended methods for humane destruction. Further detail on specific practices and applying methods to pigs is presented in Part B.

Firearms

GA6.8 Firearm use should be in the frontal, temporal or poll positions.

GA6.9 Firearms should be cleaned regularly and maintained in optimal working condition.

GA6.10 To ensure maximum impact and the least possibility of misdirection, projectiles should be fired at the shortest range possible, but not with the barrel in contact with the pig’s head.

GA6.11 Suitable projectiles and propellant charges for the class of pig and situation should be used to always achieve humane destruction with reasonable personal safety if carried out correctly.

Note: In general, firearms are the most acceptable method of humane destruction for pigs. In transport situations, the distance between the end of the firearm barrel and the pig is expected to be between 10 and 100 cm. The only approved target organ is the brain. There are three effective aiming points at the head: frontal, poll and temporal. The poll is not recommended for the pig. Before firing, the pig’s head must be still. For the frontal method, the firearm or captive bolt
should be directed at a point in the middle of the forehead where two lines from the bottom side of the ears to the eyes intersect. The line of fire should be aimed into the skull towards the imagined centre of the brain or spinal cord as indicated in the diagrams. For the temporal method (firearm only), the pig is shot from the side of the head so that the projectile enters the skull at a point midway between the eye and the base of the ear on the same side of the head. The projectile should be directed horizontally into the skull. This method is an option for adult pigs due to the heavier bone structure of the front of the skull. A firearms safety consideration is that projectiles may exit the skull.

Figure B9.1 Recommended positions for humane destruction of pigs

Note: (A) indicates the frontal method for firearm and captive bolt and (C) indicates the temporal method suitable for firearm only. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions. The aim point for the frontal position is low on the forehead. The positioning lines go from the outside base of the ears to the eyes. The diagrams are representational and individual anatomical differences should be taken into account.

Firearms energy specifications are as follows:
- the standard 0.22-long rifle cartridge means the use of any 0.22 rim fire cartridge that produces in excess of 100 foot pounds of energy at the muzzle
- the standard 0.22-magnum cartridge means the use of any 0.22 rim fire magnum cartridge that produces in excess of 300 foot pounds of energy at the muzzle
- the centre fire cartridge means the use of any centre fire cartridge that produces in excess of 1000 foot pounds of energy at the muzzle.

GB9.17 For adult pigs, a rifle should deliver at least the muzzle energy of a standard 0.22 magnum cartridge and should be aimed in the frontal or temporal positions for older boars and sows, a 0.30-calibre firearm should be used. For piglets, a rifle should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge and should be aimed in the frontal or temporal positions. Figure B9.1 shows the optimum position for humane destruction of pigs.

Captive bolt devices

GA6.12 Captive bolt use should be:
- in the frontal or poll positions; and
- accompanied by appropriate restraint; and
- applied in contact with the skull.
GA6.13 The captive bolt stunner should be pressed firmly on the head before being discharged, and should be positioned as described in the approved positions for pigs. The temporal position is not an option.

GA6.14 For penetrating captive bolt stunners, the cartridge power and length of bolt should be appropriate to the species and class of pig. Non-penetrating captive bolt stunners are not recommended.

GA6.15 Operators should make sure that charges intended for use are appropriate for the class of pig.

GA6.16 Captive bolts should be regularly cleaned and maintained in optimal working condition according to the manufacturer’s instructions.

Note: Two types of captive bolt stunners powered by an explosive cartridge are available:
- the concussion stunner (non-penetrating) has a wide mushroom-shaped head that delivers a blow to the skull, causing unconsciousness
- the penetrating captive bolt stunner has a narrow bolt that is driven a short distance into the brain.

Both types of stunner only cause a stun, or loss of consciousness, that may be temporary and not lead to death. The penetrating captive bolt stunner is recommended because it is more reliable at delivering an effective stun in pigs. The concussion stunner is not recommended for destruction of pigs during transport. Captive bolt stunning should be followed by an effective procedure to cause death, such as bleeding-out.

GB9.18 The chest stick should be used as the preferred method of bleeding-out of pigs.

**Anaesthetic overdose**

GA6.17 Veterinarians or approved persons should perform anaesthetic overdose as appropriate.

Note: Anaesthetic overdose depresses the central nervous system causing deep anaesthesia, leading to respiratory and cardiac arrest. Many different drugs are available, but only for use by veterinarians. The method is appropriate for pigs that can be handled.

**Stunning by blunt trauma to the head**

GA6.18 A single, sharp blow should be delivered to the centre of the forehead.

GB9.17 Blunt trauma is the preferred method for piglets less than 15 kg.

GB9.20 If necessary, use of blunt trauma on newborn young of pigs less than 24 hours old should be followed by bleeding-out or another technique while the animal is unconscious, to ensure death.

Note: Blunt trauma to the forehead using a hammer or other suitable solid, heavy object may be used to render unconscious small and easily controlled piglets (up to 15 kilograms live weight). Blunt trauma must be applied properly to be effective and humane; therefore, the training and skill of the operator is essential. A follow-up procedure, such as bleeding-out or pithing, should be used immediately after stunning to ensure death.

**Pithing**

GB9.19 Pithing of pigs is dangerous and is not recommended.