



### TRANSPORTATION RECOMMENDATIONS FOR CATTLE

*The American Association of Bovine Practitioners believes that all cattle or calves being considered for transportation should be healthy, walk easily on their own, have no drug residue potential or disease conditions that would cause them to not pass pre-slaughter inspection, and should have a body condition score of 2.0 or more for dairy (on a 5-point scale) and 3.0 or more for beef (on a 9-point scale).*

#### GENERAL GUIDELINES FOR HANDLING

##### ALL CATTLE CLASSES

Prior to loading into a trailer, a load plan should be formulated based on the animal weight, frame size and type of transportation equipment being used. Consideration should also be given to the environmental conditions, and adjustments in loading plan made accordingly.

- All personnel handling or transporting cattle or calves should have documented training sufficient to ensure that the health, safety, and welfare of animals can be assessed and an appropriate plan followed.

- All handling of cattle and/or calves should be performed using low-stress cattle handling methods.

- Verify through records that cattle being transported for slaughter that have or may have been treated meet the appropriate withdrawal time.

- Facilities and equipment used for loading cattle and/or calves onto transport vehicles should be designed to minimize stress and injury. Assure that transportation vehicles are clean, safe, and provide adequate space for each animal. Emergency contact numbers and contingency plans for handling unexpected situations like mechanical breakdowns or severe weather should be available to drivers.

- Delay or cancel transport of an animal that appears to be exhausted or dehydrated until the animal is rested, fed and rehydrated in a safe area.

- Do not mingle animals with large variations in size and weight in an open trailer.

- Cattle being transported should be unloaded, fed and watered at least every 28 hours as specified under U.S. federal regulation (U.S. Code Title 49 > Subtitle X > Chapter 805 > § 80502). This would not pertain to air and sea transportation methods that supply feed, water and enough room for the cattle to rest during transportation.

#### DEFINITIONS

**BOVINE:** Any beef or dairy animal including cow, steer, bull, calf, heifer.

**CALF:** A bovine that is nursing or receiving a milk supplement.

**CATTLE:** Any beef or dairy animal including cow, steer, bull, calf, heifer.

**CULL/MARKET CATTLE:** There are two classes of cattle in this category. Cull/market cows and bulls are cattle being removed from the beef or dairy operation because they are no longer deemed as being productive. Market finished cattle are cattle leaving a feedlot and moving to slaughter.

**FEEDER:** Weaned cattle entering or located in a feedlot.

**INJURED AMBULATORY:** A bovine that is otherwise healthy (free from systemic, metabolic or infectious disease) that as a result of injury is unable to walk normally.

**NON-AMBULATORY:** A disabled animal unable to rise, stand or walk without assistance (often referred to as a “downer”).

**NON-TERMINAL MARKET:** A market where bovines are bought and sold, also called sale barns or auction markets (not a slaughter facility).

**SAFE AREA:** A pen or grass paddock or other space that provides protection from the elements, predators, and other animals, where a non-ambulatory bovine is provided with a comfortable surface to lie on, along with good footing, proper feed, clean water, and supportive care.

**STOCKER:** Weaned cattle; typically weighing between 300–550lbs and pasture-managed.

**TERMINAL MARKET:** A slaughter facility or packing plant.

- Appropriate and accurate health papers should accompany any cattle being transported.

- If cattle are unable to be transported and must be euthanized, it is recommended that veterinarians develop a written plan with their clients for protocols to be used for making euthanasia decisions as supported by AABP/AVMA, and assist clients with proper training of animal handlers. AABP euthanasia guidelines can be found at [www.aabp.org](http://www.aabp.org).

#### HANDLING AND TRANSPORTATION OF CALVES

Veterinarians are a vital part of the cattle operation’s team and should be directly involved with their clients.



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tele during the development, implementation, and associated documentation of policies and procedures for calf management and transportation.

Calves shipped to a calf raising facility should be healthy, individually identified, and fit for transport. These guidelines apply to calves being transported to an off-site rearing facility such as another location of the same farming operation or a commercial calf rearing operation, i.e., “calf ranch” or “heifer grower.” These guidelines do not apply to calves being transported to livestock markets or auctions.

#### Principles of Calf Selection for Transport

Personnel determining fitness of individual calves for transport should be trained in assessment of calf health and welfare.

- All calves should have some form of unique individual identification to facilitate management and record-keeping.

- A calf should not be transported unless it is sufficiently fit, meaning that newborn calves should have received colostrum or an appropriate colostrum replacer, and non-newborn calves should have recently had milk and had access to fresh water and feed. All calves should be dry, well hydrated and free from illness, injury, and be able to stand.

- Very young calves tolerate a narrower range of temperature than older calves, therefore the effects of temperature and weather on their specific requirements should be mitigated by tactics such as targeting optimal timing of movement to account for ambient temperature and weather conditions, adjusting ventilation on transport vehicles, providing a sufficient amount of bedding, or individual calf coverings in winter, i.e., “calf jackets.”

- Calves that are unfit for transport due to disease or injury should be evaluated immediately and treatment instituted, or be euthanized using methods supported by the AVMA/AABP guidelines. All calves that have been treated should be individually identified and accompanied by a written health record

documenting treatment and withdrawal times, if applicable.

#### Principles of Handling and Transporting Calves

- Calves are less able to cope with stressors than older cattle, particularly transportation, and extra attention to their well-being is important. All personnel handling or transporting calves should be trained on the farm’s protocols to ensure that the health, safety, and welfare of calves of varying ages is maintained. Personnel should be trained on assessing health and welfare of calves; evaluating fitness for transport, proper handling techniques; decision making for euthanasia, and conducting and documenting humane euthanasia supported by AABP/AVMA guidelines. Personnel should also be aware of applicable local, state, and national guidelines pertaining to transport of calves. Calves should be moved using the concept of flight zones when possible. Younger calves may not respond to efforts to move them by using the concept of flight zones and therefore may need to be handled differently when loading, unloading and moving.

- All handling should be performed as calmly as possible to avoid unnecessarily exciting calves. All moving aids, including flags and paddles, should be used judiciously. Electric prods should never be used on calves.

- Calves must never be handled solely by the ears or tail.

- All transportation vehicles should be checked prior to loading for unsafe conditions that could lead to injury of calves or unnecessary delays in transporting calves to their destination. Hauling vehicles and trailers should be cleaned and then disinfected after each load of calves to minimize the risk of disease transfer.

- Calves should have an adequate amount of space during transport. Guidelines for the amount of space during transportation for calves of different weights are available from the Federation of Animal Science Societies ([www.fass.org](http://www.fass.org)) and these recommendations should be consulted when developing on-farm transportation guidelines.



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■ Willful or purposeful abuse, neglect, or other maltreatment of calves for any reason, including the use of electric prods, whips, or canes on young calves, and withholding of food/milk or water during the pre-transportation period, should not be tolerated.

#### TRANSPORTATION OF STOCKER AND FEEDLOT CATTLE

All stocker and finish fed (feeder) cattle must have their processing, treatment and feeding records checked to ensure all cattle have met assigned medication withdrawal times if destined for slaughter. Additionally, all required USDA-APHIS health transport shipping records must be in order, and if applicable, all brand inspection records must also be in order. Copies of these records must be provided to the transporter as needed.

All cattle must be examined and fit for transport under the conditions the cattle are to be transported (see the section on transportation of compromised cattle). Arrangements for special needs of the cattle such as protection from weather, bedding, traveling at night during hot weather, arrangements for off-loading rest periods, etc., must be made ahead of securing transportation.

The shipper needs to ensure that transportation arrangements have met required guidelines of the receiver of the cattle, or any suggested guidelines provided by manufacturers of pharmaceuticals the cattle may have received prior to transport.

#### Loading and Unloading Cattle

Veterinarians are encouraged to make the following recommendations to clients when shipping stockers/feedlot cattle:

- Identify any weather conditions that could impact the safety and well-being of the cattle during transportation (extreme heat/cold).
- Using a clean trailer. Fecal-oral transmission of diseases are less likely to occur when cattle are hauled in clean trailers.
- Make sure that people who are working with the

cattle are trained to handle the animals calmly, with minimal noise, avoiding overcrowding and with minimal use of electric prods. Vocalization can be a sign cattle are being overstressed during the loading process.

■ Verify the driver understands the travel route directions and has all required paperwork. Make sure the driver has important emergency phone numbers that may be needed en route or at delivery. Have an emergency plan in place that addresses potential transportation emergencies.

■ The trailer should be an appropriate size for the number of cattle scheduled to be hauled. (Adapted from Grandin, 2001: 1.8 sq. ft. for the first 100 lbs. (CWT) of a bovine and 1.4 sq. ft. for each additional CWT of a bovine. This estimate allows for 30% of the cattle to have horns. If no horns are present square footage per CWT can be slightly less. Heavier cattle need slightly less square footage per CWT than do lighter cattle.)

■ The trailer should be inspected for properly working latches/gates and any defects that could impact cattle safety and well-being.

■ The load-out area should be appropriate for the type of trailer being used to haul the cattle, and the load-out chutes/gates should be in good repair.

■ The trailer should be in the proper position in the load-out area to minimize the potential for cattle injury during loading.

■ Check that cattle on trailers are standing and ready for travel.

■ Prior to unloading, check that there are no cattle in a compromised position that might be injured during unloading, and position the trailer properly to minimize the potential for cattle injury during unloading.

■ Have the driver verify that all appropriate documents are transferred to the responsible party receiving the cattle.

#### For Cattle Being Loaded for Air and Ocean Transportation

Prior to loading the cattle, a load plan should be formulated based on the animal weight, frame size and type, transportation equipment being used, and



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duration of transportation. Consideration should also be given to the environmental conditions, and adjustments in load plan made accordingly.

■ Water should be made available up until the loading process begins.

■ Feed should be readily available but may be withheld up to 18 hours prior to the loading process beginning provided the shipping protocol has been reviewed and agreed upon by the attending veterinarian and agent of the cattle and it is determined the cattle general well-being will be maintained by withholding feed during the targeted time. At no time should the cattle go without feed for more than 28 hours.

#### ■ TRANSPORTATION OF CULL/MARKET BEEF AND DAIRY CATTLE DESTINED FOR MARKET OR IMMEDIATE SLAUGHTER

Veterinarians should help clients develop and implement plans to manage beef and dairy cull/market cow issues, including fitness for transport, treatment for conditions if warranted, or euthanasia of animals unfit for transport, slaughter and human consumption.

Veterinarians should develop a written plan with their clients for protocols to be used for ambulatory cow culling decisions, and assist clients with proper training of employees.

■ Milk all dairy cows that are still lactating just prior to transporting to a terminal or non-terminal market.

■ Verify through records and treatment personnel that cattle that have or may have been treated meet the appropriate withdrawal time.

■ Minimize the number of times cattle need to be handled from time of loading to arrival at the sale barn or slaughter house to reduce stress as well as the risk of bruising.

■ Delay transport of an animal that appears to be exhausted or dehydrated until the animal is rested, fed and rehydrated in a safe area.

■ Make sure employees understand cattle pressure/ flight zone and behavior principles for safe

handling procedures when loading cattle onto transport vehicles. Electric prods should be discouraged. If used prods should be applied to the rear quarters of the animal while avoiding sensitive areas such as the anus, perineum, vulva and scrotum.

■ Facility design for loading cattle onto transport vehicles should minimize stress and injury to cattle. Non-slip flooring should exist to keep cattle calm, safe, and minimize injuries. Inspect the loading facility to make sure all contact surfaces are smooth and free of sharp edges in addition to assuring all equipment is well maintained and in proper working order to further assure prevention of injuries to cattle.

■ Assure that transportation vehicles are clean, safe, and provide adequate space for each animal. The bed should be clean, dry, and have a non-slip floor.

■ Do not transport ambulatory animals with conditions that will not pass pre-slaughter inspection at a packing or processing plant. These include, but are not limited to:

- cancer eye, blindness in both eyes
- fever greater than 103°F
- drug residues
- peritonitis
- fractures or lameness (4 or 5 on a 5-point scale)
- unreduced prolapses
- cows that are calving or have a high likelihood of calving during transport
- distended udders causing pain and ambulatory issues
- suspected central nervous system symptoms
- visible open wounds

#### ■ HANDLING AND TRANSPORT OF INJURED AMBULATORY CATTLE/CALVES

Identify “special needs” cattle such as those with lameness/mobility issues, are thin or appear sick. Special needs cattle should be protected on the trailer and be loaded on the back of the trailer to make it easier for them to unload.

Special needs animals that have conditions that



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increase the likelihood of becoming non-ambulatory because of commingling in transport should be either left at the farm or transported in a separately partitioned compartment without other animal contact. Injured ambulatory cattle/calves with fractured limbs (broken legs) or other non-weight bearing lameness are not fit for transport and should not leave the farm.

If injured ambulatory cattle must be transported, they should not be commingled with others. Injured ambulatory cattle should only be transported to a veterinary facility or a terminal market. Never transport injured ambulatory cattle to a non-terminal market. Care should be exercised during loading, unloading, and handling of injured ambulatory cattle to prevent further injury.

#### ■ HANDLING AND TRANSPORT OF NON-AMBULATORY CATTLE/CALVES

Non-ambulatory cattle/calves are not fit for transport and should not leave the farm of origin unless being transported for veterinary attention. Either treat and allow sufficient time for recuperation or euthanize. Do not transport animals with bone fractures of the limbs or injuries to the spine. Do not use electric prods on sick or injured cattle.

Segregate sick or injured animals into a safe area separate from ambulatory cattle. Veterinarians should encourage cattle producers to seek veterinary consultation to determine if cattle/calves are likely to respond to treatment or should be euthanized. If euthanasia is the best option, proceed using AABP/AVMA recommended euthanasia methods.

#### HEALTH CERTIFICATES/ CERTIFICATES OF VETERINARY INSPECTION

The certificate of veterinary inspection (CVI) is typically required for transportation of cattle across state lines and may be required for transport within a state. It assures that transported animals are officially identified for marketing and regulatory purposes and that the veterinarian signing the CVI deems the inspected

animal(s) apparently free from clinical signs of disease at the time of inspection. The CVI reduces the risk of transmitting either zoonotic disease or cattle diseases across state lines. Destination states' regulations may require that animals being transported into their state are free of certain diseases and have no clinical signs of other disease. A CVI does not guarantee that cattle are disease-free as cattle with no clinical signs of illness may still carry diseases such as Johnes Disease and bovine viral diarrhea virus.

Veterinarians are encouraged to help clients determine the best strategy to prevent disease introduction into clients' herds, including having cattle tested prior to shipment and recording the results on the CVI. It is recommended that veterinarians advise clients about state requirements or disease testing 2–4 weeks prior to transport of cattle. 

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#### REFERENCES

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#### OTHER SOURCES:

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