

Livestock Transport Emergency Guide



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Jennifer Woods, Reflected J Livestock Consulting – *Livestock Emergency Response Course* Creator
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Dr. Martin Appelt, Canadian Food Inspection Agency – Ottawa, Ontario
Jim Paterson, Canadian Food Inspection Agency – Guelph, Ontario
Jeremy Locke, Ontario Society for the Prevention of Cruelty to Animals
Craig Richardson, Ontario Ministry of Agriculture and Food
Tom Luckhart, Luckhart Transport LTD.
Dr. Temple Grandin, Assistant Professor of Animal Science, Colorado State University

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Top 10 Tips for Livestock Transport Emergencies

- 1** Crowd control is important to avoid injuries - to people and animals. Keep people away from the scene to prevent frightening the animals.
- 2** Are the animals contained or loose? You will require a plan for both situations. Containing the animals is a top priority.
- 3** Remain calm, quiet and safe - always keep an escape route open.
- 4** Evaluate the livestock truck; try to identify damage extent, type and number of animals.
- 5** Call the (24/7) CFIA Livestock Emergency Transport Line 1-877-814-2342.
- 6** Know your local contacts with livestock expertise. Keep that list up to date.
- 7** All animals are unpredictable and dangerous, no matter how clam they may seem.
- 8** Accidents, stress and injuries may alter behaviour significantly. You may need an expert!
- 9** Rescue efforts require expertise, planning and coordination.
- 10** Moving slowly with patience is always best when moving or handling farm animals.

Emergency Contact Sheet

Each contact sheet is unique to a local area. Availability and access to facilities and equipment will vary. This section is designed to help each area create a contingency plan to identify resources that may provide assistance.

Any costs for materials or services remain the financial responsibility of those having the care and custody of the animals (transporter, transportation company, animal owner, consignor, consignee or cargo insurer). It is imperative that the financial responsibility is acknowledged prior to engaging services or for equipment.

Once you have compiled a list of possible contacts, each should be approached to ensure they are willing and able to assist in an emergency. Once agreement is obtained, the following list should be completed and be readily available for use. **The list should be reviewed and updated on a regular basis.**

Canadian Food Inspection Agency (CFIA) Livestock Transport Emergency Line: 1-877-814-2342

Ontario Society for the Prevention of Cruelty to Animals (OSPCA): 1-888-ONT-SPCA

OPP: 1-888-310-1122

NAME	CONTACT #	
Livestock Veterinarian		
Local Livestock Transporter		
Local Cattle Producer		
Local Horse Breeder		
Local Pork Producer		
Local Sheep Producer		
Local Elk Producer		
Local Poultry Producer		
Local Llama Breeder		
Local Emu/Ostrich Breeder		
Local Bison Producer		
Livestock Holding Facilities		
Portable Corrals/Panels		
Deadstock Removal		
Tow Truck		
Other Resources		

**Producer Associations and Related Contacts
Current as of March 1, 2007**

Ontario Sheep Marketing Agency

130 Malcolm Road, Guelph ON N1K 1B1
Tel 519-836-0043 Fax 519-836-2531
www.ontariosheep.org

Ontario Pork

655 Southgate Drive, Guelph ON N1G 5G6
Tel 519-767-4600 Fax 519-829-1769
www.ontariopork.on.ca

Dairy Farmers of Ontario

6780 Campobello Road,
Mississauga, ON L5N 2L8
Tel 905-821-8970 Fax 905-821-3160
www.milk.org

Ontario Cattlemen's Association

130 Malcolm Road, Guelph, ON N1K 1B1
Tel 519-824-0334 Fax 519-824-9101
www.cattle.guelph.on.ca

Ontario Goat Breeders' Association

Cindy Hubble
Box 596
Lancaster, ON K0C 1N0
Tel 613-347-1077

Ontario Equine Federation (Horses)

9120 Leslie Street, Suite 203,
Richmond Hill, ON L4B 3J9
Tel 905-709-6545 Fax 905-709-1867
www.horse.on.ca

Ontario Bison Association

Tim Belch, President
RR# 4 Peterborough, ON K9J 6X5
Tel 1-877-619-7886 Fax 705-742-7190
www.ontariobison.ca

Ontario Deer and Elk Farmers Association

ODEFA c/o Michael Maziarz
5719 Eramosa-Erin Townline
RR#4 Rockwood, ON N0B 2K0
Tel 519-856-4483
www.ogba.ca
www.ontariodeerelkfarmers.com

Ontario Camelids Association

(Llamas, Alpacas)
RR# 3 Cookstown, ON L0L 1L0
Tel/Fax 705-458-4057
www.ontariocamelids.org

Ontario Ratite Association

(emu, ostrich, rhea)
Bernie Gauthier
3838 Bertie St. Stevensville, ON L0S 1S0
Tel 905-382-0843 Fax 905-382-3838
www.ontarioratite.com

Chicken Farmers of Ontario

3320 South Service Road,
Burlington, ON L7R 3Y8
Tel 905-637-0025 Fax 905-637-3464
www.cfo.on.ca

Turkey Farmers of Ontario

100 Conestogo College
Boulevard, Suite 1120
Kitchener, ON N2P 2N6
Tel 519-748-9636 Fax 519-748-2742
www.ont-turkey.on.ca

Canadian Food Inspection Agency

174 Stone Road West, Guelph, ON N1G 4S9
Tel 519-837-9400 Fax 519-837-9783
Emergency 1-877-814-2342
www.inspection.gc.ca

Ontario SPCA

16586 Woodbine Avenue, RR#3
Newmarket, ON L3Y 4W1
Tel 1-888-668-7722 Fax 905-898-2167
www.ospca.ca

**Ontario Ministry of Agriculture, Food and Rural
Affairs**

1 Stone Road West, Guelph, ON N1G 4Y2
Tel 1-888-466-2372
www.gov.on.ca/omaf

Ontario Provincial Police

Communication Centre 1-888-310-1122
General Inquiries 1-800-461-4455
www.gov.on.ca/opp

Ontario Veal Association

130 Malcolm Road, Guelph, ON N1K 1B1
Tel 519-824-2942 Fax 519-824-2534
www.ontarioveal.on.ca

INTRODUCTION

Objective:

- To provide basic information on the steps needed to effectively deal with a livestock transportation emergency.
- To provide a 24/7 support network for first responders (police, fire, etc.) as per flow chart included on page 6.
- To provide knowledge of livestock handling in emergency situations for improved animal well-being and for enhanced safety of those involved.

This guide will cover:

- incident needs as per assessment
- livestock handlers, veterinarians and other response team contacts, specific to Ontario
- behaviour of livestock likely to be exhibited in stressful situations
- personal safety precautions when handling livestock
- means to calm, rescue, capture and temporarily confine animals
- laws, ethics, and euthanasia protocol

Ontario's livestock industry is substantial.

Ontario is one of Canada's largest livestock-producing provinces. In addition to cattle, hogs, and sheep, Ontario's livestock industry also includes poultry, elk, bison, deer, llamas, ostriches and other exotic species.

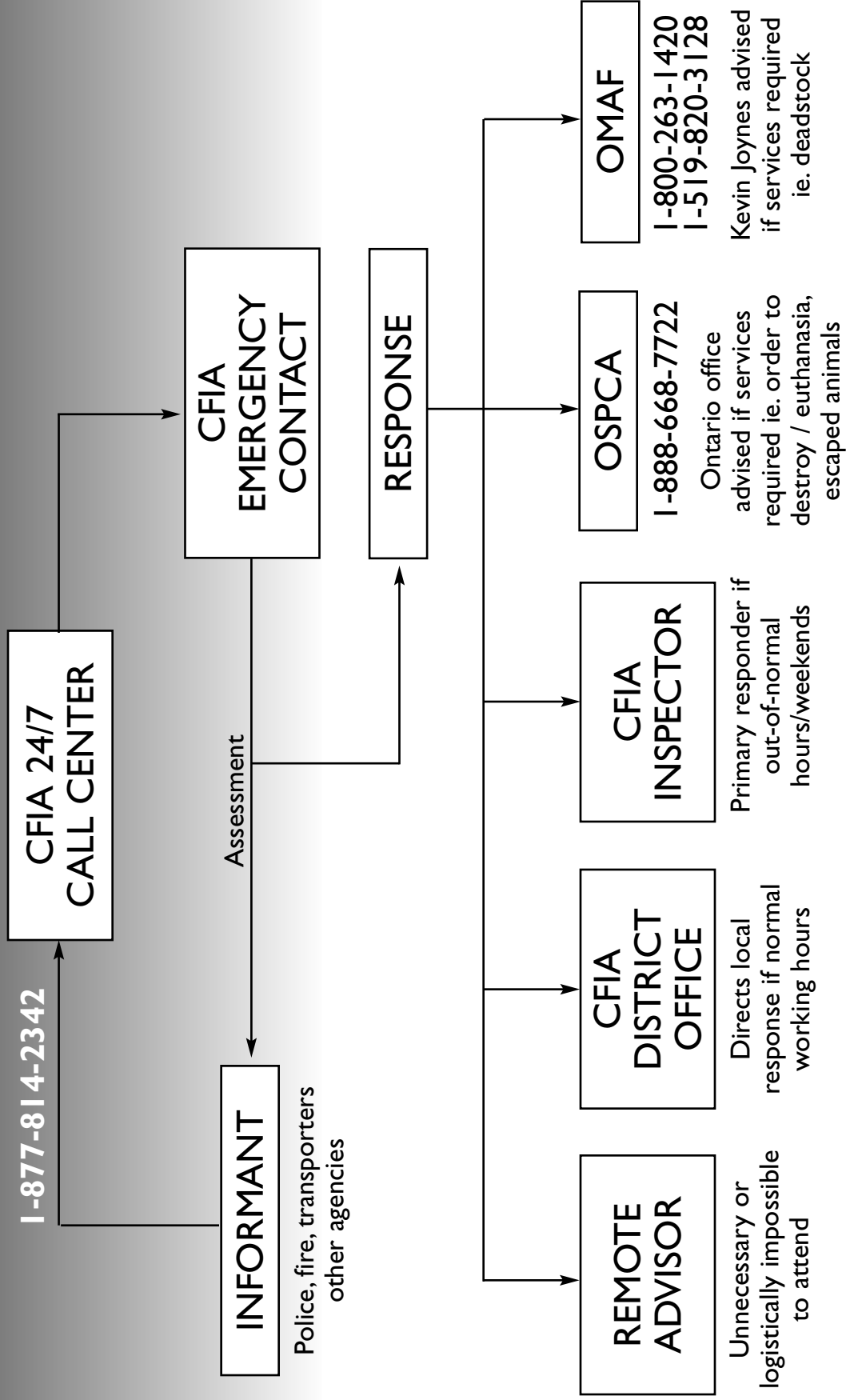
Ontario has over 40 livestock auction markets, and more than 200 abattoirs that operate within its borders. Every day thousands of animals are transported on Ontario's roadways and through major urban areas. While almost all of these animals reach their destination safely, there are occasions where accidents occur. This guide will support and assist those responding to these emergencies*.

The humane handling and well being of Ontario's livestock is a priority.

In 2000, the Ontario Humane Transport Working Group was formed to promote the safe, humane handling of livestock while being transported. This group is comprised of representatives from various farm groups, transporters, processors, government and humane organizations.

*Note: Emergency Management Ontario is the agency responsible for the management of disasters in the Province of Ontario. This guide is intended to deal only with emergencies associated with livestock transportation i.e. traffic accidents.

Ontario Animal Transport Incident Response



ANIMAL TRANSPORT INCIDENT ASSESSMENT

INFORMANT: _____ PHONE: _____

LOCATION OF INCIDENT: _____

DATE/TIME OF INCIDENT: _____

TRANSPORT CO.

- CONTACTED
- PHONE NO.: _____

AGE GROUP

- YOUNG
- INTERMEDIATE
- MATURE

EXPENSE AUTHORITY

- CONTACTED
- PHONE NO.: _____

QUANTITY

- KNOWN
- UNKNOWN
- NUMBER: _____
- ESTIMATE: _____

DRIVER

- FUNCTIONAL
- NON-FUNCTIONAL

CLASSIFICATION

- SLAUGHTER
- REPLACEMENT
- BIO-SECURITY CONCERN

VEHICLE TYPE

- FARM TRAILER
- GOOSENECK TRAILER
- 1/2 TON PICKUP
- STRAIGHT TRUCK
- SEMI TRAILER
- POT TRAILER

DESTINATION

- FARM
- SLAUGHTER PLANT
- AUCTION MARKET
- OTHER

VEHICLE CONDITION

- OPERABLE
- NON-OPERABLE

SECURITY STATUS

- CONTAINED
- ESCAPED
- TIED _____
- LOOSE _____

ACCIDENT RESULT

- UPRIGHT
- ON-SIDE L R
- ROLLED

HEALTH STATUS

- UNINJURED
- INJURIES
- DEAD
- UNKNOWN

ACCIDENT SITE

- URBAN
- RURAL
- ON ROAD
- SHOULDER
- DITCH
- OTHER

EXTRICATION

- YES
- NO

ANIMAL TYPE

- CATTLE
- HORSES
- PIGS
- SHEEP
- POULTRY
- DEER
- BISON
- LLAMA
- RATITE
- OTHER

SUPPORT REQUIRED

- TRANSPORT
- PERSONNEL
- EQUIPMENT
- SPECIAL
- FENCING
- GATES
- LIGHTING
- DEADSTOCK
- TOW TRUCK
- VET
- SPECIALISTS

Comments: _____

Date: _____ Emergency Contact: _____

GENERAL ANIMAL BEHAVIOUR

Large animals can seriously injure handlers and/or themselves if they become excited or agitated. Understanding how an animal instinctively reacts will aid you in properly handling the animal during an emergency situation. The following are common behaviour characteristics that apply to livestock in general. Species specific facts will be covered in Section 3.

- All animals are unpredictable.
- Never assume an animal is going to be nice - no matter how calm they seem.
- Animals experience feelings such as fear, aggression, pain, nervousness, etc.
- Horned animals are aware they have horns or antlers and may use them in an aggressive manner.
- Livestock have a wide angle of vision and are easily frightened by shadows. They will often balk and refuse to walk over a hose, puddle, shadow or change of surface, etc. They will also shy away from bright sunlight if they are not used to being outdoors.
- Livestock have a strong herding instinct. Isolation is one of the strongest stressors of animals and should be avoided. They will calm more quickly if left in a herd and may also “follow the leader” when together. If possible use a wall or fence line as a guide.
- Injured or frightened animals may bite, particularly pigs and horses. All animals may kick or strike when frightened.
- Livestock tend to move from a dimly lit area to a brighter area, provided the light is not glaring into their eyes.
- Loud noises, moving or flapping objects will spook, startle, or slow an animal.
- Frightened animals are unpredictable and will react instinctively by running or fighting. Allow animals to calm down before attempting to handle them.
- **If you spook them, it may take approximately 30 minutes to calm them down.**
- Animals have sharp senses of smell, sight and hearing.

PROPER LIVESTOCK HANDLING

Enhancing the safety of the handler & animal

- If you don't have to handle the animals... **DON'T**
- Take your time. The old saying is: "If you make the animal feel you have all day, it will take ten minutes. If you make it feel that all you have is ten minutes, it will take all day."
- Do not chase the animals; let them move at their own pace.
- Always have an escape route.
- Stay alert as you may have to move quickly.
- Never turn your back on an injured or frightened animal.
- Announce your presence but keep noise to a minimum as animals have sensitive hearing. Advise emergency crews to, wherever possible, switch off engines and place generators at a comfortable distance from the animals.
- Always move slowly and quietly around livestock. Do not shout, yell or wave your arms wildly at the animals.
- All personnel not required to deal with the animals should stand back for their own safety before animals are moved.
- Unless absolutely necessary, do not approach an animal from directly in front. Livestock such as horses and elk may strike with their front legs. All livestock may view this as an aggressive move. If you must, use a board, such as a spinal board, to create a barrier between the animal and yourself.
- Never walk up behind an animal, whether it is standing up or lying down. It may startle causing a panic reaction resulting in possible injury to personnel. Animals have very accurate aim when kicking.
- Make sure the animal knows you are there and speak softly while approaching.
- Be confident - animals sense fear and hesitation and may take advantage of it.
- An animal should never be struck and use of an electric prod should only be considered if all other options for moving the animal have been exhausted.
- Moving lights (headlights, emergency lights, and flashlights) agitate animals. Avoid shining lights into the animals' faces and ask emergency crews to switch off flashing lights wherever possible.

Flight Zone

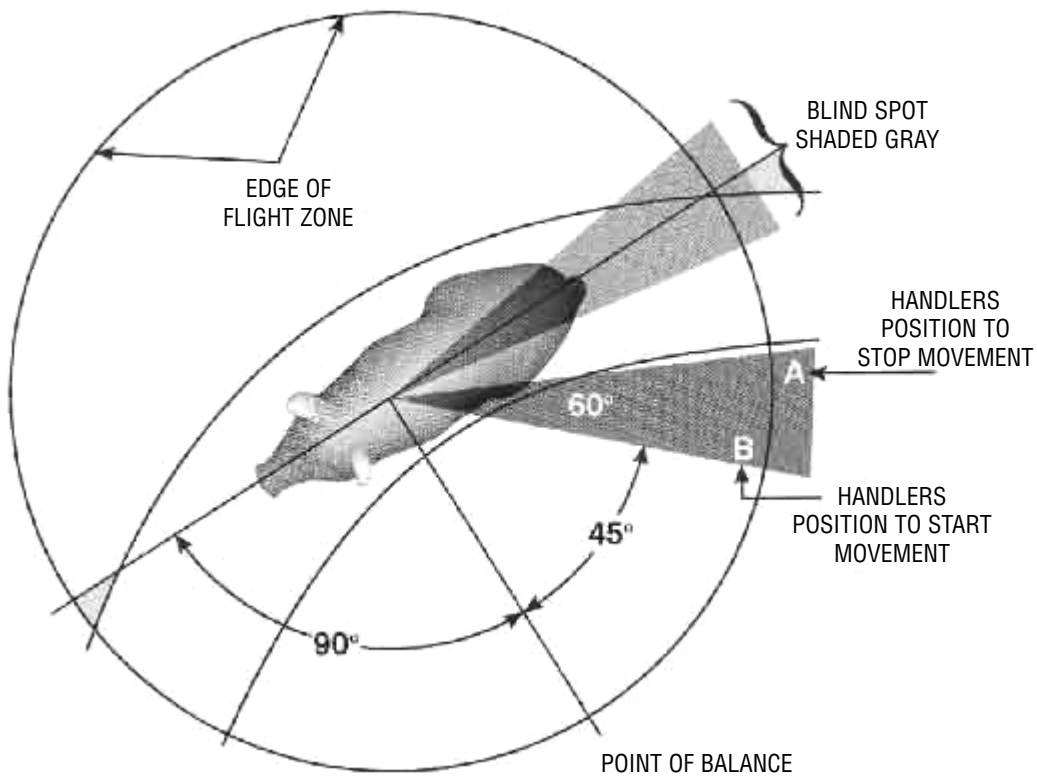
Livestock can be quite happy together in close confines. However, like most people, they need their space. Individually, most animals display a protective area or “flight zone” that varies in size with each animal. Certain objects, such as a non-threatening herd mate, may freely enter this flight zone. Some objects, however, will cause a reaction when they get close to the perimeter of the flight zone.

All animals involved in an emergency situation, such as an accident, will have a large flight zone. Sight is the main sensory factor used by the animal in this zone. Approach the animal calmly and slowly and continue to announce your presence. Entering the flight zone too suddenly (surprising the animal) or too quickly will make the animal bolt or move in an unpredictable way. If too much pressure is applied they will turn back on you - back off when the animal is not responding in the way you wish.

Here’s what may happen when you enter an animal’s flight zone.

- the animal will be happy to see you
- it will move away
- it will run away and pressure the facilities, damaging or possibly destroying them.
- it will remove you from its zone

Flight Zone and Point of Balance



SPECIES SPECIFIC BEHAVIOUR AND HANDLING

In general, all intact (non-castrated) males of each species are typically more aggressive than female, or altered (castrated) members of the species. Always use extreme caution when dealing with males, and with female animals with young.

It is recommended that experienced animal handlers should handle these animals.

Cattle

- Cattle may stampede if frightened. Their instinctive reaction to danger/fear is to flee.
- All bulls should be considered very dangerous and unpredictable. **EXTREME CAUTION MUST BE USED WHEN DEALING WITH THEM.**
- Dairy bulls are extremely dangerous. Immediate euthanasia must be considered for public safety.
- Cattle may charge or kick when frightened. Be careful not to get too close.

Horses

- Horses can strike and kick with both their front and rear feet. An injured or trapped horse that is lying down and appears quiet can snap into violent action at any moment, attempting to free itself. Stay away from legs at all times and approach only from the side of its spine if possible.
- Horses that have been handled frequently will respond well to human contact. They can usually be led to safety by a halter and calmed with gentle talking and petting.
- Always approach a standing horse on the left side. Talk to them in a calm, quiet manner while you approach.
- Horses (especially broken) are more trusting of humans. If they feel they can trust you and you are there to help them they will likely calm down.
- The breed of horse will also influence behaviour - hot bloods (e.g. Arabians or race horses) tend to be high strung; warm bloods (e.g. Quarter Horses, pleasure horses) are calmer by nature and cold bloods (e.g. Clydesdales, heavy horses) are usually calmest. Animals, like humans, have their own personalities and the above should just be used as a guideline.
- Two types of horses are transported - pleasure or meat horses. Pleasure horses will be transported in specially designed horse trailers, whereas slaughter horses are usually transported in commercial livestock trailers.

Pigs

- Adult pigs may be **extremely** dangerous. They should be handled with a great deal of caution - their comparative smaller size can be deceiving. Adult male pigs may have tusks and while they may not look impressive and barely peek out between the lips, they can be long and razor sharp. The pig strikes by throwing its head upwards and these tusks can cause deep stab wounds, even through boots. You should use a shield (e.g. ply wood or spinal board) when working with them to protect yourself. They can bite and you should never turn your back on an adult pig, especially if it is injured.
- Pigs will squeal for no reason at all. Squealing is not necessarily an indication that they are in distress.

- Pigs are naturally curious and try to investigate everything. Pigs often chew or bite in a non-aggressive manner while exploring.
- The more distractions there are (including people), the slower and more difficult moving they will become. They need to be simply “guided” in the direction you want them to go and let them find their way. They may follow a lead pig. Pigs cannot be chased with much success. Let them move at their own speed and, in case of balking, do not beat the pigs at the rear of the crowd. Avoid “singling out” and moving an individual pig. Move them in pairs or groups because they are much calmer when they have skin to skin contact with a herd mate.
- Stress can cause pigs to die due to a heart attack. They may not be used to extensive physical exercise.
- Injuries are difficult to detect unless very obvious. Pigs should all be handled as if they have sustained possible injury.
- Pigs don’t like stepping up or down. If possible attempt to make a ramp when there is a change in elevation.
- Pigs are sensitive to heat and cold. They may suffocate in heat easily and should be dealt with quickly. Pigs can be cooled by misting them with cool water - do not pour cold water on them or soak them as the shock may be fatal. Fans can also be used to blow air onto the animals to lower temperatures in the trailer. They also suffer from frostbite easily and wind chill can be a fatal factor.
- Pigs frighten easily. Indoor pigs may be sensitive to light and may not go into bright light such as sunlight or headlights. Their instinct is to turn back into their shelter.

Poultry/Turkey

- Poultry are frightened by close contact with people.
- Birds may initially react with hysteria, suddenly fly about, squawk and try to hide. If several birds are loose and one becomes panicked, the others will usually follow suit.
- If crates or cages have spilled and birds are still inside, they should be up-righted immediately. Birds may suffocate quickly.
- Birds are also easily affected by heat and cold and may require cooling or protection from the elements (i.e. wind). Fans or water misting may be used to cool the birds. If the accident occurs in the summer it would be beneficial to place the birds in a shaded area.
- Do not chase birds or cause them to fly. Handled calmly they can usually be herded.
- Turkeys ready for slaughter have little exercise tolerance. If severely stressed, the skin colour on the head and neck gets a blue tinge, indicating that the birds are on the verge of collapse.

Sheep/Goats

- Sheep are usually passive and easily herded as a group. Individuals separated from a group will attempt to re-join by jumping over or through a person. Sheep are more cooperative if handled gently and quietly.
- Sheep will instinctively “pile” up or bunch up in a tight group. They may suffocate when this occurs.
- Sheep that have just been shorn (shaved) are more susceptible to hypothermia.
- Sheep and goats will charge when frightened or when they feel threatened. Do not turn your back on them.
- Do not lift sheep by their horns or fleece.

Elk/Deer/Bison

- **An elk, deer, or bison handling specialist should be called to assist and the animals should be left on the trailer until this person arrives.**
- These animals are very quick, agile and may leap coming out of the trailer.
- They cannot be contained by typical fences. Specialized fencing needs to be at least eight feet in height. In addition, visual barriers (such as tarps) should be utilized. If possible, these animals should be loaded directly onto a suitable trailer, as it will be very difficult to manage them in a pen.
- Be very gentle with deer as they may die simply from the shock of being moved. Be very patient with deer. The least amount of people handling them, the better.
- Do not try to rope elk, deer, or bison.
- Bison do everything at a run and are extremely difficult to stop.
- Use extreme caution when dealing with alternate livestock and any animal with horns/antlers.

Llama/Alpaca

- Llamas are extremely heat sensitive. Trailers should not be crowded and adequate ventilation must be provided.
- Llamas can strike out with their front feet; caution should be used while approaching them.
- Llamas are known to “spit”; precautions should be taken to prevent bacteria laden saliva coming in contact with your eyes.
- Llamas may lie down and be reluctant to move as a defense mechanism.
- Llamas do not like to be petted.
- You can not blindfold a llama. They will freeze on the spot.

Ostrich/Emu/Rhea (Ratites)

- Ratites can be extremely dangerous as they have a powerful forward kick with sharp talons.
- They are attracted to bright or shiny objects (i.e. eyes) and will attempt to peck.
- Ratites are very fragile, and can be injured easily.
- Ratites panic quickly. Handle calmly and carefully.
- A suggested handling method is to put a hood over the animal’s head, and place one hand on its neck just below the head, and the other hand on the rump area and use your body to put pressure on the rump and steer it from behind.

CAUTIONARY NOTE: A situation may arise where moving livestock is impossible without risking the health and safety of yourself or other personnel at the scene. Be prepared for such a situation. If safe, competent handling and/or sedation are not options, destroying the animals is more prudent than risking injury or death to humans.

EXTRICATION

It is recommended that rescuers avoid entering the trailer whenever possible.

- A temporary containment facility should be located or created before animals are released from the trailer (i.e. paneled corral, directly onto another truck, or even police tape for certain species such as horses). A nearby fenced field may be used for containment.
- If you are presented with a situation where the trailer and/or bedding is on fire, do not release animals from the trailer until a plan for containment is established. Loose animals will pose a serious risk to passing vehicles etc.
- Live animals should be removed from the trailer before it is righted.
- The ideal way to remove an animal from a trailer is through the existing doors.
- To decide the optimum method of extrication, first evaluate the trailer and the condition of the animals.
 - (a) Position of trailer - on side, roof or upright, on right or left side
 - (b) Position of animals - lying down, pinned or trapped, tied or loose
- If the animals are uninjured and standing calmly in the trailer, leave them alone until it is necessary to move them.
- No person should enter a trailer to check or treat animals until a rescue plan is established and the trailer is stabilized.
- If unable to use existing doors, access to animals can be achieved through the roof.
- The structural integrity of the trailer must not be jeopardized or the trailer may collapse on the animals and rescue personnel:
 - (a) Ascertain the design of the trailer (i.e. Angle haul, multi deck, dividers, etc.)
 - (b) Determine what material the trailer is made of - most new trailers are a combination of fiberglass and/or aluminum with steel supports. Older trailers are usually all steel.
 - (c) Ensure that the trailer is, or has been stabilized before proceeding with any rescue attempt.
 - (d) Try to determine which direction gates will swing when opened. Animals may be held in place by a closed gate. To avoid injury, use caution when opening.

- (e) Check to be sure the animals do not have any limbs trapped. Horses may need sedation before dismantling. This must be done by a licensed veterinarian.
 - (f) Ensure that animals inside will not be injured while cutting into the trailer.
 - (g) Cut the hole only wide enough for one animal at a time to get out.
 - (h) Don't cut the hole out completely, you may wish to use the attached metal as a wall, or door.
 - (i) Bend the cut edges out to prevent the animals getting cut while exiting the trailer.
- When entering the trailer always approach a downed animal from the spine side. Never approach via the belly, back or front legs. You will get hurt.



INJURED ANIMALS

- Evaluate and decide:
 - (a) no immediate treatment necessary
 - (b) treat animal where it is
 - (c) move animal to another location
 - (d) humanely destroy the animal

- A veterinarian should be called when:
 - (a) requested by the owner;
 - (b) the animal is considered a non-slaughter animal and cannot be transported to facility for treatment;
 - (c) sedation of the animal is required;
 - (d) an animal that is unable to walk without assistance must be transported from the accident scene (See Section 8);
 - (e) the animal should be destroyed (See Section 8).

**** Note: Ensure authority for payment of services rendered is in place.

- If an animal is injured but can move, work slowly and quietly around it. If it has a halter on, be very careful while leading it. Walk slowly and talk calmly. If loose, walk calmly to its side and do not yell or chase it.

- It is strongly recommended that severely injured animals be euthanised in the trailer.

- To keep a horse which is down from struggling, stand at the animal's spine, place a blanket over its eyes leaving the nostrils exposed and press down lightly on the neck with your knee. If the animal is in an enclosed space, no one should go in to hold the animal down until the space is opened and rescuers can do it safely.

- An animal that needs to be moved for treatment or euthanasia should be moved the shortest distance possible. If dragging is the **ONLY** means of rescue, a sled must be used. A spinal board or tarp may be an effective sled. Ensure it is strong enough to handle the weight of the animal you intend to move. The calming method previously covered can be used when moving an animal on a sled.

LIVESTOCK INJURY & PAIN ANALYSIS

Common observations:

- loss of balance or lack of coordination, staggering, circling
- stands away from the other animals
- glazed eyes, staring, drooping head - little interest in surroundings
- reluctance to move, inability to stand or difficulty standing or moving
- standing in rigid position
- pressing head against objects
- lameness, swollen limbs, or joints
- arching backs, up or down
- shivering
- drooping or cold ears
- excessive vocalization
- grunting
- grinding teeth (squeaking sound)
- bones protruding from the body
- open, bleeding wound

Bleeding

These wounds can be dealt with by applying direct pressure or tourniquets. Open wounds should be kept as clean as possible until a veterinarian can treat them. Internal bleeding can result in severe shock or death. Signs of internal bleeding are listlessness, unconsciousness, very cold legs or a blue tinge to the pink skin inside the lips or tongue. If the animal is not euthanised, it should be kept warm and still until a veterinarian can attend.

Fractures and Dislocations

With fractures, the animal may not be able to use the limb, it may move awkwardly, limp severely, or the limb may be pointing in the wrong direction. As a general rule, an open limb fracture (bone sticking out through the skin) in adult livestock warrants euthanasia. With dislocations (a limb that is out of its normal joint) the injury may result in the loss of use of the limb, a swelling of the joint or the affected area will not move easily and appear to be “locked”. The limb can also look longer or shorter than the corresponding limb on the other side.

If a veterinarian has been called, large animals are best left where they are until the veterinarian arrives. If the animal is able to walk, try to get it to a safe area until it can be attended to. If the animal cannot get up and needs to be euthanised, it will be necessary to destroy it on site.

A fractured spine can be extremely painful. The animal will usually not be able to rise completely, and there may be no movement in the hind legs. With a less severe fracture, an animal may be up and moving normally, or have a “swaying” in its hindquarters. Euthanasia is recommended.

Loss of Consciousness

Loss of consciousness may occur from a skull fracture, a brain hemorrhage, suffocation, drowning, shock or electrical shock. Until the animal can be attended to, make sure it is lying on its side and can breath properly.

Suffocation

Suffocation may result from the piling of animals against the front, rear or sides of a trailer. Roll-overs may result in the suffocation of animals on the bottom of the pile-up. Smoke inhalation in a fire will also suffocate an animal – even hours after a “successful” rescue, due to lung damage. Remove live, mobile animals from the pile up as soon as possible. Some of the animals underneath may recover. As they do, they can be removed. Do not attempt to revive those that do not recover on their own.

Burns

When animals have been exposed to fire or electric shock, they can have burns of varying degrees. Burns cause extreme pain. The greatest immediate danger with burns is shock and, later on, wound infection. After getting the animal to a safe zone and calming it, cold water should be gently poured over the burned area for approximately 10 - 15 minutes. The burn should then be covered with a clean cloth and a veterinarian should treat the injury immediately. When burns are extensive (covering most of or the entire body) or severe (deep down to bones and muscles), the animal should be humanely destroyed by a veterinarian as soon as possible. As with humans, do not apply oils, lotions or salves and do not prick blisters, breathe on, cough on or touch the injured area.

Amputation

In the case of an amputation, the animal should be euthanised immediately.

Electric Shock

Electric shock may result in shock, burns, fractures or death.

Drowning

Most animals can swim if uninjured. Animals in such situations will panic and should be assisted when a handler can safely do so.

DECISION ABOUT RE-LOADING INJURED OR COMPROMISED ANIMALS

Any animal that is unable to stand up on all of its legs by itself is not fit for transport and should be humanely destroyed. This reflects the requirements of the Health of Animals Regulations (section 138) and CFIA's Compromised Animal Policy and the Ontario *Dead Animal Disposal Act* for moving fallen animals.

In the case of slaughter animals, it is doubtful if such an animal will pass for human consumption. Its carcass will likely be partially or fully condemned at the meat plant. There is nothing to be gained by re-loading and transporting such an animal.

In the case of other animals, such as horses used for pleasure and competition or valuable purebred animals, the owners may strongly disagree with a decision to euthanise the animal. They might be willing to have the animal treated by a licensed veterinarian. Loading and transport of a non-ambulatory animal to the nearest suitable place where additional care can be provided requires a veterinarian recommendation. This will largely depend whether the animal has been properly cared for at the scene (for example, bandages applied to injured limbs, medication against pain, sedation, etc.) and is now being transported to a veterinary clinic.

Note: At all times the comfort and safety of the animal must be considered. At the same time, do not disregard your own safety or the safety of other personnel at the scene!



EUTHANASIA

Euthanasia - humane death that occurs without pain and distress

It is important to remember that animals are property, and are therefore owned. If an animal needs to be destroyed, this can only happen in one of three ways:

- with the consent of the animal owner or designate
- by way of a certificate issued by a veterinarian pursuant to the authority contained in the *Ontario Society for the Prevention of Cruelty to Animals Act*
- by police officer using the authority contained in the *Police Services Act*

Proper procedure for euthanasia:

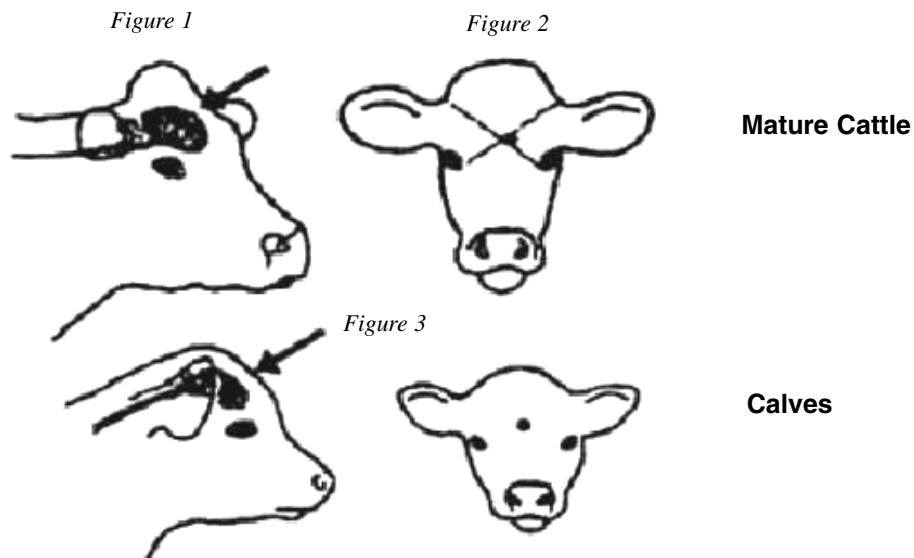
- Allow animal to calm down if necessary.
- The point of penetration is in the diagrams on the following pages. **The point between the eyes is not the appropriate point of entry.**
- A 22-caliber firearm is sufficient for most cattle, pigs and horses. A larger caliber such as a .308 should be used for large bulls, boars or bison. The muzzle should be held approximately 2 inches from point of entry, not flush with the skull. Shotguns should be fired 10-12" away.
- Make sure the animal is dead before walking away from it. Check for vital signs - pulse, breathing, etc. An animal will "wiggle" for 2-3 minutes following death.

The following diagrams and information describe how to properly euthanise specific animals. To ensure euthanasia is performed properly it is very important to learn the appropriate point of penetration.

The following information and diagrams are taken from the Recommended Codes of Practice for the Care and Handling of Farm Animals. Poultry recommendations have been adapted from the Centre for Animal Welfare, College of Agricultural and Environmental Sciences, University of California, Davis.

APPENDIX 1

Guidelines for humane killing of cattle by firearms



Cattle

Mature Cattle

The head should be secure in a chute or by halter and shank to a solid structure. Food can be placed in front of the animal. The firearm is held at right angles to the skull and aimed at a point 2/3 of the way up the forehead at a point intersecting imaginary lines drawn between the back of the ears and the corners of the eyes (Figures 1 and 2). It may be easier to shoot slightly to the side of the ridge that runs down the center of the face.

Calves

Calves can be handled in the same manner as mature cattle but the aim of the firearm should be squarely on the mid lines of the forehead slightly lower than in the mature cattle (Figure 3).

Source: Longair, J. (Al), Finley, G., Laniel, M-A., Mackay, C., Mould, K., Olfert, E.D., Rowsell, H., and Preston, A. 1991, Guidelines for euthanasia of animals by firearms. Can. Vet. J. 32: 724-726 December.

APPENDIX 2

Guidelines for humane killing of deer by firearms



Figure 1



Figure 3

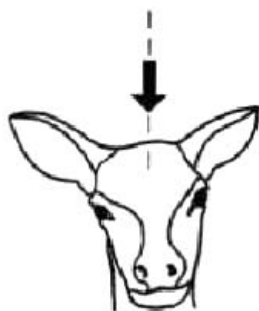


Figure 2



Figure 4

Deer without antlers

Deer can be handled in the same manner as goats or sheep - food can be offered to the animal. The aim of the firearm should either be from behind or from the front as described in the humane killing of deer with antlers or from the top of the head at a point high up on the head equal distance from the eyes and ears (Figures 1 and 2).

Deer with antlers

If the animal has antlers, the approach should be from the rear and the aim directed between the base of the horns towards the mouth (Figure 3). Alternatively, the firearm can be aimed from the front just above the eyes on the midline, shooting towards the spine (Figure 4).

Source: Recommended Code of Practice for the Care and Handling of Farmed Deer (Cervidae) (1996).

APPENDIX 3

Guidelines for humane killing of horses, mules and donkeys by firearms

*Figure 1**Figure 2*

The animal must be adequately restrained to ensure proper placement of the shot. The muzzle of the firearm must be placed close to the animal's head, above the eyes, pointing in the required direction (Figure 1). The optimal distance from the muzzle to the head is 3 to 5 cms (1 - 2"). The bullet or shot should enter the skull at the point where imaginary lines crossing from each to the opposite ear intersect (Figure 2). The direction of the shot should be down towards the withers (Figure 1).

Adapted from: Longair, J. (A), Finley, G., Laniel, M-A., Mackay, C., Mould, K., Olfert, E.D., Rowsell, H., and Preston, A. 1991, Guidelines for euthanasia of animals by firearms. *Can. Vet. J.* 32: 724-726 December.

APPENDIX 4

Guidelines for humane killing of pigs

*Figure 3-1 Site of shooting**Figure 3-2 Direction of aim***Blow to the head**

The best method of killing a piglet (under 3 weeks of age) quickly and painlessly, is to strike the animal on the top of its head with a heavy, blunt object, such as a hammer. The blow must be administered swiftly, firmly, and with absolute determination.

Overdose of anesthetic

Under some circumstances, you may have to ask a veterinarian to euthanize a pig with an overdose of an anesthetic. These drugs are strictly controlled and must be administered by a veterinarian. The meat from animals killed in this manner cannot be used for human food or animal food. Therefore the disposal of the carcass presents a problem.

Firearms

Shooting an animal should only be done by persons well versed in handling firearms and licensed to use firearms. Safety must be considered. To avoid the possibility of a bullet ricocheting off concrete floors and walls, take the pig outdoors. Restrain the pig with a noose around its upper jaw. The person holding the restraining rope or snare should stand in front of the pig and behind the person with the gun.

The site of shooting is on the mid-line of the forehead, one finger's width above eye level (Figure 3-1). In most cases, the barrel of the firearm should be 3-5 cm (1 1/4 - 2") from the head if using a rifle, pistol, or 0.410-gauge shotgun or up to 25 cm (10") if using a larger gauge shotgun or rifle. The aim should be well up into the skull (Figure 3-2).

A 0.22 rifle or 0.410 shotgun are only appropriate for animals under 24 weeks of age. Older animals require a more powerful firearm.

Source: Recommended Code of Practice for the Care and Handling of Farmed Animals – Pigs (1993).

APPENDIX 5

Guidelines for humane killing of sheep by firearms



Figure 1

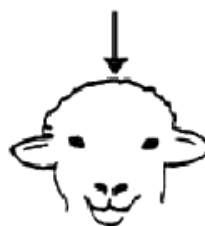


Figure 2



Figure 3



Figure 4



Figure 5

Figures 1 and 2: Without horns. Figures 3-5: With horns

Sheep and goats without horns

Sheep and goats can be handled in the same manner as cattle - the head should be secured with a halter, and food offered to the animal. The aim of the firearm should be from behind or from the top of the head at a point high up on the head an equal distance from the eyes and ears (Figures 1 and 2).

Sheep and goats with horns

If the animals have horns, the approach should be from the rear and the aim directed between the base of the horns towards the mouth (Figure 3). Alternatively the firearm can be aimed from the front just above the eyes on the mid line, shooting towards the spine (Figure 4). Goats are treated as per horned sheep (Figure 5).

Source: Longair, J. (AI), Finley, G., Laniel, M-A., Mackay, C., Mould, K., Olfert, E.D., Rowsell, H., and Preston, A. 1991, Guidelines for euthanasia of animals by firearms. Can. Vet. J. 32: 724-726 December.

APPENDIX 6***Poultry Euthanasia Sheet*****Poultry**

The method chosen should minimize the pain and distress experienced by the bird. However, the choice of techniques may be limited in certain environments. In all cases, proper restraint can help to decrease the bird's fear and distress. When possible, poultry should be held gently in an upright position with their wings closed to prevent flapping. Being carried upside down by the legs should be minimized. Covering the eyes with a hand or a piece of cloth exerts a calming effect, as does holding the bird in contact with the handler's body.

Appropriate training of personnel is important to ensure that poultry are euthanised appropriately. Untrained personnel in an emergency situation can use some methods, while others, such as cervical dislocation, require skill and training to carry out correctly.

Method: Cervical Dislocation

If carried out near the head area, dislocation of the neck vertebrae from the cranium damages the lower brain region, causing rapid unconsciousness. In order to be humane, dislocation must cause severance of the brain from the spinal cord and carotid arteries. This is best achieved using a stretching motion rather than by crushing the vertebrae. Training of personnel is critical. Small birds can be dislocated by applying a rotational movement to the neck. Adult poultry should be held by the shanks with one hand, and the head grasped immediately behind the skull with the other hand. The neck is then extended and dislocated using a sharp downward and backward thrust. The necks of larger or heavily muscled birds like broiler breeders, turkeys, geese, ratites, and waterfowl are extremely difficult to dislocate. It is therefore recommended that other methods be used for birds weighing more than 6.5 pounds. Flapping and other body movements may persist for several minutes after cervical dislocation, although if the vertebrae have been properly dislocated these are reflex reactions. Securing the bird's wings prior to performing the dislocation can prevent involuntary flapping. If large numbers of birds are to be euthanised cervical dislocation is not an appropriate method because personnel performing the procedure rapidly become fatigued due to the physical effort required.

Confirmation of Loss of Consciousness and Death

Confirmation of death is critical regardless of the method chosen. The cessation of reflexes in the head area can be used to confirm loss of consciousness:

- Lack of response to a hard pinch delivered to the comb, wattles, or snood
- Lack of blink reflex when the eye is touched and fully dilated eye pupils

The following signs can be utilized to confirm death:

- Cessation of respiration
- Cessation of heartbeat

APPENDIX 7***Emergency Ratite Euthanasia: Emus, Ostriches, Rhea***

If the bird can be safely restrained, a veterinarian can administer a lethal injection and euthanise the bird. Ratites have powerful legs and sharp talons, only knowledgeable handlers should attempt to restrain a conscious bird. Some kind of capture pole with a noose to hold the upper neck is required for safe restraint of ratites.

Emergency euthanasia of ratites may be performed by gunshot to the brain at close range. It may be safer to aim the firearm from behind or from the top of the head at a point high up on the head. This will keep the ratite from moving its head toward the firearm. Ratites bob their heads and move their necks frequently. Approaching a ratite from behind will also keep the person discharging the firearm out of the kicking range of the bird. It is not safe to have someone attempt to hold or restrain a bird that is to be shot.

NOTES

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