



LARGE ANIMAL RESCUE FIELD GUIDE

Version 1.0

The **Large Animal Rescue Field Guide** is for General Land Rescue Operators who have completed the Large Animal Rescue Operations (LARO) course.

This field guide does not replace proper training and is provided as a reminder of operational response principles and techniques for large animal incidents.



Many of the principles and techniques used in large animal rescue can be broadly applied to both horses and cattle.

Suggestions, corrections or concerns, please contact:

david.king@member.ses.nsw.gov.au

Ph: 0437 387 030

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Large animal veterinarians

A large animal vet must be called for all horse rescue incidents. They will:

- Identify zoonotic disease risks
- Determine the extent of injury(s)
- Determine the prognosis for life (Is it a rescue or a recovery?)
- Provide medical stabilisation
- Provide sedation or anaesthesia
- Provide post rescue treatment, if required (fluid therapy etc)
- In stock truck incidents, they will triage stock and identify stock to be euthanised.



As you are responding to a horse incident ensure a large animal veterinarian has been mobilised.

Hendra virus

Hendra virus can cause death in horses and humans. A common Hendra virus infection symptom in horses is disorientation.

Disoriented horses may become caught in fences or stuck in a dam or creek and be easily mistaken for a rescue incident.

Rescuers should be aware that these animals may be suffering from Hendra virus, especially if the horse is in, or has recently moved from, an area where flying foxes are common.

Ask “Has the horse been vaccinated for Hendra or has the horse recently been moved from another area?”.

Q fever

Q fever is a bacterial infection that can cause severe flu-like illness and can affect you for many years.

People usually get infected by breathing in the Q fever bacteria from air or dust around animals, mainly cattle, sheep and goats.



If you are not vaccinated for Q fever, always wear a P2 mask around stock.

On your arrival at the incident

- Minimise noise as you arrive (*sirens, exhaust brakes, slamming doors and lockers*)
- Liaise with owner or caller and check they have called their vet?
- Ask the animal's name (*to determine if it is a companion animal or livestock*); ask the animal's age (*is the animal getting towards the end of its life*); ask if it's a horse has it been vaccinated for Hendra or if it has recently travelled (*determine the Hendra risk*)
- Locate the animal(s)
- Take control if no Police are present (*Police have legislated control over all land rescue operations*)
- Undertake a thorough risk assessment
- Establish zones (hot, warm and cold)
- Remove endangered public or owner(s)
- Ensure everyone has appropriate PPE (including the vet and the animal owner)
- Determine the safest access / egress routes to the animal(s)

Assess the rescue requirement

Always determine the risk is worth the benefit in undertaking a rescue operation.

This may be a discussion you have with the vet.

PPE

Ensure anyone entering the hot zone has appropriate PPE; including

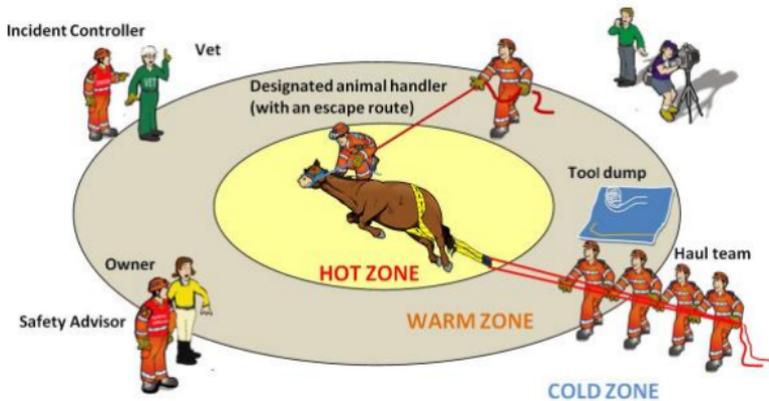
- Helmet
- Personal Protective Clothing (PPC)
- Gloves (*not your road crash gloves*)
- Boots
- Safety glasses
- P2 mask (if working around stock to prevent Q-Fever infection)
- Safety harness and rope (manned by a competent person)
- Dry suit or waders (if working in mud)
- PFD (if working in or around water)



Ensure the vet and the animal owner have appropriate PPC and PPE.

Establish your working zones

Determine the direction of access and extrication and set up your working zones accordingly.

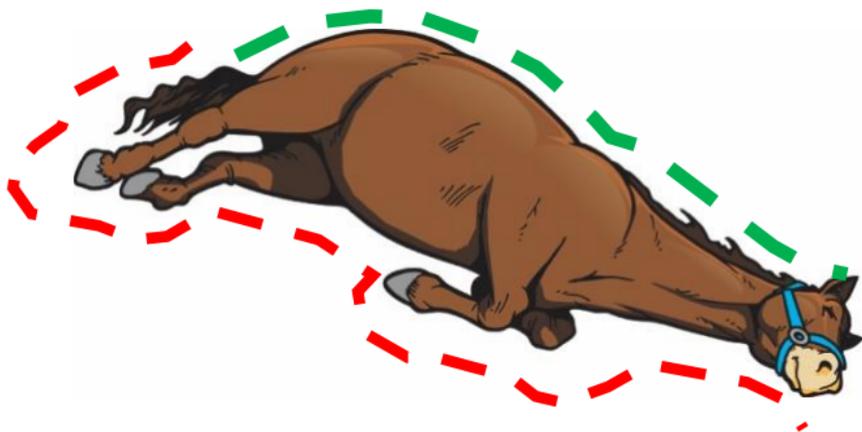


- Appoint roles (Animal handler, Safety Officer, Rigging team)
- Establish your tool staging area and retrieve the required equipment.



Minimise the number of people working in the hot zone.

Be aware of your danger zones



A recumbent horse (lying down) has a kicking zone and can strike you with its hoofs or flailing head, especially if it thrashes around.



Don't get between a standing animal and its escape route (especially to its herd) or between a standing animal and a hard object (wall, post, yard etc).

Restrain the animal

Restraint must be applied prior to any rescue operation.

If you don't know how to put on a halter, use an improvised halter:

1. Tie a figure eight loop in the end of the rope
2. Lay the rope with the figure eight loop over the horse's neck
3. Feed another loop of rope through the figure eight loop
4. Pass this loop over the nose of the horse
5. Carefully adjust and tighten



If the horse is recumbent, apply downward pressure on the horse's neck.



Use a head sheet or PVC sheeting under the head to protect the downward facing eye.

Always have an 'escape' plan

Place a safety line on any person entering the hot zone that doesn't have an obvious escape route, such as mud, water or a steep slope.



Use a harness or rope tied around the person and have someone on the rope at all times.

Reduce stimulus

Minimise the arousal of the trapped animal.

Minimise the risk to rescuers and the horse from its thrashing around; and minimise the levels of adrenaline when it comes time to sedate or anaesthetise the horse.

- **Keep calm and keep quiet**
- Remove an upset or crying owner
- Maintain the sense of entrapment (*keep the float doors closed or maintain downward pressure on the horse's neck*)
- Minimise movement, noise and vibrations
- Minimise the numbers of rescuers in the hot zone
- Give the horse some feed (lucerne chaff, hay, green pick, or grain)
- Don't move its herd mates away
- Blindfold the horse (tuck a towel into the halter). *However, some horses won't tolerate being blindfolded.*
- Cotton wool in ears. *Again, some horses won't tolerate it.*

Operational Support

Determine what additional resources you may need to undertake the rescue or recovery operation:

Do you need:

- additional people to help skid the animal?
- winching capability to help skid the animal, especially up a steep slope?
- crane, telehandler, 4WD forklift, back hoe, excavator or other heavy lifting capability?
- FRNSW HAZMAT to help decontaminate or manage biohazards?
- water to operate the mud lance or to wash down equipment?
- euthanasia?
- fencing or temporary yarding?
- rehabilitation (water, food , shade, seating for a protracted incident)?



Request additional resources through the local Police command or the District Emergency Management Officer (DEMO).

Sedation levels

Discuss with the vet the level of sedation required to perform the rescue operation.

0	1	2	3	4	5	6	7	8	9	10
None	Mild sedation			Medium Sedation		Heavy sedation			Anaesthetised	

Lighter sedation if you don't want horse to react quickly or unexpectedly but still able walk or move to assist the rescue

Heavier sedation generally recommended for lifting, skidding (dragging) or rigging slings

Anaesthesia generally recommended for a more technical extraction (legs through the floor of a horse float, difficult or awkward lifts, hobble lifts).



Always ask how long you have to undertake the rescue operation?

Recovery

As the animal wakes from anaesthesia it will be unpredictable and will need a flat area to recover.

- Move the animal well away from the area of entrapment (creek, dam , sloped area)
- Check the area for rocks and other debris



Determine what you are going to do with the animal once it has been rescued and has recovered:

- Paddock
- Yard or stable
- Float to the vet

Euthanasia

Animals may need to be put down due to injury, medical concerns or age.

This is achieved by:

- Chemical – overdose with an anaesthetic agent (pentobarbitone)
- Captive bolt
- Bullet
- Exsanguination



You may need to assist the vet in accessing the Jugular Vein (in the neck).

Shooting an animal

If a vet is not able to attend and the horse is in obvious pain and has injuries incompatible with life, it may need to be put down by shooting.

Frontal position (front view)

The firearm should be directed at the point of intersection of diagonal lines taken from the base of each ear to the opposite eye.

The bullet should be directed horizontally.



Temporal position (side view)

The horse is shot from the side so that the bullet enters the skull midway between the eye and the base of the ear.

The bullet should be directed horizontally.

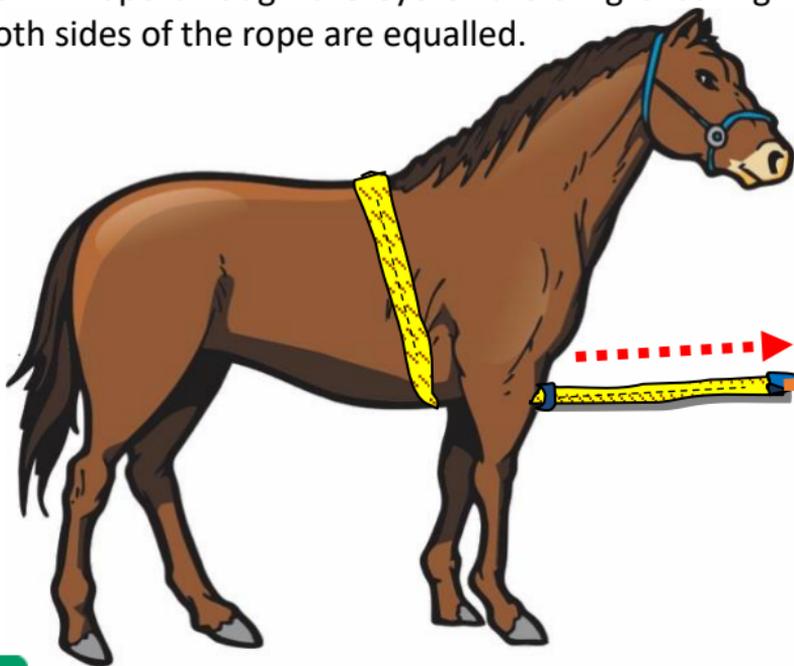


Warning - bullets can pass through the animal's skull and ricochet.

Forward assist

This is a useful technique to help an ambulatory horse to walk or climb out under its own power.

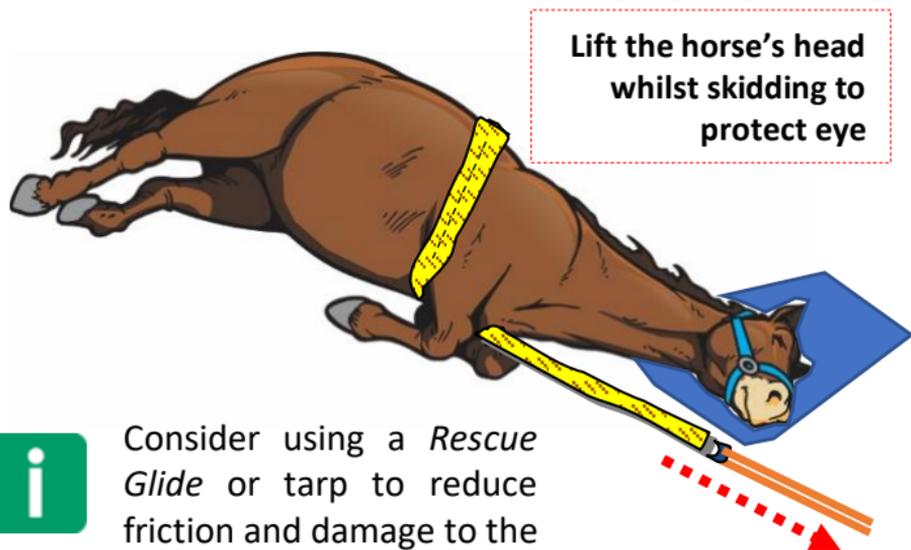
Thread a 6m X 75mm sling around the horse (behind its shoulders) and push one end of the sling through the other end sling eye and pull the free end between the front legs. Thread a 15 – 20 m X 13mm rope through the eye of the sling ensuring both sides of the rope are equalled.



Use a light sedation to allow the horse to walk or climb

Forward skid

Thread a 6m X 75mm sling around the horse (behind its shoulders) and push one end of the sling through the other end sling eye and pull the free end between the front legs. Thread a 15 – 20 m X 13mm rope through the eye of the sling ensuring both sides of the rope are equalled.



**Lift the horse's head
whilst skidding to
protect eye**



Consider using a *Rescue Glide* or tarp to reduce friction and damage to the animal



Use a moderate to heavy sedation for rigging the slings and undertaking the skidding operation.

Rear or backwards Skid

Thread a 6m X 75mm sling around the horse's girth (in front of its hips) and carefully bring both sides of the sling between the rear legs (either side of the girl or boy bits). Thread a 15 – 20 m X 13mm rope through the eye of the slings ensuring both sides of the rope are equalled.



Consider using a *Rescue Glide* or tarp to reduce friction and damage to the animal



Use a moderate to heavy sedation for rigging the slings and undertaking the skidding operation

Sideways 'Hampshire' skid

Thread a 6m X 75mm-wide sling under the horse. Make sure the middle of the sling lines up with the sternum and move the other end of the sling between the front legs and under the neck.

Thread another 6m X 75mm-wide sling under the horse as you would in a rear drag. Move the other end of the sling between the rear legs.

Thread two separate 15 – 20m X 13mm ropes through the eyes of the two slings ensuring both sides of the rope are equalled.



Consider using a Rescue Glide or tarp to reduce friction and damage to the animal.

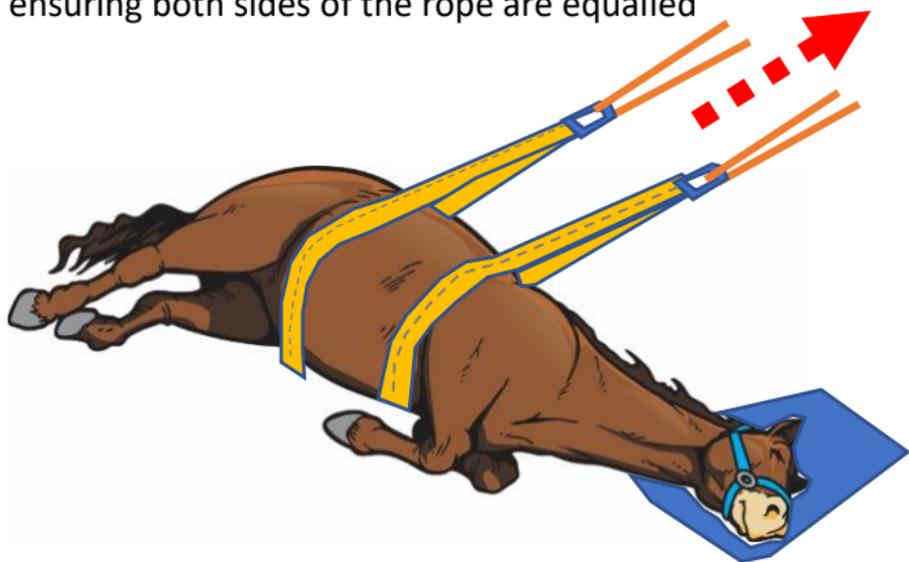


Use a moderate to heavy sedation for rigging the slings and undertaking the skidding operation

Sideways 'barrel roll'

This is a useful technique to skid a horse up and over a steep bank.

Thread two 6 m X 75mm slings (under the horse and position them just behind the front legs and just in front of the back legs. Thread a separate 15 – 20 m X 13mm rope through the eyes of the two slings ensuring both sides of the rope are equalled



Consider using a Rescue Glide or tarp to reduce friction and damage to the animal.

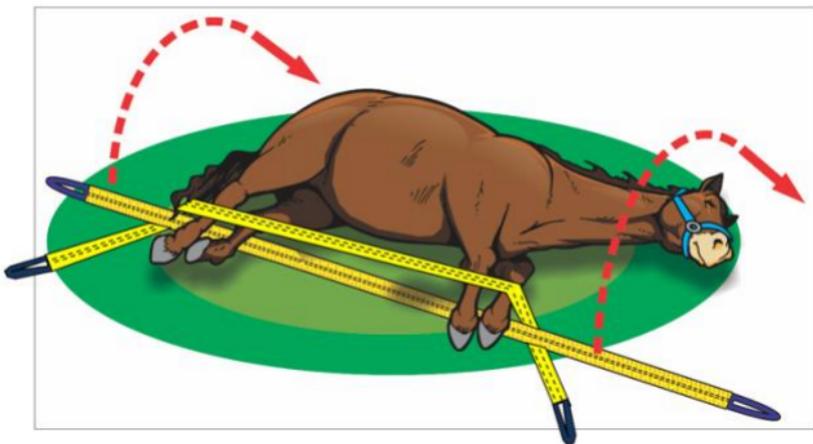


Use a moderate to heavy sedation for rigging the slings and undertaking the skidding operation.

Rolling a horse over

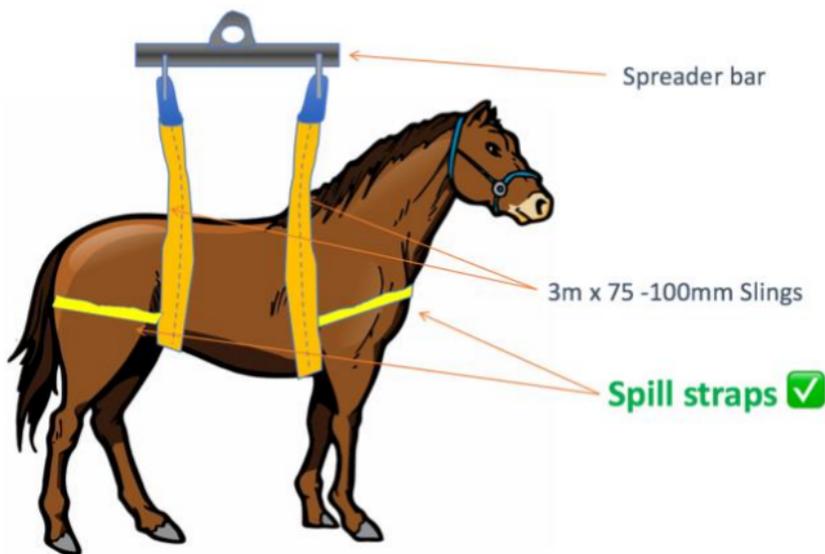
A horse that has been laying on its side for a long period may need to be rolled over before it can stand; or if the horse's legs are up hill; or the horse is cast in its stable.

Thread a 6 m X 75mm sling under the horse's legs (pastern). Thread another 6m X 75mm-wide sling over the first sling to hold it in place as you roll the horse. Four persons pull the slings using a lifting and sweeping motion roll to the horse over.



Lifting using short slings

A horse can be simply lifted using 2 x 3m x 75-100mm slings.



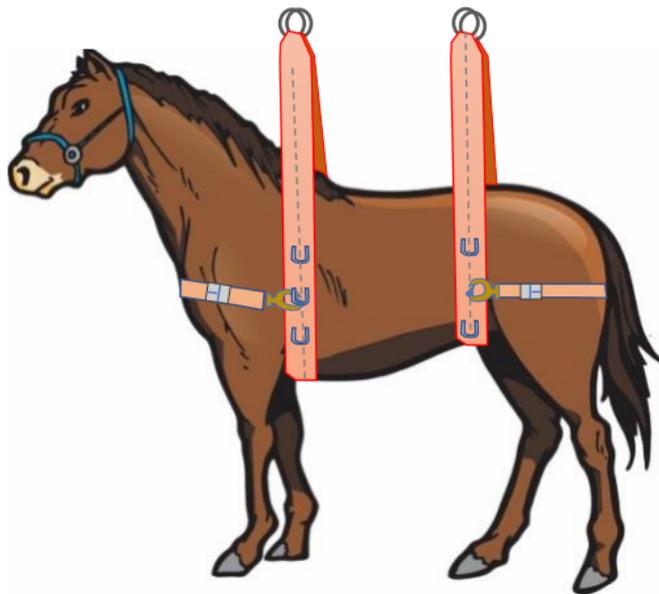
- Use a spreader bar to manage the slings (*avoid lifting from one point such as a crane hook*)
- Always rig spill straps (fore and aft) to avoid the horse falling from the slings



Use a heavier sedation for rigging the slings and undertaking the lifting operation.

Lifting using 'Hampshire' slings

A horse can be lifted using 2 x 3m x 150mm Hampshire slings.



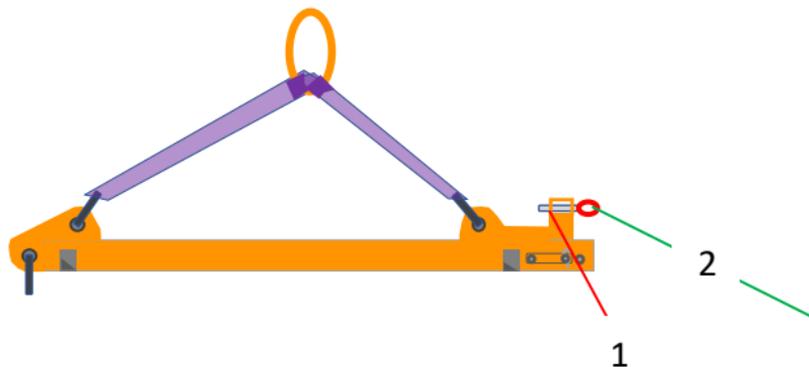
- Use the 'Hampshire' slings with the **'Eburn Quick Release Bar'**.
- Select the most appropriate D-rings on the sling so the adjustable quick release spill straps lay across the chest and flank.



Use a heavier sedation for rigging the slings and undertaking the lifting operation.

Eburn Quick Release

The Eburn Quick Release bar is typically attached to a crane hook or similar and attached to the lifting slings or harness.



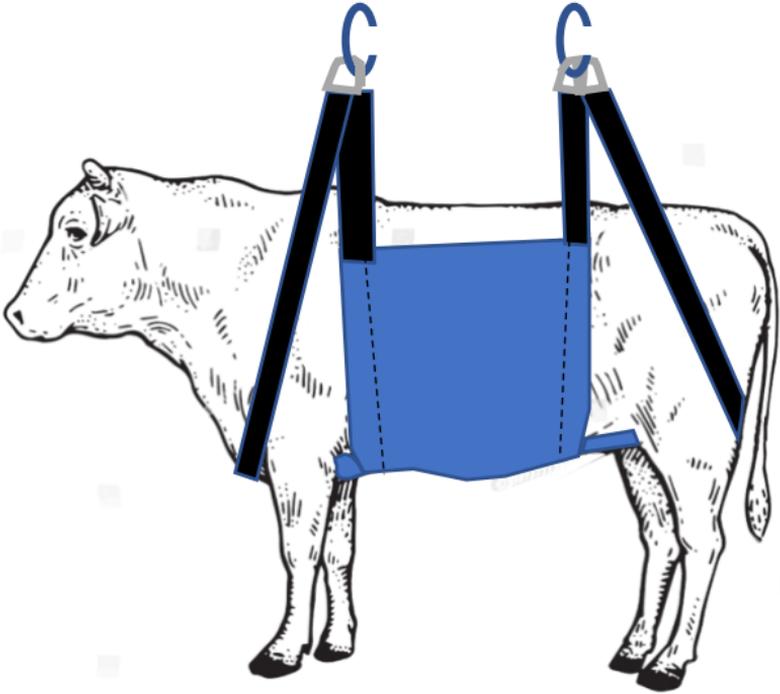
- Feed the rings on the Hampshire Slings into the two openings (one sling for each opening)
- Close the catch (pulling back on the firing pin)
- Insert the safety pin (red cord) through the firing pin; and connect the firing (green) cord to the firing pin
- When ready to release; open the two spill strap quick releases; pull the safety cord (1); and pull the firing cord(2)



Check that no one is in the flight path before releasing the animal.

Lifting using 'Downer Cow' slings

A 'Downer' Cow Sling can be used to lift a cow or horse.



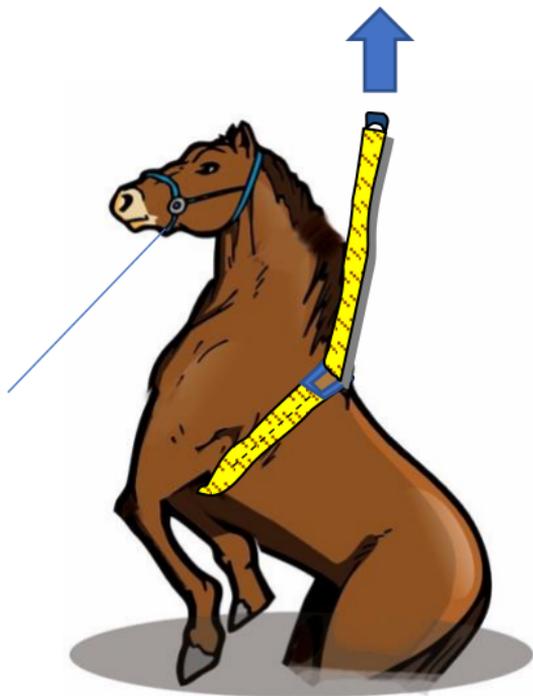
- Use C rings to facilitate a quick(ish) release. C rings are best used with a short round sling on forklift tines or similar.



Use a heavier sedation for rigging the slings and undertaking the lifting operation.

Lifting from a septic tank

A horse can be lifted up and out of a septic tank using a modified 'Forward Skid' rigging connected to a crane or other lifting machine.



Use a heavy sedation or general anaesthetic for the lifting operation.

Lifting using a Hobble Lift

A horse can be lifted upside down using a hobble lift.

- You will need a crane capable of lifting the horse (*check the weight, boom length required and distance to be lifted*)
- The horse must be anaesthetised
- Use hobbles (or min. 25mm tape slings or 1m round slings) – one on each pastern
- Ensure the head is supported to maintain the airway.



If this type of lift is going to take a long time, the horse may need a constant infusion of general anaesthetic. Discuss this with the vet

Mud operations

Horses and cattle can be stuck in mud by the gumboot effect.

- Take all precautions to avoid the muzzle going under water at any time
- Use a mud lance (or hose nozzle) to inject water down each limb to overcome suction
- Be careful lifting a horse or cow from mud. If there is any resistance use a mud lance or similar to free up the suction.



Be careful operating in mud due to biological and chemical contamination in the mud. Wear appropriate PPC and PPE.

Still not sure what to do?

Don't hesitate in giving us a call for advice:

David King 0437 387 030

Anthony Hatch 0419 406 220