

# First aid for wounds

Skin wounds are extremely common in horses, particularly on the limbs or face. Many wounds only require simple first aid to treat them, though more serious ones will require veterinary attention. Arming yourself with some basic first aid knowledge and a suitable first aid kit will enable you to treat minor wounds effectively yourself which will aid healing and reduce the risk of infection. You will also be better equipped to assess more serious wounds and provide initial treatment whilst awaiting veterinary attention.

The most important thing is to be prepared. Compile a first aid kit, making sure you replace anything you use so it is always well stocked. It is helpful to keep your kit in a portable box with a lid so the contents stay clean and dry and can easily be transported with your horse to events. An equine first aid kit should include:

- o Scissors
- Sterile non-stick dressings
- Cotton wool
- o Bandaging material
- o Poultice material
- o Silver tape
- o Antibacterial wash
- Wound gel
- o Thermometer

It is also sensible to have your vet's contact details in your first aid kit so the information is readily available for you and others.

## **Assessing wounds**

If your horse acquires a wound, you will need to assess it so you can decide how serious it is. This will help you decide if it requires veterinary attention or not, although we are always happy to offer advice over the telephone if you are not sure. When assessing a wound there are a few important things to consider:

- 1. How large and deep is the wound? Wounds that involve the full thickness of the skin and are more than a few centimetres in length may require suturing. Deep wounds that seem to involve the structure below (e.g. bone, muscle or tendon) should always be assessed by a vet. Small, superficial wounds that do not appear to involve anything other than the skin can usually be managed without veterinary intervention.
- 2. If it is on a limb, is the horse lame? If so, how lame? Severe lameness is a concern as it can suggest there is damage to underlying structures.



- 3. Is it over a joint, tendon sheath, tendon or bone? Wounds over joints and tendon sheaths could have entered the joint or tendon sheath and cause infection of these important structures (see "synovial infection" below).
- 4. What caused the wound? Could there be a foreign body in the wound such as a piece of wood or thorn? If the wound is likely to have been from a kick, there could be damage to the underlying bone or muscle.
- 5. How contaminated is it? This will affect how much cleaning and flushing the wound requires. All contamination will need to be cleaned away for the wound to heal.
- 6. How much bleeding is there? If there is large amount of blood draining from the wound, or blood is pumping from the wound then this should be dealt with immediately (see "severe bleeding" below).

If there is severe lameness, swelling or bleeding associated with the wound you should seek immediate veterinary attention. Large or deep wounds will also require veterinary attention as they may require suturing. With larger wounds, while waiting for the vet, you should clip around and clean the wound, as you would with a smaller wound in order to reduce the likelihood of infection.

## **Initial treatment of wounds**

- o Firstly, clip the hair away from the edges of the wound. This is usually best done with a pair of scissors. It helps you see the extent of the wound, enables better cleaning, and improves healing as hair and discharge will not stick to the edges of the wound.
- Next, clean the wound using a dilute antiseptic solution (follow manufacturers advice for dilution rate) or salt water. You can use cotton wool or swabs for this. Sometimes when you clean a wound a small amount of bleeding will occur. As long as the bleeding is not excessive this is not a concern.
- o Finally, you want to keep the wound clean. If the wound is anywhere other than on a lower limb, apply a layer of wound gel to the entire wound. This will dry to form a protective layer. The wound should then be cleaned and wound gel reapplied daily until the wound has healed. If the wound is on a lower limb, you will probably need to apply a dressing to keep the wound clean.



#### **Applying dressings**

After cleaning the wound start by applying a small amount of wound gel (or manuka honey or flamazine) to the wound. Next, apply a non-stick sterile dressing directly to the wound. This should be held in place by a layer of soft, thin bandaging material (Soffban) followed by a layer of cotton wool or gamgee for padding. This should be held in place by an outer bandage. Disposable self-adherent bandages such as vetrap are most useful for this, but it is possible to use a clean stable bandage. Finally, applying some adhesive bandage such as Elastoplast to the top and bottom of the dressing (half on the dressing and half on the horse's skin) will help keep the bandage in place and will stop bedding material getting under the bandage. Bandages should be changed, and the wound cleaned every 2-3 days until the wound has healed. If you are in any doubt as to how best to apply a bandage do not hesitate to call us for advice.

### **Severe Bleeding**

If an artery, large blood vessels or multiple blood vessels have been damaged by a wound, there may be excessive bleeding. The best way to stop bleeding is to apply pressure. Anything clean will do but ideally use a wad of swabs held in place by a bandage, which can be applied with a bit more pressure than you normally would use when applying a bandage. If blood keeps soaking through your pressure bandage, keep adding more layers rather than replacing with fresh bandages as removing the bandage may remove a forming blood clot. The bandage should remain in place until the bleeding is assessed by a vet. If the wound is on an area that cannot be bandaged, you can apply pressure by firmly pressing a wad of swabs or cotton wool against the wound until help arrives.

#### **Synovial Infection**

Synovial infection is the term used to describe when a wound or sharp object (such as a thorn) penetrates a joint or tendon sheath and allows infection to invade into the structure. This is serious and potentially life threatening, because if left untreated the infection and associated inflammation can cause permanent damage to the joint or tendon sheath. Synovial infections are treated by flushing the joint or tendon sheath with large volumes of sterile solution via keyhole surgery, followed by a course of intravenous antibiotics. The sooner an infected joint is identified and treated, the more likely it is that the infection can become under control before irreversible damage has occurred.

Signs of synovial involvement include:

- o Severe lameness
- Swollen joint or tendon sheath
- o Straw coloured fluid leaking from the wound

Occasionally if there is a very large opening into a joint and all the joint fluid has leaked out, a horse might not appear particularly lame. You should therefore seek veterinary advice if your horse



has a wound over a joint even if severe lameness is not apparent.

## **Tetanus protection**

Tetanus is a soil living organism (Clostridium. Tetani) which can be introduced via wounds, especially deep wounds. Horses are particularly susceptible to Tetanus, and it is very hard to treat. Affected horses will become extremely ill and sadly often die, so vaccination is imperative to stop the infection from developing. Your horse requires two vaccinations 4-8 weeks apart to be covered, followed by a booster at 12 months and then every 24 months after that. If your horse is vaccinated against influenza, cover for tetanus will be included with this. If your horse is not vaccinated and acquires a wound, it can be given tetanus antitoxin within the first 24hrs to provide immediate protection. This is not a vaccination though and this treatment should always be followed up by starting a course of vaccinations.

If you are in any doubt as to how to treat a wound or whether it requires veterinary attention, please do contact us.