

# First Aid for Lacerations and Puncture Wounds

Lacerations and puncture wounds are probably the most common types of emergency that horse owners have to face. They can occur anywhere on the body and can range from minor injuries to the epidermis (outermost skin layer) to life threatening wounds involving arteries, joints, or tendon sheaths. As an owner, it is vital to remain calm in such a situation. You will be in the best position to help your horse if you can avoid panic. A little advance preparation will go a long way to help in a crisis situation.

1) Keep your veterinarian's phone number posted in the barn and programmed on your cell phone, home phone, and all other phones. Know how to reach your vet after hours and how to reach his or her back up if your vet is unavailable.

2) Have someone available to help you. If your usually calm horse is in pain, you may not be able to handle him safely by yourself to administer first aid until your veterinarian arrives.

3) Keep a first aid kit available in the barn and in your horse trailer. The American Association of Equine Practitioners (AAEP) recommends the following items. You may want to add your own favorite antiseptic cream or ointment and other objects such as wire cutters. Access to ice is also very useful.

1. Sterile cotton roll
2. Sterile contact bandage

3. Sterile cling wrap
4. Sterile gauze pads of assorted sizes
5. Sterile gauze wrap
6. Adhesive wrap and adhesive tape
7. Leg wraps
8. Sharp scissors
9. Hemostats
10. Steel cup or container
11. Rectal thermometer with string and clip attached
12. Surgical scrub and antiseptic solution
13. Latex gloves
14. Flashlight and spare batteries
15. Permanent marker pen
16. Pliers
17. 6" diameter PVC tubing cut in half the long way (like a gutter) into lengths of 1½ to 2feet for emergency splinting

4) Make sure you know how to correctly apply a leg bandage. Incorrect application can cause further injury. Consult your veterinarian for instruction.

5) Know when your horse's last tetanus vaccine was administered. Your veterinarian will need to know this to determine whether a booster is necessary. This is very important.

Your initial goals following a laceration or puncture wound should be to move your horse away from any further danger, assess the injury to determine if a veterinarian needs to be called, stop any excessive

bleeding, stabilize the area, and prevent further damage.

- If it is possible to move the horse without causing further injury, put the horse in a stall or other safe well-lit area and keep the horse quiet. If you suspect a bone fracture, do not move the horse unless directed to do so by your vet.
- Have someone hold the horse for you so that you can safely evaluate the injury.
- The AAEP recommends that you call your veterinarian in the following situations: There appears to be excessive bleeding. The wound is over or near a joint or tendon. You can see underlying structures. The wound is severely contaminated. The entire skin thickness has been penetrated. Any type of deep puncture has occurred. The wound is severe and located below the knee or hock. An eye is involved. If you are unsure, call your veterinarian.
- DO NOT attempt to remove a penetrating object without consulting your veterinarian first. Sometimes it is better if the object is left in place until the veterinarian arrives because removal may cause uncontrollable bleeding or further damage. It may be necessary to cut the ends off the penetrating object to avoid further injury; if so, leave at least a few inches sticking out to make removal easier. If your veterinarian advised you to remove an object that has punctured a foot, be sure to mark the puncture site with an indelible marker or piece of tape so that the site can be found again later. Also mark the object at the skin

edge so your vet can determine how deep the object penetrated.

- If the horse is bleeding excessively, apply firm, steady pressure to the area until the bleeding stops. Applying a pressure wrap to the area may be helpful if you know how to do so correctly.
- Apply bandages and/or ice to help minimize swelling to tissues and make wound repair easier.
- If blood loss has been severe, do not sedate or medicate your horse without consulting your veterinarian.
- Do not attempt to treat an eye injury yourself.

Once the wound has been evaluated and stabilized, basic first aid is mostly commonsense.

- Clean the wound thoroughly with plenty of fresh water to remove all dirt. Take care to avoid further tissue damage by overly aggressive scrubbing. Avoid using alcohol on open wounds. Povidone-iodine and chlorhexidine solutions are good antiseptic solutions that cause less tissue damage than alcohol or hydrogen peroxide. Peroxide can cause oxidative damage at a cellular level which can lead to cell destruction.
- Using hydrogen peroxide to clean a wound may therefore actually lead to destruction of the tissues you are trying to save.

- If the laceration is small and superficial (does not penetrate further than the outer most skin layer), you may be able to treat it yourself with topical antiseptic ointment or spray. Use good fly control around, but not in the wound to avoid further problems associated with fly larvae.
- Anything more involved should be kept covered with a bandage to keep the dirt and flies out. Follow your veterinarian's recommendations.

Contact Brandon Equine Medical Center at 813-643-7177 or email [lkuebelbeck@brandonequine.com](mailto:lkuebelbeck@brandonequine.com) with any questions regarding this topic.