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David Marshall, VMD
Delaware Equine Extension Veterinarian

Be Prepared for an Equine Health Emergency

If you own a horse, sooner or later you are likely to confront a medical emergency. From lacerations to colic, from founder to foaling difficulties, a horse owner may encounter any number of emergencies. If you learn how to recognize and define what an emergency is, you will be prepared to act promptly, taking appropriate measures prior to the arrival of your veterinarian. The American Association of Equine Practitioners (AAEP) offers six guidelines to help you prepare for an equine emergency:

1. Preparation is vital in the face of a medical emergency. No matter what the situation, if you have rehearsed the steps to take and are mentally prepared, you can prevent panic from taking control of the situation.
2. Keep your veterinarian's number nearby each phone, including how the practitioner can be reached after hours.
3. Ask your veterinarian for a back-up or referring veterinarian, and get that phone number in the event you cannot reach your veterinarian quickly enough.
4. Know in advance the most direct route to an equine surgery center in case you must transport the horse. You may need to make advanced arrangements to transport your horse if you don't own a truck or trailer.
5. Post the name and phone numbers of nearby friends and neighbors who can assist you in an emergency while you wait for the veterinarian.
6. Prepare a first aid kit and store it in a clean, dry, readily accessible place. Make sure that family members and other barn users know where the kit is. Also keep a first aid kit in your horse trailer or towing vehicle, and a pared-down version to carry on the trail.

Now, what if the horse's injury is minor, not requiring a call to the veterinarian. After all, horses tend to be accident-prone, given their inborn behavioral responses, such as their natural curiosity and flight instinct. For this reason, horse owners must know how to treat minor scrapes, scratches, and lacerations before the wounds turn into serious problems.

Basic first-aid supplies come in an impressive selection from age-old remedies to the high-tech, from the "natural" to the synthetic. Some preparations are costly and some inexpensive and they come in so many forms—liquids, sprays, powders, and ointments. In deciding what first aid products to purchase, the question is: What encourages and what inhibits healing? Treating wounds promptly and properly goes a long way in reducing healing time, thus returning your horse to normal functional activity, and in decreasing the appearance and development of scars.

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First aid kits for both emergency care and the handling of non-complicated wounds need not be elaborate. Following is a list of essential items that will handle 99 percent of simple wounds as well as assist you in emergency situations until the veterinarian can get there.

Supplies for First Aid Kit

- Rectal thermometers. *Note*: Plastic digital models give a faster reading and are safer to use around the barn than glass-mercury types.
- Inexpensive stethoscope for checking heart rate and respiration rate
- Large gauze squares: 3x3 inch or 4x4 inch
- Adhesive tape
- Antiseptic scrub, such as povidone-iodine (Betadine™) a "tamed iodine," or chlorhexidine (Nolvasan™, Hibiclens™)
- Saline solution. A squirt bottles of saline intended for soft contact lenses is perfect to clean wounds and light enough to carry on the trail.
- A large syringe such as a 35cc or 60cc is also good for flushing wounds. An 18 gauge needle provides the perfect wound flush pressure.
- Cotton roll or some sort of padded leg bandage.
- Four-inch size, self-adhesive stretch-type bandage material such as Vetrap™
- Sterile non-adherent dressing pad, Telfa pads™
- Topical medication. *Note*: No single dressing medication can produce the optimum wound healing environment for all wounds or for the total healing stages in one wound. The following list is appropriate for most superficial, non-emergency type horse wounds. Your veterinarian can make additional recommendations.
  Triple antibiotic ointment
  Povidone – iodine ointment
  Povidone – iodine solution

The above first aid kit can be sized and adapted to trail use or barn, trailer, truck or tack box storage. Zip-up plastic storage bags keep supplies dry and dust-free. Tubes of ointment are far superior to jars because jars quickly become contaminated with barn dirt. Other first aid supplies to consider are: cold packs to ice injured legs, scissors, and fly repellant to keep files from wounds in areas impossible to cover. Be careful not to apply repellants directly on the wound.

Four principles of basic wound management

1. Wound Lavage—Flush the wound using saline solution. This is critical for the removal of contaminants and bacteria. Flush the wound for several minutes. Discontinue flushing before wound becomes discolored—taking on a gray color. Tap water from a hose can be used for large wounds, but tap water delays wound healing. Delivering the lavage or flush solution by fluid jet spray is a superior flush. Exact pressure can be achieved by using a 35cc or 60cc syringe with an attached 18 gauge needle or a spray bottle. If necessary, a saline solution can be made by combining a flat teaspoonful of salt to a pint of previously boiled water. Adding 1/2 teaspoon full of povidone iodine solution or chlorhexidine solution to freshly prepared saline solution will kill any tap-water germ contaminants.

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2. Leaving a wound exposed, [allowing a cut to “breathe”], actually delays healing by as much as 50 percent. A covered, moist wound will heal much faster. Apply a daily or twice daily application of povidone-iodine ointment or triple antibiotic ointment under a nonstick gauge pad for best results. In this way the wound is protected from further contamination, the pressure reduces edema-swelling, the wound is immobilized, and the wound environment is superior for rapid healing.

3. Two other important (and related) equine wound factors to expedite healing are constant pressure and limited movement. You can reduce the possibilities of granulation tissue development; so-called “proud-flesh,” with pressure. This is especially important on leg wounds—the most common site for horse wounds and for delayed healing. Limit the horse’s movement, especially if the wounds occur about joints. Any movement delays wound healing and promotes wound problems such as “proud-flesh” development.

4. A list of Never-dos:

    - Don’t swab wounds or flush wounds with hydrogen peroxide. The bubbles make you think something good is happening, but hydrogen peroxide is known to destroy the new skin cell development.
    - Don’t treat wounds with vitamin E. Despite what you may have heard, vitamin E has been shown in human studies at the University of Miami, to impair wound healing. In addition, one-third of the human patients tested with Vitamin E also developed an allergic reaction.
    - Never place alcohol or tincture of iodine [Strong Iodine or 7% Iodine] on a horse wound. Like peroxide, these solutions damage tissue and delay healing. Rule-of-thumb is if you would not apply a particular product on your own wound, don’t use it on your horse.

Tetanus requires a note of caution in terms of wound care. A horse requires an annual tetanus shot as a prevention, and tetanus enters the horse primarily through wounds. Occurring worldwide, the tetanus organism lives in soils and thrives in horse manure enriched soils. Since horses are particularly sensitive to tetanus, give a tetanus booster when a new wound occurs and the horse is more than 6 months from its last tetanus shot.

Of course, prevention is the best approach to accidental injury and life-threatening emergencies. Take the time now to evaluate your horse’s environment and remove potential hazards. Remember, a horse is curious and seems to find inventive ways to injure itself. Also, the American Association of Equine Practitioners maintains that horse owners should not worry that they are “over-reacting or annoying the veterinarian.” The veterinarian is your partner in the health of your horse. Just act wisely and quickly to minimize injury or illness, and know when to call the veterinarian for help.

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1. American Association of Equine Practitioners “Emergency Care” brochure. AAEP’s horse health web site, www.myHorseMatters.com.

2. Manual of Equine Emergencies, Second Edition 2003, Elsevier Science (USA), Orsini and Divers.

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