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TNH1006- Emergency First Aid for Horses

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EQUIFACTS

Emergency First Aid for Horses

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You come home after a long, hard day at work and go to the barn to feed. Your gelding, named "Disaster," has a deep cut on his forearm and the cut is bleeding in spurts. What do you do?

An emergency is a medical condition that requires immediate care. Sensible emergency care can prevent the problem from worsening, reduce discomfort and promote more rapid correction of the problem. The cut described above could result in a dangerous blood loss and quickly become infected if first aid is not given.

The most common veterinary complaints seen in horses are colic, lacerations and lameness, all of which can be prevented to a degree. Colic is associated with rapid changes in feed, irregular feeding and an inadequate deworming program. Lacerations are often associated with poor fence and barn maintenance, barbed wire fencing, overcrowding, and frequent mixing of groups of horses that have not been kept together in the past. Lameness can be associated with poor conditioning, injuries that could have been prevented and inadequate foot care. If you have a lot of horse emergencies, you should evaluate your management and make changes to reduce problems.

First Aid Kits for Horse Owners

While many equine emergencies can be prevented, some are inevitable due to the nature of the horse and the nature of many horse facilities today. Having a first aid kit available where and when it is needed is a good idea. The first aid kit should be:

- Complete enough to be useful in common emergency situations.
- Compact enough to be taken to the horse,
- Stored so that its contents are intact, clean and useable,
- Checked often enough so that supplies are not out of date.

The barn and your horse trailer are the most logical places to keep a horse first aid kit. Trail riders often have a small first aid kit in their saddlebags. A basic first aid kit for horses might contain:

- **Bandage material** including antiseptic wound ointment, 4×4 gauze squares (to clean and cover wounds and to hold wound medications in place); 4-inch wide roll gauze and roll cotton (to cover the gauze and pad the leg, and support the horse's leg); flexible, self-adhering leg wrap, such at Vetrap® (to be used only over adequate padding); 2-inch wide adhesive tape to hold everything together; duct tape (where a waterproof covering is needed); and bandage scissors. There are many other types of bandage material that work well.

- **Medications**, such as mild soap for cleaning wounds, a mild antiseptic for killing bacteria that

will evitably get into a wound and some sort of pain-relieving drug. Your vet may be willing to prescribe prescription drugs such as flunixin meglumine (Banamine®), phenylbutazone (bute) or a tranquilizer. Hypodermic needles and syringes will be needed if you use injectible products. There are a number of other medications that might be useful. Make sure that you are aware of expiration dates and discard expired medications.

- **Other first aid materials** such as a twitch, rubber gloves, a bucket and plastic bags to line the bucket (so that the inside is clean with each use) and a list of emergency phone numbers should be a part of your first aid kit. A tablet and pen are useful to write down what you have found and what you have been advised to do. A thermometer should be a part of every first aid kit. Digital thermometers are quick and easy to use but batteries do run down. Mercury thermometers are more accurate but slower to use (three minutes) and breakable.

- If you have mares that will foal, towels, tail wraps, a mild navel disinfectant such as tamed iodine or chlorohexadine, liquid soap, OB sleeves, a hair dryer, phosphate enemas and tetanus antitoxin (kept in the refrigerator) should be available in addition to your regular first kit.

- Plastic bags, plastic containers and a toolbox are useful for keeping supplies together and clean.

Handling Emergencies

Remain calm! Horses have managed to survive for most of their history without human attention and your horse will most likely do well in the current situation. Also, the horse will sense your panic and become nervous, making a bad situation worse. A couple of minutes of deep, measured breathing and thought are often a very effective first aid treatment.

Immediately call your veterinarian for advice or a visit if you don't feel that you can handle the situation, if you are unsure what the problem is or how severe it is, or just to be safe.

Remember your personal safety. You won't do the horse any good if you get injured.

If logical and practical, move the horse to a barn or other area where it can be confined and safely restrained. If the horse can't walk, is caught in a fence or just won't cooperate, moving the horse is not logical or practical.

Examine the horse to define the problem as best you can. Remember to examine the entire horse. What you see may be a wire cut, but what you want is a well horse. There may be more than one wire cut. Recognizing all the horse's current problems may be important to the horse's overall wellbeing.

Decide what needs to be done first. Spurting blood from a wound needs attention **now**. See how the problem is affecting the horse by:

- **Taking the horse's rectal temperature**. In cases of infection and some other situations, a horse's body temperature will go up. This fever causes protective chemical reactions in the body to happen faster and other changes that will help the horse protect itself. The normal rectal temperature of most adult horses is 99 to 101.5. Rectal temperatures below 98 or more than 102 indicate a problem.

- **Taking the horse's pulse rate**. The horse's pulse rate will go up when it is excited, in pain or in an effort to move more blood and blood elements to an area of the body where it is needed. The pulse of the horse is taken by touching the fascial artery where it crosses the jawbone near its center and counting the pulse for one minute. The pulse rate in a normal, calm, adult horse is 25 to 48 beats per minute and resting pulse rates above 60 may indicate a problem.

- **Measuring the horse's rate of breathing**. The horse's rate of breathing will go up if it is excited, but also if its oxygen needs are not being met at normal breathing rates. Breathing rate can be measured by watching the chest and flank or putting one's hand in front of the nostrils. The normal rate of breathing for a calm, normal, adult horse is between 8 and 20 breaths per minute.

- **Look at the horse's gums and measure capillary refill time**. The horse's gum color should be a light pink color, although blood loss and shock may cause pale or gray gums. Capillary refill time measures how quickly a horse can move blood to distant parts of the body; horses in shock may not do this quickly enough. Capillary refill time is measured by pressing firmly on the gums above the teeth using a finger or thumb, causing the area to become blanched out. After releasing the pressure, that area of the gums should return to normal color in two seconds or less in a normal horse.

- **Next, use the pinch test to measure dehydration.** In times of stress or disease, horses can lose body water faster than they can take it in. Dehydration can be measured by using the thumb and forefinger to pull the horse's skin away from the point of the shoulder. When the skin is released, it should return to its normal position in two seconds or less. If this takes longer than 2\two seconds, the horse is dehydrated.

Remember that normal rates may vary between horses. You should know your horse's normals before an emergency.

First Aid for Common Emergencies

Wounds that penetrate the skin are deep and wide and show significant bleeding. These wounds need first aid. Bleeding in spurts means an artery is cut – this should be treated as soon as possible. Failure to treat promptly can result in blood loss, more scarring and slower healing due to infection. Check for the amount of blood loss by looking at gum color and measuring capillary refill time. In cases of arterial bleeding, put pressure on the wound, using several gauze squares to stop or slow bleeding. Hold the gauze squares in place with roll gauze wrapped snuggly around the injured area. Cover with a thick layer of roll cotton and then apply roll gauze over the top snuggly. More pressure can be put on thicker bandages without danger of slowing blood flow to the area. Hold everything in place with adhesive tape. If the original bandage becomes blood soaked, put more bandage on top rather than replacing the original bandage.

If arterial bleeding is not present, clean the wound with mild soap and water, removing any debris present. Hosing the wound off may help. Rinse the wound with water and dry the leg. Put several gauze squares over the wound and hold the gauze in place with roll gauze. Cover with roll cotton and an elastic leg wrap or hold in place with adhesive tape. Call your veterinarian for advice or a visit. Check your records to learn when the horse last had a tetanus shot. Some wounds can be sutured. The advantages of suturing include faster healing, less infection, less scarring and less likelihood of proud flesh. The decision to suture a wound is based on:

- The wound's location
- How dirty the wound is
- The length, width and depth of the wound
- How long ago the wound occurred
- The horse's temperament and facilities available
- The owner's willingness and ability to provide aftercare

Your veterinarian should be contacted immediately if the wound occurs over a joint or in the pastern region. Wounds into the joint or tendon sheath can introduce bacteria that can cause a severe infection.

Abdominal pain from any source is referred to as colic. Most colic in the horse is due to some sort of intestinal problem. Horses will act generally uncomfortable, may perspire, look at their side, tread their feet, assume abnormal postures, paw the ground and lie down and roll. Horses showing these signs should be examined for signs of shock by checking gum color, capillary refill time and dehydration. Remove the horse from any feed source and away from any obstructions that the horse could roll in to. Stay with the horse to keep it from injuring itself. Call your veterinarian for advice about walking the horse and administering pain-relieving drugs, if you have them available. Avoid tranquilizers, unless directed, as these may reduce the horse's blood pressure.

Lameness is common in horses. Decide which leg or legs are lame and how severe the lameness is. Examine the lame leg, looking for areas that are warmer, painful to the touch, swollen or can be moved abnormally. Bandage the affected leg using a thick bandage extending from one joint above the affected area to one joint below. If it does not appear that a bone is broken, take the horse to a stall where its movement can be limited. If in doubt, leave the horse where it is until help arrives.

Difficult births are a true emergency. The average interval between the time that a mare starts to strain and finishes the birth process is 11 minutes. Mares who strain more than 30 minutes without delivering a foal should be considered in trouble. Immediately call your veterinarian. Keep the mare walking until the veterinarian arrives to keep her from pushing. If your veterinarian instructs you to do a vaginal exam on the mare, be sure to get the mare's tail out of the way and wash and dry the rear of the mare thoroughly before entering the birth canal. Use an arm-length plastic sleeve and lots of lubricant.

Always call your veterinarian if the problem is sudden and/or severe, if you are not sure what the problem is or how to best treat it.

Emergency medical situations are a part of horse ownership. Being prepared, calm, having a first aid kit and knowing how to use it should reduce the likelihood of the problem getting worse or healing more slowly than it should.

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