



American Association
of Equine Practitioners

Horse Health Education

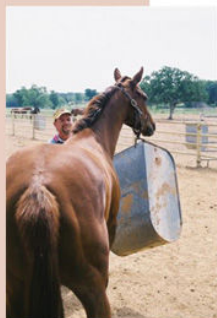
EMERGENCY CARE

Guidelines to Follow During Equine Emergencies

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HORSE HEALTH EDUCATION: EMERGENCY CARE



If you own horses long enough, sooner or later you will likely be confronted with a medical emergency.

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There are several behavioral traits that make horses especially accident-prone:

- Flight-or-fight instinct
- Hierarchy dominance – the need to establish the pecking order within the herd
- Natural curiosity

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Several behaviors account for many of the cuts, bruises and abrasions that horses suffer.

Lacerations are typically the most common emergency with which horse owners must contend.

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There are other types of emergencies as well that can consist of:



- Colic
- Foaling difficulties
- Acute lameness
- Seizures
- Illness

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As a horse owner, you must know how to recognize serious problems, respond promptly and take appropriate action while awaiting the arrival of your veterinarian.

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RECOGNIZING SIGNS OF DISTRESS



You must be a good observer so you can readily recognize signs of ill health.

It is important to know your horse's normal vital signs, including temperature, pulse & respiration (TPR) as well as normal behavior patterns.

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RECOGNIZING SIGNS OF DISTRESS

Subtle signs may include:

- * Anorexia decreased appetite
- * Lethargic
- * Laying down longer than usual
- * Single animal off to themselves
- * Squinting or tearing (holding the eye closed)
- * Red, purple, white or yellow gum color
- * Fever (temperature greater than 101.5)

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RECOGNIZING SIGNS OF DISTRESS

More obvious signs may include:

- Rolling, pawing, stretching, looking at the flank
- Inability to move
- Ataxic (wobbling when walking)
- Sweating profusely
- Labored breathing (nostrils flaring) or rapid respiratory rate
- Yellow or green nasal discharge
- Lameness
- Bleeding



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WHAT'S NORMAL?

There will be individual variations in temperature, heart and respiration values. Take several baseline measurements when the horse is healthy, rested and relaxed.

Write them down and keep them within easy reach, perhaps with your first aid kit, so you can compare to them in case of emergency.



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WHAT'S NORMAL?



Normal ranges for adult horses are:

- Heart rate: 28-44 beats per minute.
- Respiratory rate: 12-24 breaths per minute.

Normal ranges for the foal are:

- Temperature: 99.5 - 102 degrees Fahrenheit.
- Heart rate: 80-120 beats per minute.
- Respiratory rate: 24-40 breaths per minute.

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WHAT'S NORMAL?



- Rectal temperature: 99.5-101.5 degrees F. If the horse's temperature exceeds 102.5 degrees F, contact your veterinarian immediately. Temperatures over 103 degrees F indicate a serious disorder.
- Capillary refill time (time it takes for color to return to gum tissue adjacent to teeth after pressing and releasing with your thumb): 2 seconds or less.

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WHAT'S NORMAL?

Other observations you should note:



- Pinching or folding a flap of skin (preferably on the leg or face where the skin is typically taut) and releasing. This tests skin pliability.
- Color of the mucous membranes of gums, nostrils, conjunctiva (inner eye tissue) and inner lips of vulva should be pink. Bright red, yellow, pale pink to white or bluish-purple coloring may indicate problems.

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WHAT'S NORMAL?

- Color, consistency and volume of feces and urine should be typical of that individual's usual excretions. Straining or failure to excrete should be noted.

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WHAT'S ABNORMAL?

- Evidence of lameness, such as head-bobbing, reluctance to move, odd stance, pain, unwillingness to rise.
- Bleeding, swelling, evidence of pain.
- Seizures, paralysis, coma or “tying up” (form of muscle cramps that ranges in severity from mild stiffness to life-threatening illness).
- Signs of distress, anxiety or discomfort.
- Lethargy, depression or a horse that is “off-feed.”
- Presence or absence of gut sounds.

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ACTION PLAN

No matter what type of emergency you may be faced with, mentally rehearse the steps you will take to avoid panic. Here are some guidelines to help you prepare:

1. Keep your veterinarian's number by each phone, including how they may be reached after-hours.
2. Consult with your regular veterinarian regarding back-up or a referring veterinarian's number in case you cannot reach your regular veterinarian quickly enough.

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ACTION PLAN

3. Know in advance the most direct route to an equine surgery center in case you need to transport the horse.
4. Post the names and phone numbers of nearby friends and neighbors who can assist you in an emergency while you wait for the veterinarian.

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ACTION PLAN

5. Prepare a first aid kit and store it in a clean, dry and readily accessible place. Make sure that family members and other barn users know where the kit is kept.
6. Also, keep a first aid kit in your trailer or towing vehicle, and a pared-down version to carry on the trail.

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FIRST AID KITS



First aid kits can be simple or elaborate, but there are some essential items. Here is a short list to get yours started.

- * Cotton roll
- * Contact bandage
- * Cling wrap
- * Gauze pads, assorted sizes
- * Gauze wrap

* Materials that should be sterile.

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FIRST AID KITS

- Adhesive wrap and adhesive tape
- Leg wraps
- Sharp scissors
- Hemostats
- Cup or container (for fecal or urine collection)

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FIRST AID KITS



- Digital rectal thermometer
- Surgical disinfectant and antiseptic soap
- Latex gloves
- Flashlight and spare batteries



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FIRST AID KITS



- Permanent marker pen
- Pliers (to pull nails)
- 6" diameter PVC tubing, cut in half length-wise, into lengths of 1 ½ to 2 feet (used for emergency splinting)
- Fly spray
- Hoof pick
- Shoe pullers
- Stethoscope

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EMERGENCY RESPONSE

Maintaining your presence of mind can help to save your horse's life.

The initial steps you take to treat a wound can prevent further damage and speed healing. How you proceed will depend on your individual circumstances and exercising good judgment.



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EMERGENCY RESPONSE

The following should be viewed as guidelines:

1. Catch and calm the horse to prevent further injury. Move the horse to a stall or other familiar surroundings if this is possible without causing distress or further injury to the horse. Providing hay or grain can also be a good distraction.



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EMERGENCY RESPONSE

2. Get help before attempting to treat or evaluate a wound. It can be difficult and very dangerous to try to inspect or clean the wound without someone to hold the horse. You cannot help your horse if you become seriously injured yourself.



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EMERGENCY RESPONSE

3. Evaluate the location, depth and severity of the wound.
Call your veterinarian for a recommendation anytime you feel your horse is in need of emergency care. Here are some examples of situations in which your veterinarian should be called:
 - A. There appears to be excessive bleeding.
 - B. The entire skin thickness has been penetrated.



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EMERGENCY RESPONSE



- C. The wound occurs near or over the joint.
- D. Any structures underlying the skin are visible.
- E. A puncture has occurred.
- F. The wound is severely contaminated.

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EMERGENCY RESPONSE

4. Consult with your veterinarian for a recommendation before you attempt to clean the wound or remove debris or penetrating objects, as you may precipitate uncontrollable bleeding or do further damage to the wound.

Large, penetrating, foreign objects should be stabilized to avoid damaging movement, if possible. Don't put anything on the wound except a compress or cold water.

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EMERGENCY RESPONSE

5. Stop the bleeding by covering the wound with a sterile, absorbent pad (not cotton), applying firm, steady, even pressure to the wound.
6. Do not medicate or tranquilize the horse unless specifically directed by your veterinarian. If the horse has suffered severe blood loss or shock, the administration of certain drugs can be life-threatening.

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EMERGENCY RESPONSE

7. If the eye is injured, do not attempt to treat. Await your veterinarian.



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EMERGENCY RESPONSE



8. If a horse steps on a nail or other sharp object and it remains embedded in the hoof, first clean the hoof.

(Consult with your veterinarian for a recommendation before removing the nail).

If your veterinarian advises, carefully remove the nail to prevent the horse from stepping on it and driving it deeper into the hoof cavity. As you remove it, be sure to mark the exact point and depth of entry with tape and/or a marker so the veterinarian can assess the extent of damage. Apply antiseptic to the wound and wrap to prevent further contamination.

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EMERGENCY RESPONSE

9. Horses being treated for lacerations or puncture wounds will usually require a tetanus booster.



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EMERGENCY GUIDELINES

Regardless of the situation, remembering the following points is crucial:

1. Keep the horse as calm as possible. Your own calm behavior will help achieve this.
2. Move the animal to a safe area where it is unlikely to be injured should it go down.

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EMERGENCY GUIDELINES

3. Get someone to help you and delegate responsibilities, such as calling the veterinarian, retrieving the first aid kit, holding the horse, etc.
4. Notify your veterinarian immediately. Be prepared to provide specific information about the horse's condition and other data that will help your practitioner assess the immediacy of the danger and instruct you on how to proceed.

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EMERGENCY GUIDELINES

5. Listen closely and follow your equine veterinarian's instructions.
6. Do not administer drugs, especially tranquilizers or sedatives, unless specifically instructed to do so by the veterinarian.

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VARIOUS EMERGENCIES

- If the wound is on the bottom of the foot, over a joint or near a tendon, call your veterinarian immediately for advice.
- Make sure that the horse has had a tetanus toxoid booster in the last 6 months.

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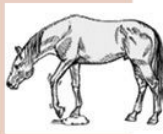
VARIOUS EMERGENCIES

Colic

Colic (abdominal pain) can show many different signs such as:



- Anorexia
- Stretching
- Lying down
- Decreased manure output
- Rolling
- Pawing
- Kicking at the belly
- Looking at the flank



The heart and respiratory rate may also become elevated and the mucous membranes may become white, purple, blue or red.

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VARIOUS EMERGENCIES

If you see any of these mentioned signs of distress:

- Remove all feed but provide access to water.
- Walk the horse to keep it from injuring itself and from rolling.
- Call your veterinarian immediately.

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VARIOUS EMERGENCIES

Eyes



Signs of eye pain include squinting, tearing and holding the eye closed.

Eye problems require immediate veterinary attention!

Until the veterinarian arrives, try to keep the horse from rubbing the affected eye.

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VARIOUS EMERGENCIES

Choke (esophageal obstruction)

Choke can occur when a horse eats its food too fast and a large portion of the feed becomes lodged in the esophagus. Clinical signs that are most commonly seen include:

- Green frothy (or feed) nasal discharge
- Coughing or gagging

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VARIOUS EMERGENCIES

If any of these signs of choke distress are seen:

- Immediately take all food and water away from the horse.
- Contact your veterinarian immediately.
- Your veterinarian can relieve choke and address possible aspiration pneumonia.

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VARIOUS EMERGENCIES



Neurological Emergencies

Neurological emergencies are varied and can occur from head or neck injuries, after a fall or from infection stemming from a disease such as West Nile virus, Eastern Equine Encephalitis (EEE), Rabies, Rhino (herpesvirus) or Equine Protozoal Myeloencephalitis.

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VARIOUS EMERGENCIES

Clinical signs of a neurological emergency may include:

- Ataxia (unsteadiness and wobbly gait)
- Depression
- Circling
- Head pressing
- Weakness
- Inability to stand
- Excessive excitability

These emergencies require immediate veterinary assistance.

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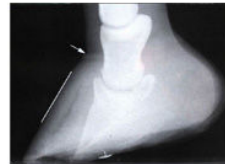
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VARIOUS EMERGENCIES

Acute non-weight bearing lameness

The most common cause of sudden severe lameness is a foot abscess. Other possible causes include a fracture or an infection of the joint or tendon sheath.

Laminitis (founder) can also cause severe lameness, but usually affects more than one foot.



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VARIOUS EMERGENCIES

Your veterinarian can determine the cause of the lameness and prescribe the appropriate treatment.

If there is an obvious fracture, try to keep the horse quiet.

Do not apply any ointments as they may communicate with the fracture site. A light bandage may help to keep the wounded area clean until your veterinarian arrives.

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VARIOUS EMERGENCIES

Fever

Fever can cause depression, anorexia, increased heart and respiratory rates. Fever can occur from the result of:

- Infection
- Tumors
- Drug administration
- Exhaustion
- Severe muscle injury
- Severe inflammation
- Immune-mediated disease
- Hyperthermia
- Neurological problems

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NEONATAL FOAL EMERGENCIES



Photo courtesy of Louise Reinagel

Follow the basic 1-2-3 Rule:

1. A newborn foal should **stand** within 1 hour.
2. **Nurse** within 2 hours.
3. The **placenta** should pass within 3 hours.

If any of these time limits are broken, call your veterinarian immediately.

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NEONATAL FOAL EMERGENCIES

Normal foals will suckle several times an hour.

If the foal sleeps for prolonged periods of time, cannot nurse or displays abnormal behavior, contact your veterinarian.

All foals should have a wellness exam by 24 hours of age and a blood test to check proper IgG levels. Immunoglobulins (IgG) are passed in the colostrum and are the foal's only defense against infection until its own immune system is functional (about 3 months of age).

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SUMMARY

Taking the time to evaluate your horse's environment and removing potential hazards can prevent many accidents.



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SUMMARY

- Assess your management routines to make them safer.
- Mentally rehearse your emergency action plan.

Preparation will help you to stay calm in the event of a real emergency.
Keep your veterinarian's phone number and first aid kit handy.

In an emergency, time is critical. Do not be concerned with overreacting or annoying your veterinarian.

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SUMMARY

By acting promptly, you can minimize the consequences of an injury or illness. Your horse's health and well-being depend on it.



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