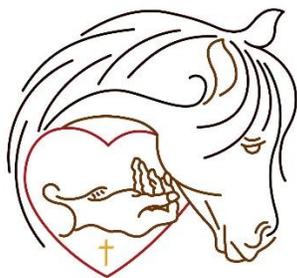




**Being a
Responsible
Equine Owner**

Requires more than love



As an equine owner, it is up to you to educate yourself on the basic needs of your equine.

EQUINE definition: Includes all horses, donkeys, mules, ponies and miniatures.

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Costs and Considerations When Rescuing a Horse:
Dr. Tania Cubitt – Performance Horse Nutrition
(page 27)

Helpful Links:

County Extension Offices:

<https://extension.tennessee.edu/Pages/Office-Locations.aspx>

Tennessee Animal Cruelty Laws:

https://www.heartsofhorsehaven.org/uploads/1/0/7/1/107185663/2016.tn_animal_law_book.pdf

Report Equine Cruelty:

<https://www.tn.gov/agriculture/businesses/animals/animal-health/livestock-welfare.html>

Horse Welfare Standards:

<https://extension.tennessee.edu/publications/Documents/PB1741.pdf>

Hearts of Horse Haven is here to support law enforcement and owners through education, emergency assistance and direction. We are just a phone call away. (865) 573-8006 or email heartsofhorsehaven@gmail.com

Introduction

Not everyone working within the equine community understands the basic needs of these animals. The owner has control over most of the safety and health issues that can affect the animal. Injuries and health issues outside of the owner's control become the owner's responsibility to take attention from someone more qualified.

The information compiled within this publication come from respected resources. The topics were selected to cover only the basic care needed. If a proper management program is not supplied by the owner it can cause unnecessary harm and affect an equines quality of life.

A vast amount of additional information is available on the care and training of equine. Free information might be found at your local library or on the internet.

If you are in doubt always check with your veterinarian. They are the experts and no well-meaning advice from friends or the internet should ever supersede a veterinarian with their experience dealing with an equines health.

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Safe and Healthy Environment

Your property may have hidden hazards you may be unaware of. The most common that may create a risk to your animals is old private dumpsites. With the constant movement of the earth not only will rocks work their way to the surface, so will other buried materials such as glass, nails and metal. In some areas of Tennessee, sinkholes can cause a very serious problem. Walking your property periodically is recommended to find, remove or repair these hazards before they can do harm to your horse.

Horses will go where the grass is greener, and this includes into and around potential hazards that have grass growing around them. Machinery, lumber piles, etc. should be removed or securely fenced off.

Adequate Fencing

The perimeter of the equine world is the boundary between a safe haven and a dangerous outside world. The fencing is the owner's safeguard against an animal-at-large; which can result in serious injury to itself, to other animals or people or property and possibly ending with financial repercussion for the owner.

Fencing materials that are considered safe and suitable for equines can vary, based on the size of their living space. Barbed wire fencing is not considered safe for equines as it can result in many crippling injuries. When an area is so large or lined with overgrowth this may be your only option, but usually equine rarely make contact with these boundaries. With regular maintenance, the fencing causes no problems.

Owners should make certain the property is large enough to hold the amount of animals being confined in it so no animals will crowd the fence line, which could cause issues. Remember the old saying... ***“the grass is always greener on the other side.”***

As pastures dry up, equine will spend more time at the fence line making an effort to reach the grass on the other side. Old, poorly maintained fencing that is not maintained could end up being a hazard for your equines.

Any wire fencing that has openings large enough for an equine's foot to slip through can cause serious injury to the animal, especially if there is no one

around to untangle the animal, as it will struggle to get free inflicting more damage to itself.

The key to safe boundary fencing is to choose fencing that is safe for your equine, effective for size of your property and maintained regularly.

Tennessee Fencing Laws

TN law specifically lists the following allowed types: stone, plank, rail, earthen banks, wire, and osage orange and synthetic materials commonly sold for fencing.

They describe a lawful fence for livestock would be built by stretching not less than five strands of barbed wire tightly between posts set in the ground not more than twenty feet apart. The topmost wire cannot be less than four and one-half feet from the ground. The bottom wire must not be less than six inches from the ground and the next bottom wire not less than fifteen inches from the ground.

Livestock is not allowed to run-at-large in Tennessee. Owners who willfully allow this to happen could be charged with a class C misdemeanor. Any person who suffers damage from livestock running-at-large could have a lien placed on the animals until the damages are recovered. Livestock that habitually escapes is considered “notoriously mischievous” and must be confined to the owner's premises. The livestock owners would be strictly liable for damages caused by the animals if the animal is notoriously mischievous.

Because Tennessee is considered a “fence in” state, this means that a neighbor must fence in his property in order to keep escaped livestock out. When a neighbor's property is damaged by roaming livestock and the livestock does not habitually escape, the livestock owner is not liable for any damages if the neighbor does not have a fence or if the neighbor's fence is deemed insufficient. In the event that the neighbor's fence causes the livestock to be maimed, wounded or killed then the neighbor would be liable for paying damages to the livestock owner. If livestock escaped through a partition fence, the livestock owner would be liable for damages only if the owner had refused to or neglected to maintain the partition fence and if the adjoining landowner had maintained their portion of the fence.

Partition fences are the responsibility of both property owners even if one property owner has livestock and the other does not. Costs for building

and maintaining a partition fence are supposed to be paid equally by each landowner. If you cannot agree

on who is to pay what on a partition fence; a general sessions judge may appoint three impartial citizens to examine the fence and make a judgment as to the amount that should be paid by the landowners. If one landowner refuses to maintain their portion of the fence, that person would be liable for any damages that are a result of their neglect to maintain their portion of the fence.

One landowner can remove a partition fence but only by agreement or after that person has given the other landowner six-months written notice of his intent to remove the fence. Unless the other landowner consents earlier, the fence can only be removed after the six-months has passed.

Adequate Shelter

All animals need some type of shelter to protect them from the elements. They may choose not to use it, but it needs to be made available.

The survival instinct is very strong in horses, and they will not seek shelter under or in something that they perceive as a threat to themselves. Anything that flaps in the wind will be perceived as a danger such as a suspended tarp or a building in poor repair.

- A shelter is a structure that the equine has access to when needed. A 3-sided shelter with a roof slanting away from the opening and facing away from the prevailing wind works well. The structure needs to be sturdy and not effected by wind. Animals can be fed hay or feed in the shelter when necessary. If the animal needs to be confined for any reason, it is easy to attach a gate to the front of the structure.

- A shelter provides some relief from insects. In shade there are fewer flies which feed off body moisture and blood. If the animal has an open wound flies will lay eggs close to it and the maggots which hatch will feed on the blood and body of the animal.

- The shade of the shelter also provides relief from the direct heat of the sun. Extreme heat can cause colic. Heat stroke itself can be deadly.

- More than one shelter may be required. This would be determined by herd size in order for all to take shelter when needed.

- Shelter is a protection in cold weather when the wind-chill factor can rob the animal of body heat.

- Suitable shelter should be built on high ground giving relief from mud and standing water.

- Shelters need to be kept clean. Bedding material might be needed and must be removed when wet.

- The shelter needs to be large enough for a horse to comfortably lie down and get up without injury.

- Blanketing is not a replacement for shelter. When used incorrectly, blankets can cause health issues.

A horse's coat has natural insulating and water resistant qualities. A healthy winter coat traps a layer of warm air between the surface and the horse's skin, keeping them warm and dry. *You may have noticed horses standing in a field after it has snowed with steam raising off its body.* If it is very windy, or if the horse's coat gets matted and wet, this layer of air disappears

Most equine do well with no fancy shelter. Some owners have the luxury of owning a barn and may turn their horses out during certain times of the day. This type of housing also comes with more work as stalls need to be cleaned daily. Turnout time should be allowed each day for exercise, along with adequate water supply, ventilation, a consistent feeding program and grooming.

A box stall should be large enough to allow the horse to turn around, lie down, and get up without interference

Unclean housing creates several health issues. When the stall **or other place of confinement** is not kept free of manure and urine, it becomes an area of health hazard for animals and humans.

Ammonia is a toxic, reactive and highly hazardous chemical. It is a corrosive substance and the main toxic effects are restricted to the sites of direct contact with ammonia; skin, eyes, respiratory tract, mouth, and digestive tract (for the confined equine this also includes their feet).

1. Clean stalls regularly

Clean stalls daily; which includes removing urine and wet bedding, and removing all bedding from the stall about once a week. If possible, remove your horse from the stall while you clean, because

ammonia will be stirred up by the cleaning process. Not removing wet bedding forces the equine to stand and lie in the liquid ammonia.

2. Ventilate

If total pasture time is not an option, and you must stall your horse, provide adequate ventilation. This dilutes the ammonia concentration. Increased ventilation also increases the drying rate of bedding on which the animals excrete. Proper air flow through your barn will provide your horse with fresh air, distribute air evenly, regulate temperature and moisture levels and help to remove odors and gases. Limit stall time whenever able.

4. Absorbent bedding and ammonia neutralizing agent

Manufacturers now produce ammonia-absorbing products made up of all natural ingredients.

Hydrated lime has been found to have damaging effects on an animal and is no longer recommended. There are many commercial products available that have been found to be excellent alternatives and are non-toxic and won't irritate your horse's mucous membranes or respiratory system.

NEVER allow bleach to come in contact with urine!

The liquid ammonia within the urine and the bleach will produce a highly toxic gas.

Horses in a Wet Environment

Horses that are allowed to remain in a wet state (sweat, rain, snow) may cause damage to their hair, coat and possibly cause illness.

In Tennessee where we have long periods of rain or high temperature along with high humidity, equines will be at greater risk to develop painful body and foot conditions such as rain rot or thrush.



Not Adequate: Freezing temperatures, no shelter, small lot, standing in urine & feces, blanket covering a body score 2 out of 9.

Rain Rot: (*rain scald, streptothricosis*)

The bacteria that causes this condition cannot survive when exposed to air, so if the horse's coat remains wet for a long period of time, it is the perfect breeding ground for it. It usually develops on the horse's back or rump, ears, around eyes and muzzle.

This is more likely to happen when moisture is captured under a thick coat of winter hair.

The best form of prevention is keeping your horse dry during periods of intense rainfall. In addition groom your horse often, particularly during the early spring months. Not only will removing the winter coat make your horse more comfortable, it will make it less likely for rain rot to take root.

Underneath the scabs, the skin is usually (but not always) pink with puss when the scabs are first removed, then it becomes gray and dry as it heals. It is usually hard to differentiate rain rot from other similar skin conditions, so if you are unsure, call your veterinarian.

In the early stages, you will be able to feel small lumps on the horse's skin or hair by running your hand over your horse's coat. Although this condition is not life-threatening, it is very important to treat rain rot immediately before it gets any worse.

How to Treat

1. Use an antimicrobial shampoo. Vigorously lather the horse, let it set for 10 minutes, then rinse. Continue this daily for 1 week. Some of the over the counter brands that work well are MTG, Bimeda Inc Chlorhexidine Solution, Nolvasan Scrub. A home

remedy that works well is mixing equal parts water and Listerine.

2. Remove all scabs that are present. This is usually painful so be gentle and patient. The best way is to temporarily moisten scabs with warm water so they become soft and easier to remove. Be sure to dry the horse immediately after scab removal.

3. Keep the horse in a dry, clean area that is very well ventilated. Give the horse protection against biting insects. Separate the horse from any others that also have rain rot.

4. When treating this condition, you must keep **all equipment used disinfected**, to keep the organism from coming back and spreading to other equines.

A good solution for cleaning grooming tools is 2 tablespoons of bleach to 1 gallon of water.

DO NOT use this solution on your horse, only on the equipment.

Rain Rot can be spread through sharing of equipment between horses. This includes saddle pads, blankets, leg wraps, brushes, halters, etc. The best prevention for rain rot is to use a disinfectant on any equipment shared between horses after each use.

If the condition does not improve, antibiotics may be needed. Always contact your veterinarian for extreme cases of this infection.

Thrush

Horse thrush is a decay of the frog at the bottom of the hoof. The frog is a soft elastic section shaped like a triangle with its base at the heel and pointing forward and has two distinct layers.

A bacteria causes the frog to rot producing a black residue which produces a strong smell. It lives in the soil, where there are muddy pastures and in uncleaned stables.

Thrush rarely causes lameness and poses no major health hazard, provided that appropriate measures are taken. In serious cases it may cause pain and can cause lameness.

In severe cases where bleeding from the frog is evident, contact your veterinarian for treatment, and a tetanus shot will probably be required.

Prevention is the best cure

1. Good foot care and dry clean living conditions.
2. If you smell a foul odor while picking your horse's feet, chances are he has contracted thrush.
3. In many minor cases, hoof picking every day will be enough to stop thrush as the exposure to oxygen may actually kill it.

Treatment

There are several commercial products that successfully combat the frog-eating disease and are most effective when administered directly after a thorough hoof cleaning.

To ensure you are able to reach all areas of the foot to treat, it may be best to have your farrier out to remove any excess flaps or sole.

Get with your farrier and/or veterinarian and come up with a treatment plan.

Summary

Not picking out the feet often enough and a dirty environment are the two most common causes of the problem. If these two are not an issue and cases of equine thrush persists, it may be caused by a weak immune system and/or poor horn growth because of a dietary imbalance. Contact your veterinarian.

Nutritional Needs

The animal's lifestyle, be it pleasure, show, breeding, work, or retirement, is largely determined by the owner . . . You.

Water, the Most Important Nutrient

Although many of us may not think of water as being a nutrient, it is vitally important. The lack of this important nutrient can mean life or death for any animal.

Water is essential for almost all bodily functions, so any alteration in the normal water balance of the animal has an immediate and profound effect. Within 24 hours of restricting water intake an animal may stop eating. By 72 hours without water, the animal can be

in a very serious or even life-threatening situation.

The body of an adult horse is composed of about 70% water. For a 1,000-pound animal that equals 70 pounds of water or about 88 gallons.

The body of a foal has even higher water content, which approaches 80% of its body weight.

The normal water intake for a healthy, non-pregnant horse is about 8 to 10 gallons for an adult horse each day. But this requirement can vary widely due to factors mentioned below.

In the healthy horse, water intake is influenced by four major factors:

- 1) The larger the animal the more water it will consume.
- 2) The more active a horse is the more water it will consume.
- 3) As environmental temperatures increase, so does water intake.
- 4) Depending on the diet of the animal, it can also greatly impact the amount of water consumed.

EXAMPLE:

Horses on high grain diets will consume 30 to 40% less water than horses on a hay diet.

Horses on good quality spring and summer pasture will consume less drinking water (compared to horses on hay and concentrates) because the moisture in the grass meets a large percentage of their water needs.

Good quality pasture forage (**not lawn grass**) can be 65 to 80% moisture while hay may only contain 8 – 10% moisture. Because of this, horses may consume less drinking water in the summer than in the winter

As a horse owner, the thing to remember is that your horse needs clean, good quality water available at all times. Large, outdoor water troughs should be cleaned regularly during the summer. If the horse is stalled, the water buckets should be emptied and rinsed daily because they attract flies and smells that will make the water unappealing to consume. In very hot weather, it may be necessary to clean water troughs more often because algae will grow in the tanks. Sometimes you can reduce the growth by

keeping the tank out of direct sunlight or by adding a small cap full of Clorox to each 60 gallons of water.

On hot days run some fresh, cool water into the tank; horses drink better if the water is cool (45 to 65 degrees) as compared to very warm water.

If you have an automatic water system, check these also; they need regular cleaning and a quick once-over to be sure they are operating normally.

You could have a problem if you notice horse(s) spending a lot of time around the water tank, appear to be fighting over water, or have dry feces.

Signs of dehydration are dry manure or if it has a covering of mucus; this covering indicates an inadequate water intake.

If horses do not drink enough, they can be subject to colic or intestinal impaction.

When to use caution in watering

- When the horse is excessively hot, it should be given small sips of lukewarm water until it has recovered.
- After a strenuous workout, cool down the horse before allowing it to drink.
- If the horse has been denied water for an extended length of time (24 hours or more) do not let it drink its fill as there is a strong risk of colic, leading to the death of the animal. *Introduce the water slowly, a little at a time.*

Watering in the Winter Months

In the winter, when the water can be very cold, some horses drink less. This is a problem because water is one of the most important items a horse needs to be healthy.

Young horses, before they have their full set of teeth, are very tender in the mouth. So are many older horses and horses with any kind of dental problem, such as a sore tooth. A horse with sensitive teeth, mouth, or gums might refuse to drink cold water because it's painful. But for many normal, adult horses, cold water tends to be less of a problem.

It is important that an owner watch their horses, no matter how young or old the animals are, to make sure all are drinking enough.

There are a variety of devices you can use to warm the water or take the chill off such as electric buckets or tank heaters. Be sure to watch and confirm your horse is drinking from tanks with heaters. *Over time some heaters may start to short out and you may not feel the current but your horse might and refuse to drink from the tank.*

For pastured horses, or for troughs where there is no electrical service, the most important thing in keeping water from freezing is to insulate your water tank. You can get a lot of heat from the ground if the ground is not completely frozen. Be sure to check multiple times throughout the day and break up ice if needed allowing horses the chance to drink their fill.

One thing that you need to keep in mind is that horses are very suspicious of change. If you use the same bucket, sometimes the water could take on a taste or taint. If they are used to it, they will do fine. But if you switch buckets and the water tastes strange or different, they might not want to drink as much. Keep your buckets and watering equipment familiar to your horses, especially as you head into and through the winter months.

Feedstuff

Like people, each horse needs certain kinds and amounts of nutrients to thrive. Their requirements are largely determined by their lifestyle and age. Feed each horse according to his weight and the demands placed on the animal. Reevaluate these demands as required by changes in age, weight and lifestyle.

You'd never think to feed your grandmother with no teeth steak so you need to keep this in mind when feeding an older horse.

Good nutrition means more than just throwing some hay in a field or turning them out on a field with green plants in it. Your horse requires a daily diet that includes water, fiber and nutrients. Water and fiber help transport feed through the horse's digestive tract, while other nutrients work to maintain life-sustaining processes.

Horses obtain fiber by eating roughage. The combination of fiber and water in the horse's digestive tract creates "bulk", which keeps the intestinal tract healthy and operative.

If fiber is provided through hay, they should be fed about 1 – 1 1/2 pounds of hay each day for every 100 pounds of body weight.

Keep in mind just because your pasture looks green doesn't mean there is anything of nutritional value in it. Many pastures contain green colored weeds and they can be very deceiving to an inexperienced eye. Horse also generally will not eat where they have pooped in the pasture which explains the clusters of tall grass you see.

Signs of Starvation

A rapid drop in weight and body condition may be a sign of a terminal medical condition such as cancer or other diseases affecting the equine's internal organs. **Only a veterinarian can do tests to confirm that is or isn't the issue.**

Most frequent cause of a slower loss of body conditioning is the lack of a proper diet which is starving the body of nutrition. When this occurs the animal's body will initially use stored fat and carbohydrates. Once these are gone, energy is derived from the breakdown of protein. Even though protein is a component of every tissue, it is not stored in the body as fat and carbohydrates are stored.

Therefore, the starved body uses protein not only from muscles, but also from vital tissues such as the heart and even gastrointestinal tissues. In other words, tissues that are necessary for life. The starved body cannot select which tissue protein that will be metabolized for energy.

When an equine loses more than 50% of its body weight, the prognosis for survival is extremely poor.

Important Considerations When Feeding

A typical horse eats between 2 and 2.5% of its body weight in feed each day

1. Do not feed moldy or insect-infested hay or grains as it may cause illness or death.
2. Do not feed on the ground where there is manure present to minimize parasite infestation.
3. Let equines feed in natural position from large feed containers.
4. If you have a fast eater slow them down by placing large rocks in their dish to make them work

for their food or feed small quantities throughout the day.

5. Avoid feeding excessive grain and energy-dense supplements. (At least half the horse's energy should be supplied through hay or forage)

6. Make sure each animal is receiving its rations (In the pecking order of the herd, there might be chasing a horse away so it can eat its food also. This leaves others not receiving a healthy amount of needed feed).

7. Divide daily concentrate rations into two or more smaller feedings rather than one large one to avoid overloading the horse's digestive tract.

8. Any feed changes should be made gradually over a period of 7 to 10 days. Changes in the rate of feeding should not exceed 1 pound per day for each horse.

Feeds designed for other species, particularly medicated feeds and those containing UREA, ARE NOT to be used for horses.

Basic Feedstuffs

Roughage

Roughage is high-fiber feeds such as hay, pasture, etc. Roughage satisfies the need for bulk and adds energy, protein and minerals to the horse's diet. However, feedstuffs that are good sources of fiber tend to be relatively low in energy and protein and these alone might not meet your horse's nutritional needs.

Evaluating Hay

Most people buy hay based on how it looks, smells, and feels. The price should be your last reason for whether you buy it or not.

When appraising hay, what is inside is what counts. Ask that one or several bales be opened so you can evaluate the hay inside the bales. (Do not worry about slight discoloration on the outside, especially in stacked hay.) Keep in mind the following points:

1. Choose hay that is as fine-stemmed, green and leafy as possible. It should be soft to the touch.

2. Avoid hay that is over-cured; excessively sun bleached; or smells moldy, musty, dusty or fermented.

3. Select hay that has been harvested when the plants are in early blooms for legumes, or before seed heads have formed in grasses.

4. Avoid hay that contains a significant amount of weeds, dirt, trash or debris.

5. Examine hay for signs of insect infestation or disease. Be especially careful to check for blister beetles in alfalfa. Ask the grower about any potential problems in the region.

6. Reject bales that seem excessively heavy for their size or feel wet to the touch. (They may contain excess moisture that could cause mold or worse, spontaneous combustion.)

7. When possible, purchase and feed hay within a year of harvest to preserve its nutritional value. Store hay in a dry, sheltered area out of the rain, snow, and sun; or cover it to protect it from the elements.

Grains

For the individual owner, a commercial feed is the best answer in supplementing your equine's diet to meet its nutritional needs. Commercial feeds were developed to provide all the essential nutrients in their proper balance.

Resist the temptation to dilute or "cut" a feed with straight grains. Usually this does not pay off and can change the calcium/phosphorus ratio leading to serious skeletal and bone development problems in growing horses.

Also resist buying a cheap "All Stock" feed. The money saved may cost you further down the line.

Your veterinarian is your best council for the proper feed regiment for your animals both large and small.

Hazards of Obesity

Excess weight and over-nutrition have a number of potentially negative effects, including:

- Increased stress on the heart and lungs
- Greater risk of laminitis or founder
- Increased risk of developmental orthopedic (bone and joint) problems in young, growing horses
- More strain on feet, joints and limbs

- Worsened symptoms of arthritis
- Less efficient cooling of body temperatures
- Fat build-up around key organs, which interferes with normal function
- Reduced reproductive efficiency
- Greater lethargy and more easily fatigued

Weight Reduction

You hold the keys to controlling your horse's weight.

You need to use good nutritional management, and be dedicated to a regular exercise program. Another bad issue is you need to use restraint when it comes to feeding, or treating, too much. .

When implementing a weight loss program, it's important to do it in a way that will not stress the animal. Changes in both exercise and nutrition should be gradual.

By increasing the amount of exercise, you can rev up the animal's metabolic engine and burn more calories. By shifting to a lower-calorie diet, you can create an "energy deficit" so that the animal begins to utilize its fat reserves as fuel.

However, even though the ration provides fewer calories, it should be balanced so that it continues to provide all the essential nutrients. Develop a program that will allow your animal to reduce its weight without any negative side effects.

Overfeeding that becomes excessive stored fat puts the horse at risk to develop laminitis, the most crippling disease a horse can have (also referred to as founder).

Because obesity can affect an animal's health, keep a good line of communication with your veterinarian. Schedule regular check-ups, especially during the weight reduction process.

Here are some guidelines

- Be patient. Weight reduction should be a slow, steady process that does not stress the animal or create metabolic upsets.

- Make changes in both the type and amount of food gradually. Reduce rations by no more than 10% over a 7 to 10 day period. Losing weight too quickly can develop a serious complication.

- Track your horse's progress using a scale or weight tape (for horses). When the animal's weight plateaus, gradually cut back its ration again.

- Gradually step up the horse's exercise regimen avoiding exhaustion and overheating. The out-of-shape, overweight horse in hot weather would be at risk of going into a shock-like condition which can be fatal.

- Provide plenty of clean, fresh water so the horse's digestive and other systems function as efficiently as possible and rid the body of metabolic and other wastes.

- Select feed stuff that provide plenty of high quality fiber but are low in total energy. Measure feed stuff by weight rather than volume to determine appropriate rations.

- Select feed stuff that are lower in fat.

- If feeding a horse alfalfa hay switch, or reduce the amount of alfalfa hay fed. Replace with a mature grass or oat hay to reduce caloric intake. This will also satisfy the horse's need to chew, reduce boredom and provide fill for its stomach. In extreme cases of obesity, caloric intake may also need to be controlled by limiting pasture intake.

- Feed separate from other horses so the overweight one doesn't have a chance to eat his portion and his neighbor's too.

- Balance the horse's diet based on age and activity level. Make sure the animal's vitamin, mineral and protein requirements are met.

Interesting facts:

- The horse's digestive system consists of a muscular tube approximately 100 feet long that extends from the mouth to the rectum.

- The horse's lips, teeth and salivary glands work in conjunction to take feed stuffs into the mouth, chew them up, and wet them with saliva. *A horse produces about 10 gallons of saliva each day.*
- As it is chewed, moistened feedstuffs enter the stomach and the stomach produces acids (primarily Hydrochloric Acid).
- These acids begin breaking down the feed into digestible components, but little nutrient absorption takes place in the stomach.
- The horse evolved as a grazing animal, and horses naturally will graze 20 hours out of 24 if available.
- The horse is unable to regurgitate, and if overfed, colic can occur.
- The large intestine (or colon) is about 20 feet long and takes up approximately 50% of the total capacity of the digestive system. A 1,000 pound horse can produce on average 37 pounds of feces per day.



Effective Parasite Control

Establishing an effective parasite control program is your most important responsibility as a horse owner. It is that important!

They can cause extensive internal damage without you even realizing your horse is heavily infected. The effects of internal parasites range from a dull hair coat, not thriving well to gastric issues and death.

Internal parasites lower the horse's resistance to infection, rob the animal of valuable nutrients and in some cases, and cause permanent damage to the internal organs.

A Complete Management Program

Chemical control using dewormers is just one part of a complete parasite control plan. As parasites are primarily transferred via manure, good management is essential.

- Keep the number of animals per area to a minimum to reduce contamination with parasite eggs and larvae.

- Pick up and dispose of manure regularly

Mow and harrow pastures periodically to break up manure piles and expose parasite larvae to the elements. Larvae can survive freezing, but they cannot tolerate extreme heat and drying for very long.

- Remove bot eggs regularly from the horses' hair-coat.

- Consult your veterinarian to set up an effective deworming program for your horse and monitor its effectiveness by having fecal egg count checks done periodically throughout the year.

Types of Internal Parasites

There are more than 150 species of internal parasites that can infect horses. The most common and troublesome are the following:

- Large strongyles (bloodworms or redworms)
- Small strongyles
- Ascarids (roundworms)
- Tapeworms
- Pinworms
- Bots
- Threadworms

Probably the most important with regards to health risk, are the first four: large and small strongyles, ascarids and tapeworms.

The life cycle of most internal parasites involves eggs, larvae (immature worms), and adults (mature worms). Eggs or larvae are deposited onto the ground in the manure of an infected horse. They are swallowed while the horse is grazing, and the larvae mature into adults within the horse's digestive tract (stomach or intestines). With some species of parasite, the larvae migrate out of the intestine into other tissues or organs before returning to the intestine and maturing into egg-laying adults.

Large Strongyles:

Large strongyles, as larvae, penetrate the lining of the bowel and migrate along the blood vessels that supply the intestines.

Even small numbers of these larvae can cause extensive damage and possibly death. Infection with large strongyles can cause weight loss, poor growth in young horses, anemia and colic. In most cases, colic caused by these parasites is mild, but severe infections can result in loss of blood supply to a portion of the intestine, leading to severe and potentially fatal colic.

Small Strongyles:

Small strongyles unlike the large strongyles, do not migrate through the tissues. In some instances, instead of completing a normal life cycle, they burrow into the lining of the intestine and remain dormant, for several months before completing their life cycle. During this time the larvae are not affected by most dewormers.

Small strongyle larvae can cause severe damage to the lining of the intestine, especially when large numbers of larvae all at once. Colic and diarrhea are common in heavily infected horses.

The early and late larval stages (before and after they burrow into the lining of the intestine) and the adult parasites are susceptible to several dewormers. But currently there are only a few dewormers that are effective against the encysted larval stage- the stage that causes the most damage.

In Horses that are underweight and/or with a large worm overload caution should always be used. If too many worms are killed off at one time it could mean possible death through impaction. Never use anything to strong and speak with a veterinarian first before treatment.

Ascarids:

Ascarids, or roundworms, are most often a problem in young horses. Adult ascarids are several inches long and almost the width of a pencil. In large numbers they can cause blockage (or impaction) of the intestine. In addition, ascarid larvae migrate through the lungs as part of a normal life cycle and can cause pneumonia. Ascarid infection in young horses can cause coughing, poor body condition

and growth, rough coat, potbelly and colic. Colic is most often seen when deworming older foals (over 3 months of age) for the first time, which are heavily parasitized with ascarids.

Tapeworms:

Until recently, tapeworms weren't considered to be a significant problem in horses. We now know that tapeworms can cause colic, ranging from mild cramping to severity requiring surgical treatment. The tapeworm life cycle involves a tiny mite as an intermediate host, and horses are at risk of developing tapeworm infection when they eat this mite in grass, hay or grain.

Treatment for tapeworms takes planning. Tapeworms are not susceptible to most dewormers, and there are certain times of the year when treatment is likely to be most effective. Your veterinarian can advise you on an effective treatment plan if tapeworm infection is suspected.

Other Internal Parasites:

Lungworms cause chronic coughing in horses, ponies and mules. Donkeys are the natural host of this parasite but usually don't show any obvious signs of infection.

Pinworms lay their eggs on the skin around the horse's anus. The irritation they cause makes the horse repeatedly rub its tail.

Bots can damage the lining of the stomach where they attach. They may also cause small areas of ulceration in the mouth, where the larvae burrow into the tissues for a time after the eggs are taken into the mouth.

Threadworms are mostly a problem in young foals, in which they can cause diarrhea.

Signs of Parasitism:

Horses can have potentially dangerous numbers of internal parasites while still appearing to be relatively healthy. Common signs of parasitism include the following:

- Dull, rough haircoat
- Decreased stamina
- Unthriftiness or loss of condition
- Slowed growth in young horses
- Pot belly (especially in young horses)
- Colic
- Diarrhea

Dewormers:

ost are broad-spectrum, meaning that they are effective against several different types of parasites. It is generally best to use a broad-spectrum as the basis of your deworming program. If a specific problem is identified, such as tapeworms or encysted small strongyles, a more specific dewormer can be used.

No deworming product is 100% effective in ridding every horse of all internal parasites. However, it is not necessary for a product to kill every worm in order to improve the horse's health, minimize the risk of serious disease, improve feed efficiency and reduce pasture contamination with parasite eggs and larvae.

Daily dewormers can be worthwhile in grazing horses.

With these products, a small quantity of dewormer is fed to the horse each day, usually in a small amount of feed. They effectively prevent new infections from larvae picked up during grazing. But they may not resolve existing infection and they do not kill bots. When using a daily dewormer be sure to ask your veterinarian if a paste wormer should still be added to your yearly protocol.

It is a good idea to have your veterinarian help you determine the best deworming interval for your horse. Fecal egg counts can be very useful in this regard, as well as in evaluating the effectiveness of the product you're using.

The dose must be calculated based on the horse's body weight.

Weight tapes are accurate enough to estimating a horse's body weight for this purpose.

Deworming pastes and feed additives are convenient and easy to administer. However, some horses refuse to eat them. So be sure that all of the dose you've given is actually consumed by the horse.

Trick – If your horse won't take the oral de-wormer by mouth you can mix it with a little grain, syrup, applesauce, etc. to disguise its flavor.

Designing a Deworming Program:

There is no single deworming program that suits all horses and all situations. The ideal program for your horse(s) depends on the type, number and ages of

the horses on your farm, pasture management and your geographic location.

Skin Problems and Diseases

Just a glance now and then is not enough to catch problems early. Be a hands-on owner. This will save your equine from unnecessary discomfort and save you time and added expense.

Lice

Lice infestation causes irritation, a dull coat, hair loss, loss of body conditioning and anemia. Both sucking and biting lice can affect horses. The chewing louse feeds off tissue and cells sloughed from the surface of the skin. The sucking louse of horses feeds off blood. It is easier to kill sucking lice with a systemic insecticide than it is to kill biting lice.

Lice are normally species-specific. However, the chewing lice of poultry can also affect horses when housed together.

The horses should be removed from the building. If the poultry is removed, the lice will continue to harass the horses unless a good cleanup and premise insecticide treatment is used.

The chewing louse is about the size of a grain of rice chestnut brown in color, with a yellow abdomen with dark cross bands. They are flat with a broad, rounded head and slender legs. The eggs are attached to the hair and hatch in 5 to 10 days. They immediately start feeding and mature in 3 to 4 weeks.

The sucking louse is a tad larger and a dirty gray. They have a broad abdomen which contrasts with their long narrow head. Sucking lice are more common and more irritating than chewing lice. They have piercing mouths and when present in large numbers, they can cause anemia.

The eggs are attached to the hair and hatch 11 to 20 days later. They also begin sucking blood immediately but have a shorter life cycle of 2 to 4 weeks.

Transmission:

- Direct contact between horses
- Contact with infected brushes, blankets and tack

- Infected living quarters

Control:

- Clean equipment thoroughly with the same insecticide as used on the horses.
- Cleaning should be repeated in two weeks.
- Sterilization of equipment by boiling will kill the lice, nymphs and eggs
- Blankets and coolers in the dryer at the highest heat setting.

Treatment:

Treatment will depend on time of year, temperature and the number of horses being treated. Your veterinarian can provide you with the best treatment option.

- Powders should be used by dusting the entire animal and ensuring that the dust reaches the skin. It is difficult to get the powder down to the skin when animals have a long winter coat.

Tip: Place powder into a sock and knot up one end. You can dust your horse easily doing it this way.

Lice powder is inexpensive and comes with clear directions on how to use, including information on allergic reactions.

Ringworm

Although the lesions are probably caused by a local fungal infection, there might be a more serious infection that requires veterinary treatment.

Treatment:

- Clip hair away from the affected area and extend outside the affected area about 1/2".
- apply antifungal antiseptic, such as Betadine scrub, available at pharmacies. Lather up the scrub, and let it stand for 10 minutes to give it time to thoroughly kill the fungus.
- Rinse thoroughly with water. Follow with a final rinse, using 2 tablespoons white vinegar mixed in 1 quart of clean water. You can apply the vinegar solution with a sponge or trigger-type spray bottle.
- Apply a thin layer of antifungal ointment or spray, such as Betadine ointment or an over-the-counter human product for athlete's foot. Repeat daily for 7 days. Reduce to twice a week until the lesions

appear to be shrinking and new hair growth is visible in their centers. This may take 1 to 2 weeks).

- Keep lesions clean, dry, and exposed to air and sun.
- Fungus thrives in dark, damp conditions, such as a wet, dirty winter coat. Dry conditions and sunlight kill fungus.

Ringworm is contagious to horses and other livestock, house pets, and humans.

Clean up all clipped hair and grooming debris and discard in a sealed plastic bag. Thoroughly clean grooming equipment in Lysol disinfectant concentrate, rinse, and allow to dry. Bathe and shampoo yourself and any house pets that may have come into contact with these materials.

Launder your clothes. Check yourself, family members, and other animals for lesions once weekly for the next 3 weeks

Once a week, check for new lesions, and confirm existing lesions are shrinking and growing new hair in their centers. If there's evidence of spread, and/or if there's no improvement within 2 weeks, call your veterinarian for an evaluation.

Mange

Several different mites can infect equines and cause mange. Any part of the body can be affected and the conditions are known as:

- Body mange (starts on head and neck and spreads over entire body and causes loss of condition resulting in death)
- Foot mange or itchy leg
- Ear mange

Mange causes severe irritation, scabs and lesions on the skin, and loss of weight. The mite causing the problem can only be identified by your veterinarian by examining skin scrapings under a microscope. Some mange mites can infect humans so wash thoroughly after handling infected animals. Anything that has come in contact with the animal should be cleaned and if possible disinfected.

Cellulitis

Cellulitis is an infection of the deep layer of the skin.

Most cases are caused by puncture wounds, scratches, and cuts.

Horses are particularly prone to such injuries, but these can be prevented by proper early treatment of wounds.

Signs of cellulitis are swelling, pain, hot to touch, firmness and change in color. As the infection spreads out from the wound, regional lymph nodes may enlarge. This can turn into a very serious condition, and a veterinarian should be consulted to ensure a full recovery.

Abscess

A skin abscess is a localized pocket of bacterial infection. Pimples, furuncles, and boils are examples of small skin abscesses. An abscess is fluctuant and feels like fluid under pressure.

Hives

Can be recognized by the sudden appearance of welts. The skin lesions are a response to allergens that could be inhaled, ingested, or contacted in the environment. The welts might disappear quickly only to recur, or they might remain over several days.

Effective strategies include:

- Using long-acting insect repellents.
- Stabling during times of high insect activity
- Directing fans to the surface of the horse when stalled
- Horses with hypersensitivity to medications or insect repellents may suffer worse with this type of treatment and it could make the original lesions worse. You may need to have your veterinarian perform a skin biopsy--the best diagnostic procedure for troublesome or persistent skin disease.

Colic

Colic is the number one Killer of Horses. Most cases are mild and are resolved with simple medical treatment, and sometimes with no specific treatment at all. Less than 10% of all colic cases are severe enough to require surgery or cause the death of the horse.

Nevertheless, **every case of colic should be taken seriously**, because it can be difficult to tell

the mild ones from the potentially serious ones in the early stages.

Colic is not a disease; it is a symptom of disease. Colic indicates a painful problem in the horse's belly.

There are dozens of different things that can cause a horse to show signs of abdominal pain. Most (but not all) involve the digestive system, most often the stomach or intestines.

Recognizing Colic

Horses show signs of abdominal pain in a wide variety of ways. Some signs, such as curling the upper lip are subtle and easily overlooked, whereas other signs, such as repeated rolling or violent thrashing, are hard to mistake.

Most common signs of colic are these:

- Turning the head toward the flank
- Pawing
- Kicking or biting at the belly
- Stretching out but not actually urinating
- Repeatedly lying down and getting up
- Repeated rolling, often with grunting sounds
- Sitting in a dog-like position, or lying on the back
- Holding the head in an unusual position
- Disinterested in food
- Putting the head down to water without drinking
- Lack of bowel movements
- Reduced or absent digestive sounds
- Inappropriate sweating
- Rapid breathing and/or flared nostrils
- Elevated pulse rate (50+ beats per minute)
- Depression

Usually, a horse shows only a few of these signs during an episode of colic. Seeing any of these signs should prompt you to take a closer look and keep a watchful eye on the horse.

In general, the more obvious the signs of pain, the more serious the problem. Also, in horses with serious conditions, the signs of pain usually persist and may even worsen with time, whereas in horses with mild colic, the signs of pain may be intermittent or may disappear after a short time.

Take Immediate Action

While some cases of colic resolve without medical care, a significant percentage of horses with colic require medical treatment. Time is perhaps the most critical factor if colic is to be successfully treated, particularly if the horse has a condition that requires emergency surgery.

If you suspect your horse is suffering from colic, the following action plan is suggested:

1. Call your veterinarian immediately!

2. Remove all food from the horse's surroundings, but leave the horse some water.

3. If necessary, move the horse to a small enclosure but make sure it is large enough to allow the horse to move without restriction.

4. If it is dark or approaching nightfall, arrange for some lighting so that you or the veterinarian can examine the horse. Allow the horse to rest if it simply wants to stand or lie quietly; walk the horse around if it is continually rolling or in danger of hurting itself - but do **not** tire the horse with relentless walking.

5. Keep the horse under close observation until the signs of colic resolve or the veterinarian arrives.

Alert your veterinarian from the outset that your horse is suffering from colic. The veterinarian may not need to examine the horse immediately if the colic signs are mild, but leave that decision to the veterinarian. When you call, be prepared to provide as much of the following information as possible.

When you call your veterinarian they may ask the following information so try and be as helpful as possible with answers to the following.

- Specific signs of colic and their severity

- Pulse or heart rate (beats per minute), measured over the heart (just behind or above the left elbow) or over an artery (at the sides of the fetlock or on the underside of the lower jaw)

- Respiratory rate (breaths per minute), measured by watching the rise and fall of the flank with each breath

- Rectal temperature

- Color of the gums (white, pale pink, dark pink, red, or bluish-purple)

- Moistness of the gums (moist, tacky or dry)

- Refill time for gum color (the time it takes for the color to return to the horse's gum after you briefly press on the gum with your thumb; normal is 1-2 seconds)

- Digestive sounds (if any)

- Bowel movements, including color, consistency and frequency

- Any recent changes in management, feeding or exercise.

- Medical history, including deworming, and any past episodes of colic

- Breeding history and pregnancy status if the patient is a mare, and recent breeding history if the patient is a stallion.

After evaluating the information, your veterinarian will advise you on the appropriate course of action. Follow your veterinarian's advice **exactly**. Do **not** administer any drugs to the horse unless specifically directed to do so by your veterinarian. Sedative or pain-relieving drugs can camouflage serious problems and interfere with accurate diagnoses.

Do Not Attempt to do any of the Following:

Unless you have the necessary training, equipment and experience; you may cause irreversible harm, additional pain and/or the unnecessary death of your equine.

1. Do not pass any kind of tube into the horse's stomach.

2. Do not give the horse any substance by mouth, particularly liquids.

Most horses resist swallowing liquids and some of the liquid may be inhaled into the horse's lungs. Mineral oil is particularly harmful when inhaled.

3. Do not insert anything (your hand, a hose or any other kind of tube or device) into the horse's rectum.

The only exception is a thermometer to take the horse's temperature.

The rectum is easily damaged, and rectal tears can be fatal.

4. Do not give any intravenous injections.

Note: Home remedies such as castor oil, kerosene and turpentine are useless for colic and are dangerous; they should never be given orally to horses.

Over-the-counter remedies that contain bella donna extract should also be avoided.

They may relieve mild, spasmodic (crampy) colic, but overuse or use in horses with more serious types of colic can be disastrous.

Preventing Colic

Colic is a problem with many potential causes and contributing factors, some of which are beyond our control. The key to minimizing the incidence of colic is good management

Treat every incident as potentially serious and call your veterinarian immediately; try never to jeopardize your horse's health for the sake of a few dollars.

Dental Care

Routine dental care is *essential* to your horse's health. Periodic examination, corrections and regular maintenance are especially necessary for a number of reasons:

Horses are grazing animals, and their teeth are perfectly adapted for that purpose.

Like humans, horses get two sets of teeth in their lifetime. The baby teeth are temporary.

The last baby tooth comes in when the horse is about 8 months of age. These teeth begin to be replaced by adult teeth around 2 ½ years of age. By age 5, most horses have their full set of permanent

teeth. An adult male horse has 40 permanent teeth. A mare may have between 36-40, because mares are less likely to have canine (bridle) teeth.

Common Dental Problems

Horses suffer from many dental problems. The most common include:

- Sharp enamel points forming on cheek teeth, causing lacerations of cheeks and tongue
- Retained caps (deciduous teeth that are not shed)
- Discomfort caused by bit contact with the wolf teeth
- Hooks forming on the upper and lower cheek teeth
- Long and/or sharp canine (bridle) teeth interfering with the insertion or removal of the bit
- Lost and/or broken teeth
- Abnormal or uneven bite planes
- Excessively worn teeth
- Abnormally long teeth
- Infected teeth and/or gums
- Misalignment/poor apposition (can be due to congenital defects or injury)
- Periodontal (gum) disease

Recognizing Dental Problems:

Horses with dental problems may show obvious signs, such as pain or irritation, or they may show no noticeable signs at all. Below are a few signs you can look for.

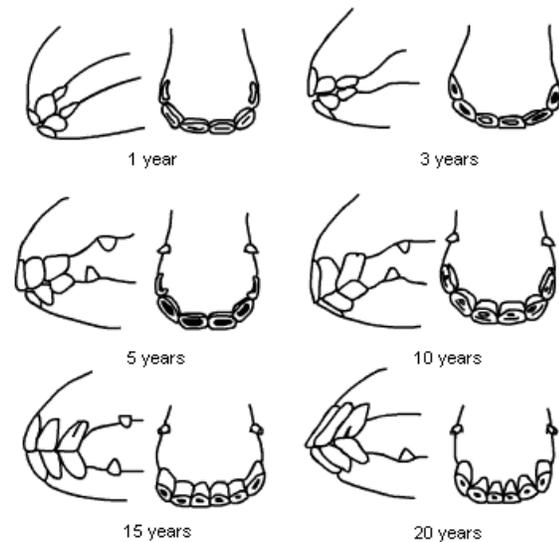
- Loss of feed from mouth while eating. Graining dropping out or hay/grass left in clumps on the ground after chewing
- Loss of body condition
- Undigested feed particles in manure
- Head tilting or tossing, bit chewing, tongue lolling, fighting the bit or resisting bridling
- Poor performance, such as lugging on the bridle, failing to turn or stop, even bucking
- Foul odor from mouth or nostrils, or traces of blood from the mouth

- Nasal discharge or swelling of the face or jaw

Oral exams should be an essential part of an annual physical examination by a veterinarian. Every dental exam provides the opportunity to perform routine preventative dental maintenance. The end result is a healthier, more comfortable horse.

Preventative Maintenance:

Routine maintenance of a horse's teeth has been historically referred to as "floating." Floating removes the sharp points of the tooth and can help create a more even bite. Routine examination and maintenance by a veterinarian or licensed Equine Dentist, should also include identification and correction of any abnormalities such as those listed previously under "Common Dental Problems."



The Age Factor:

The age of a horse affects the degree of attention and frequency of dental care required. Consider these points:

- Horses going into training for the first time, especially 2 and 3-year-olds, need a comprehensive dental checkup to prevent training problems related to sharp teeth.
- Even yearlings have been found to have enamel points sharp enough to damage cheek and tongue tissue.
- Horses 2-5 years old may require more frequent dental exams than older horses. There is an extraordinary amount of dental maturation during this period.

- Mature and Older horses should get a thorough dental examination at least once a year, whether or not there are signs of tooth problems.

- It is important to maintain an even bite plane during a horse's middle teens in order to ensure a level grinding surface into its 20s.

More Serious Dental Ailments:

Serious dental conditions can develop, such as infections of lost or fractured teeth. These conditions may require surgical treatment and/or extraction by a qualified veterinarian.

Immunizations/Vaccines

Vaccinations are a vital part of proper equine management. Few things will help protect your horse as easily and effectively as immunizations.

The vaccines administered by your veterinarian place a protective barrier between the horse and several diseases.

Every area of the country is different on what vaccination program is needed; consult with your Veterinarian.

A good immunization program is essential to responsible horse ownership, but just as in people, vaccination does not guarantee 100% protection.

Vaccinations serve to minimize the risk of infection, but does not prevent disease in all circumstances.

Primary series of vaccines and booster doses should be administered before likely exposure. Two or more doses are usually needed to initiate an adequate immune response.

Over time those antibodies gradually decline. Therefore, a booster is needed at regular intervals to *maintain adequate protection.*

Vaccinations Needed

The specific immunizations needed by a particular horse depends upon several factors: environment, age, breed, sex, use, exposure risk, geographic location, and general management. Your local equine veterinary can help you determine the vaccination program best suited to your horse's individual needs.

The following diseases are those most often vaccinated against. Some vaccines can be administered by their owners and purchased over the counter. One needs to be educated about the proper way to administer before trying this on their own. If administered wrong it could cause health concerns and possible death.

Tetanus:

Sometimes called “lockjaw,” tetanus is caused by toxin producing bacteria that can be found in the intestinal tract of many animals and in abundance in the soil where horses live. Its spores can exist for years. Although not contagious from horse to horse, tetanus poses a constant threat to horses. Clinical signs include muscle stiffness and rigidity, flared nostrils, hypersensitivity and legs stiffly held in a sawhorse stance. As the disease progresses, muscles in the jaw and face stiffen, preventing the animal from eating or drinking. More than 80% of affected horses die. All horses should be immunized annually against tetanus. Additional boosters for mares and foals may be recommended by your veterinarian.

Encephalomyelitis: More commonly known as “sleeping sickness,” vaccines are available against Western Equine Encephalomyelitis (WEE), Eastern Equine Encephalomyelitis (EEE), and West Nile Virus (WNV). Throughout North America, WEE and West Nile have been noted, while EEE appears only in the east and southeast. Sleeping sickness is most often transmitted by mosquitoes, after the insects have acquired the virus from birds and rodents. People also are susceptible when bitten by an infected mosquito, but direct horse-to-horse or horse-to-person transmission is very rare.

Signs vary widely, but result from infection of the brain and/or spinal cord. Early signs include fever, depression and appetite loss. Later, a horse might stagger when it walks, and paralysis develops in later stages. About 50% of horses infected with WEE die, and the death rate is 70% to 90% of animals infected with EEE. The mortality rate for WNV is 25-35%.

Most horses need an EEE and WEE vaccine at least annually. The vaccine is relatively low risk and very effective. Unless discouraged by your veterinarian all horses should be vaccinated. Pregnant mares and foals may require additional vaccinations. The best time to vaccinate is spring, before the mosquitoes become active.

Influenza:

This is one of the most common respiratory diseases in the horse. Highly contagious, the virus can be transmitted through snorting or coughing from horse to horse over distances as far as 30 yards.

Signs to watch for include cough, nasal discharge, fever, depression and loss of appetite. With proper care, most horses recover in about 10 days. Some, however, may show signs for weeks, especially if put back to work too soon.

Influenza has no specific treatment and can result in a lot of “down time”.

Not all horses need vaccination against influenza. However, horses that travel or are exposed to other horses should be regularly immunized against influenza. Follow your veterinarian’s advice as to whether your horse needs influenza vaccine.

Rhinopneumonitis:

Two distinct viruses, equine herpes virus type 1 (EHV-1) and equine herpes virus type 4 (EHV-4), cause two different diseases. Both cause respiratory tract problems and EHV-1 may also cause abortion, foal death and paralysis. Infected horses may be feverish and lethargic, and may lose appetite and experience nasal discharge and a cough. Young horses suffer most from respiratory tract infections by these viruses.

Rhinopneumonitis is spread by aerosol and by direct contact with secretions, utensils or drinking water. Virus may be present but not apparent in carrier animals.

Pregnant mares and young horses under stress *are candidates* to be vaccinated. Immune protection is short. Therefore, pregnant mares are vaccinated at least during the fifth, seventh and ninth months of gestation and youngsters at high risk need a booster at least every three months. Many veterinarians recommend vaccination at two-month intervals year-round for high-risk animals.

Other Disease Threats

Several other diseases are common, although the need for vaccination against them is dependent on individual risk. Rely on your veterinarian to guide you.

Strangles: A highly contagious and dangerous *bacterial* disease, caused by the *Streptococcus equi*

organism. There may be some side effects associated with vaccination; therefore, it is important to discuss the risks versus benefits of vaccination with your veterinarian. Because of the long life span of the germ, horses bought at auction are commonly exposed to the virus. These horses should be quarantined 30 days from other horses to keep others from becoming effected.

Rabies: A frightening disease which more commonly occurs in some areas than in others. Horses are infected infrequently, but death always occurs. Rabies can be rarely transmitted from horses to humans.

Botulism: Known as “shaker foal syndrome” in young horses, this disease can be serious. Botulism in adult horses, “forage poisoning,” also can be fatal. Vaccines are not available against all types of botulism.

Potomac Horse Fever: A seasonal problem with geographic factors. One third of affected horses die. There have been confirmed cases in Tennessee so be sure to follow your veterinarian’s recommendations.

Summary and Reference

Appropriate vaccinations are the most cost effective weapon you have against common infectious diseases of the horse.

Additional Info:

Basic Skills & Training

Teaching your horse the basic skills it will need to help live a stress free life is a very important part of ownership. One never knows when an emergency may arise and your horse will need to be seen by a veterinarian, farrier or need to be transported. To help them prepare owners should not only teach them the basics but practice them often. The following skills are just a few of the important ones and there are many more you may want to try.

- Lead – horses that can’t lead are not only hard to handle but could endanger themselves or others.
- Tie – learning to stand patiently teaches a horse to remain calm.
- Pick up their feet – makes cleaning them easier along with helping your farrier do his

job better.

- Loading – even if you never plan to go anywhere one never knows when an emergency might arise and the horse needs to be taken to a veterinary hospital or moved in the event of emanate dangers such as wild fires.

Gender

Mares

Before any mare is bred there are a few things an owner should take into consideration.

- Are you breeding for the right reason? If you’re just wanting to raise a baby there are plenty unwanted babies in rescues across the state.
- Can you financially afford to do so? Pregnant mares require special feed stuff to ensure a healthy baby. Mares will need to be taken off pastures that contain fescue grass and fed fescue free hay in the later part of their pregnancy to lower the potential of foal abortion.
- Does the cost of raising a foal for 3+ years, training, veterinarian and farrier care outweigh the cost of purchasing an already proven riding horse?

Stallions

No one should have a stallion without having the knowledge and facilities to do so. Stallion behaviors such as herding, mounting and biting associated with play-fighting, the potential for displays of aggression, and their intolerance for other male horses are dangerous aspects of stallion behavior which frequently result in injuries to the herd.

Stallion’s natural instinct is to increase the herd size for the group’s survival and this could result of inbreeding which causes birth defects and other health issues.

Stallions are often kept by themselves because they tend to be dominant over mares and geldings, and fights often occur unless they are separated.

Because equine are herd animals keeping them separated may result in mental and behavioral issues which could become a danger to their owners and other animals.

Because of the overabundance of unwanted horses we suggest the only reason anyone should have a stallion would be to ensure the quality of a breed or because of medical issues that would prevent castration.

Do not Breed just to Breed. Breed for Quality not Quantity

Geldings

Geldings are stallions that have been castrated (neutered) and can be housed in lower cost buildings, and smaller grazing areas. They are far less likely to exhibit the extreme and potentially dangerous aggression of a stallion.

Stallions that are gelded later in life may still show studly tendencies. The sooner a male can be castrated the better it is for all involved.

Castrating at an early age when young colts are easy to handle, the testicles are smaller and the incision can be sutured closed.

Many castrations are performed on colts between one and two years old, and due to the larger size of the testicles, the incisions must remain open. Since open incisions are more susceptible to fly irritation, spring and fall are the preferred times of the year, before or after fly season.

A horse with undescended testicles is called a cryptorchid, and general anesthesia and surgical exploration of the abdomen is necessary to castrate successfully.

If the testicle is not completely removed, the horse will look like a gelding but may still behave like a stallion.

Castrations should always be performed by a professional veterinarian ONLY!

If done improperly it could maim the animal, complicate recovery or possibly cost the animal its life.

After care is very important and shouldn't be taken lightly to ensure a speedy recovery. Incisions should be monitored and kept clean and free of flies. Cold water hosing may be recommended to help reduce swelling and/or keep the incision open and draining.

A stallion recently gelded can still impregnate a mare for up to 30 days after surgery so be sure to keep them separated.

Dealing With the Older Horse

Special Care & Nutrition

Due to improvements in nutrition, management, and health care, horses are living longer, more useful lives. It's not uncommon to find horses and ponies living well into their 30's. You can help make your horse's golden years happier and more productive by providing proper care and nutrition.

Owner Awareness

As horse's age their bodies like humans don't work like they used to in their younger days. Bones and joints are less resilient. Elderly horses may feel the aches and pains of arthritis. The immune system is less reliable, making older horses more susceptible to illness, and slower to recover from both disease and injury. Parasite infestations also take a heavy toll.

Aged horses are more prone to respiratory, eye and dental problems. Elderly animals are also less able to cope with environmental stresses, such as wind, wet and cold.

Additionally, hormonal changes may affect overall body condition, hair growth, appetite and energy levels. While some signs of decline may be directly related to the aging process, others may have an underlying medical problem, so be sure to consult with your veterinarian.

Special Nutritional Needs

Proper nutrition is vital. Changes affect or interfere with their ability to digest, absorb and utilize essential nutrients in their feed, specially protein, phosphorus and fiber. For these reasons, many older horses benefit from complete rations with built-in roughage that are specially formulated to compensate for changes in their digestive physiology.

When selecting feeds, evaluate your choices by the following criteria. The senior diet should be:

- Highly palatable
- Easy to chew and swallow
- Clean and dust-free to prevent or lessen the impact of allergies or lung disease.
- Provide 12-14% protein
- Contain enough high-quality fiber to aid digestion
- Provide essential minerals, including calcium and phosphorus in the proper ratio
- Include all essential vitamins, especially vitamin C and B-complex vitamins
- Provide enough readily available energy (feed and/or forage) to maintain proper body condition
- Include adequate, palatable fat from a vegetable source to promote healthy skin and hair, aid digestion and boost energy intake

Dental Care

A horse that can chew its feed properly will waste less of it, get more nutrient value from it and be less likely to choke or colic. Have your veterinarian examine and float (file) your horse's teeth at least once a year, twice annually if the horse is over 20.

At this time your veterinarian can troubleshoot for broken or lost teeth and check for tongue, gum or other problems.

Monitoring the proper weight condition of your senior is as important as in younger animals.

Just because your horse is older it does not mean it's OK to be thin. If your aging equine is losing weight or remains too thin, it may be a sign of a serious medical condition or the need to reevaluate and change its diet. Adding water to soften their feed may be one of those changes.

Consult your veterinarian.

Keep in mind; you'd never feed your grandmother with no teeth steak so why would you feed your older horse something they can't chew.

Other Kinds of Equine

Donkeys

Donkeys have the greatest longevity of all the equines and can sometimes live for over 50 years. Although donkeys and horses belong to the same family, they actually differ significantly and a donkey should not be treated as a small horse.

Despite their small stature, they are extremely strong, and have the potential to cause injury by kicking and biting. Donkeys are highly intelligent creatures that need plenty of care and attention and can become grumpy, and even ill, if left unattended and lonely. Basic equine requirements apply along with additional needs.

Donkeys are excellent escape artists and can squeeze through the smallest of gaps. Post and rail fencing is always recommended and gates should always be fastened securely.

Donkeys are naturally inquisitive and will wander off at the slightest opportunity.

Their hair coat is not waterproof so a shelter should be provided to them. If they become wet in colder temperatures moisture is able to penetrate the coat and reach the skin where it will quickly drain body heat.

Never allow a donkey to become fat:

Donkeys are at high risk to founder. It is far better to monitor and control a donkey's weight so that dieting does not become necessary.

Donkeys that gain too much weight will mobilize fatty deposits around the body and overload the liver and kidneys, causing organ failure.

Should a donkey need to lose weight, it must be done very gradually, preferably under the guidance of a veterinarian.

Donkeys have a higher tolerance for pain than do most horses. This can make it more difficult to see signs of problems. The same vaccinations are required as for horses.

- Colic symptoms in a donkey will often display only as a loss of appetite. Colic in donkeys frequently is brought on by extreme stress.

- Laminitis in donkeys often occurs in all four feet or in rear feet only. Laminitis of rear feet will more likely lead to euthanasia than if in front feet.

- In the past there was a risk that donkeys could pass lungworm (which they can carry without ill-effect) on to horses. However, by sticking to a proper worming routine lowers that risk.

- Severe respiratory distress in donkeys is a cause for immediate and aggressive diagnostics and treatment, especially if in a herd. Donkeys often have severe secondary bacterial infections after or along with equine influenza virus.

- Stringhalt (involuntary flexion of the hock, the leg springs upward in a reflex-like manner) and the patella becomes fixed and the horse is unable to flex the leg) is more common in donkeys than in horses.

- Any donkey off feed for three or more days should be checked by a veterinarian. They may be dealing with a serious issue of their liver.

- Chronic non-healing coronary band lesions in donkeys look like a gravel eruption. This is a syndrome of donkeys that may persist for years and may become frequent. Keep the toes trimmed short.

- Donkeys are very susceptible to both physical and psychological stress, but symptoms can easily go overlooked until a problem has overwhelmed them. Donkeys are herd animals and need constant companionship.

If possible they should always be kept in pairs as donkeys bond very strongly with their friends.

Any changes in a donkey's life should be introduced as gradually as possible with the donkey being closely monitored. If a donkey's companion dies, the body should be left with the surviving donkey for at least an hour and allow them a grieving time.

Your farrier should visit every 12- 14 weeks to check, trim or file as needed.

Provide the same owner care as you would for any other equine.

Summary: A good management program is necessary. It is not easier to care for a donkey than it is for a horse; it is just different. Most of the basic care needed for horses applies to donkeys.

Mules

The result of breeding a male donkey (jack) to a female horse (mare).

Hinny

The result of breeding a male horse (stallion) to a female donkey (jenny).

Miniatures

Miniature horses grow to approximately 90 % of their adult height by the time that they are a year old.

A miniature horse consumes the same types of feed as full sized horses just in a small quantity.

Due to the small size of the miniatures it takes less feed to impact their healthy weight. Because of this, an onset of laminitis can happen quickly especially in spring and early summer when pastures are lush.

In the winter the miniature horse gets a very long coat and it can be very deceiving about how their weight is holding.

It is important to check the horse's condition by rubbing the fingers across the ribs of the horse just below the backbone.

Basic Care

All the care that is required for horses will apply also to mules and miniatures.



No Foot – No Horse

Founder

Founder is the term used to describe the partial detachment of the coffin bone from the hoof wall. The word founder is actually a maritime term meaning “to sink,” which is appropriate, since the final stage of detachment results in the coffin bone actually sinking through the bottom of the hoof.

The coffin bone is the “hoof-shaped” wedge that normally follows the angle of the outside hoof wall. When laminitis occurs, the coffin bone begins to pull away from the laminae and slowly sinks downward. The breakdown happens quickly – full rotation to the

bottom of the hoof can happen in as little as 60 hours. It is extremely painful.

Two-thirds of a horse's weight is carried on his front feet. On a thousand-pound horse, each hoof – a structure barely the size of the palm of your hand – carries about 350 pounds of weight.

Laminitis

Every day veterinarians across the country see hundreds of cases of laminitis, a painful disease, which affects the feet of horses. What is especially alarming is that some cases are preventable. In fact, it may be that we are killing our horses with kindness. **Consider that a common cause of laminitis is overfeeding - a management factor that is normally within our control.**

The terms “**laminitis**” and “**founder**” are used interchangeably. However, founder usually refers to a chronic (long-term) condition associated with rotation of the coffin bone. Acute laminitis refers to symptoms associated with a sudden initial attack, including pain and inflammation of the laminae.

Laminitis results from the disruption (constant, intermittent or short-term) of blood flow to the sensitive and insensitive laminae. These laminae structures within the foot secure the coffin bone (the wedge-shaped bone within the foot) to the hoof wall. Inflammation often permanently weakens the laminae and interferes with the wall/bone bond. In severe cases, the bone and the hoof wall can separate. In these situations, the coffin bone may rotate within the foot, be displaced downward, “sink” (founder) and eventually penetrate the sole. Laminitis can affect one or all feet, but is most often seen in the front feet concurrently.

Causes:

Although laminitis occurs in the feet, the underlying cause is often a disturbance elsewhere in the horse's body. While the exact mechanisms by which the feet are damaged remain a mystery, certain precipitating events can produce laminitis. The causes vary and may include the following:

- Digestive upsets due to grain overload (such as excess grain, fruit, or snacks) or abrupt changes in diet.
- Sudden access to excessive amounts of lush forage before the horse's system has had time to

adapt; this type of laminitis is known as “grass founder”

- Toxins released within the horse's system
- High fever or illness; any illness that causes high fever or serious metabolic disturbances has the potential to cause laminitis, (e.g., Potomac Horse Fever)
- Severe colic
- Retained placenta in the mare after foaling
- Consumption of cold water by an overheated horse
- Excessive concussion to the feet, often referred to as “road founder”
- Excessive weight-bearing on one leg, due to injury of another leg, or any other alteration of the normal gait
- Various primary foot diseases
- **Bedding that contains black walnut shavings**

Risk Factors:

Factors that seem to increase a horse's susceptibility to laminitis or increase the severity of the condition when it does occur include the following:

- Heavy breed, such as draft horses
- Overweight body, cresty necks
- High nutritional plane (feeding large amounts of carbohydrate- rich meals)
- Miniatures, Ponies, Morgans and donkeys
- Unrestricted grain binges, such as when a horse breaks into the feed room. If this happens, **do not wait** until symptoms develop to call your veterinarian. **Call immediately so corrective action can be taken before tissue damage progresses.**
- Horses who have had previous episodes of laminitis
- Older horses with Cushing's disease

Things to look for:

Signs of **acute (severe) laminitis** include the following:

- Lameness, especially when a horse is turning in circles: shifting lameness when standing
- Heat in the feet
- Increased digital pulse in the feet
- Pain in the toe region when pressure is applied with hoof testers
- Reluctant or hesitant gait, “walking on eggshells”
- A “sawhorse stance,” with the front feet stretched out in front to alleviate pressure on the toes and the hind feet “camped out” or positioned farther back than normal to bear more weight

Signs of chronic (*persistent*) laminitis may include the following:

- Rings in hoof wall that become wider as they are followed from toe to heel
- Bruised soles or “stone bruises”
- Widened white line, commonly called “seedy toe,” with occurrence of seromas (blood pockets) and/or abscesses
- Dropped soles or flat feet
- Thick, “crested” neck

Caution! Do not try and treat your animal yourself. Call your veterinarian or professional farrier as to the appropriate action to be taken.

Need for Regular Hoof Care

Hooves are like human fingernails, they grow constantly throughout the horse's life. Some grow faster than others, some are more brittle than others, and some will need more attention than others.

Hoof care should be provided by an experienced farrier who has the training and knowledge of how to care for issues that may arise with equine over and above just a basic trim.

Understanding the nature of a horse's hoof is very important. Just as the horse adjusts to its environment and living condition, so do the feet adjust and try to keep themselves in balance.

The key elements to which the hoof responds are: moisture, surface and the horse's movement as well as the various stresses on the hoof itself.

Snow and Mud

When the ground is too muddy it will cause the horses to pack their feet with mud in dry conditions.

This will help to keep relatively even moisture in the hoof and will promote the health of the entire hoof. There can be some negative effects, if left uncared for. If there is balling up with mud or snow, this puts too much pressure on the horse's sole. The sole can then concave and will get too thin, causing the horse to be very sensitive when stepping on rocks.

Hoof Abscess

This is a very common illness/injury of the hoof. In principle the sensitive part of the hoof is inflamed and infected due to various injuries.

Most common causes:

1. Picking the horse's foot too aggressively
2. Various bruises due to an impact that can get infected in a latter stage..
4. Foreign object such as nails, stones, dirt, etc.
5. In some cases, thrush can cause an abscess of the laminae above the frog.
6. Founder
7. Ammonia build up in unclean housing

Treatment:

Treatments will vary based on whether injury location is the laminae or the coronet, the wall, the sole or the frog; also, whether there was a deep penetration to the foot by a foreign object or damage while picking the horse's hoof. Heck with your veterinarian or farrier to evaluate the problem and find the best treatment.

Euthanasia

Making the call:

This will be one of the hardest calls an owner will ever have to make. However, this may be one of the most compassionate and responsible things you can do for your friend.

You must be able to take your heart out of the equation and do what's in the best interest of the animal. This can be very hard on all involved.

Some things to consider when making that call:

- 1) Is it an incurable or progressive or transmittable disease?
- 2) Is it a chronic or severe lameness?
- 3) Is it inoperable Colic?
- 4) Is it a foal born with serious defects?
- 5) Is it debilitation caused by old age?
- 6) Is it a severe traumatic injury?
- 7) Does the animal cause a danger to itself or others?
- 8) Would the animal go through undue suffering?
- 9) Would care of the animal cause an undue financial burden

Before anyone becomes an equine owner they need to rationalize that they are an expensive animal to care for. One small injury could cost the owner hundreds, if not thousands of dollars to treat.

Means of Disposal:

- Onsite burial – must check local zoning laws to see if allowed. Would require a backhoe which could run \$150+
- Local landfill – only Class I facilities
- Offsite cremation – very few places that offer this service and it can be very costly.
- Rendering – limited sites available in Tennessee. Your veterinarians can help with pointing you in the right direction.
- Composting - must meet certain requirements, contact your local Agricultural Extension Office. Link listed at the front of this publication.

Note from Hearts of Horse Haven: Sometimes a peaceful death is better than the suffering they may endure.

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## TENNESSEE LAW

**In Tennessee, abuse or neglect of an animal constitutes "cruelty to animals." "Cruelty to animals" is a Class A misdemeanor crime, punishable by up to 11 months, 29 days in jail and/or a fine of up to \$2,500.**

#### **TN Code: 39-14-202 Cruelty to animals**

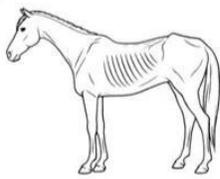
A person commits an offense who intentionally or knowingly:

- (1) Tortures, maims or grossly overworks an animal;
- (2) Fails unreasonably to provide necessary food, water, care or shelter for an animal in the person's custody;
- (3) Abandons unreasonably an animal in the person's custody;
- (4) Transports or confines an animal in a cruel manner; or
- (5) Inflicts burns, cuts, lacerations, or other injuries or pain, by any method, including blistering compounds, to the legs or hooves of horses in order to make them sore for any purpose including, but not limited to, competition in horse shows and similar events.

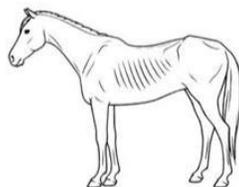
# Horse Evaluation

Using the Henneke Body Condition Scoring Chart allows a good way to see if a horse is in need of intervention.

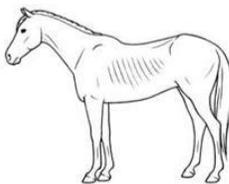
| Score                       | Description                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Poor</b>              | Extremely emaciated; no fatty tissue; vertebrae, ribs, tail head, and bones of withers, shoulder, and neck are visible                                               |
| <b>2. Very Thin</b>         | Emaciated; slight tissue cover over bones; vertebrae, ribs, tail head, and bones of withers, shoulder, and neck are visible                                          |
| <b>3. Thin</b>              | Slight fat cover over body; individual vertebrae and ribs no longer visibly discernible; withers, shoulders, and neck do not appear overly thin                      |
| <b>4. Moderately Thin</b>   | Ridge of spine and outline of ribs are visible; tail head may or may not be visible depending on the breed; withers, shoulders, and neck do not appear overly thin   |
| <b>5. Moderate</b>          | Spine and ribs cannot be seen however ribs can be felt; tail head is spongy; withers, shoulders, and neck are rounded and smooth                                     |
| <b>6. Moderately Fleshy</b> | Slight crease down spine; ribs and tail head feel spongy; fat deposits along withers and neck and behind shoulders                                                   |
| <b>7. Fleshy</b>            | Crease down spine; ribs have fat filling between them; tail head spongy; fat deposits along withers and neck and behind shoulders                                    |
| <b>8. Fat</b>               | Apparent crease down spine; ribs difficult to feel; soft fat surrounding tail head; fat deposits along withers, behind shoulders, and on inner thighs; neck is large |
| <b>9. Extremely Fat</b>     | Obvious crease down spine; patchy fat on ribs; bulging fat on tail head, withers, behind shoulders, and on neck; fat fills in flank and on inner thighs              |



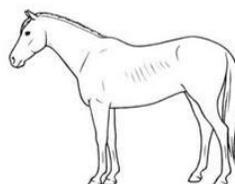
Body Score 1



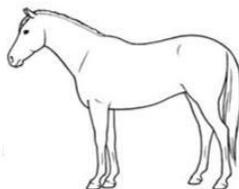
Body Score 2



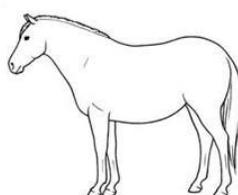
Body Score 3



Body Score 4



Body Score 5



Body Score 9

We hope you found this information useful. Please keep in mind no good intended advice should ever take the place of advice received from any professional such as your veterinarian or certified farrier.

This material is only meant to help provide informative information and help owners to understand how important their role is in their horse's life.

If you have any questions or concerns regarding the care or well-being of your animal please feel free to reach out to us. We are here for you.

After all...It's all about the horses!

(865) 573-8006

Email: [heartsofhorsehaven@gmail.com](mailto:heartsofhorsehaven@gmail.com)

To learn more about us;  
[www.heartsofhorsehaven.org](http://www.heartsofhorsehaven.org)

## Thinking about getting into rescue work?

### Costs and considerations when rescuing a horse

On occasion, the horse industry relies on well-intentioned horse owners to rescue horses and other equids from negative situations. These circumstances can include owners surrendering horses they can no longer care for or manage, horses in kill pens, or horses coming from extreme humane cases that are suffering from starvation or a debilitating injury. These horses rarely come with a history of their breed, age, training level, health, temperament, or disposition. Many times, rescuing or fostering these horses takes a skilled horse person with monetary resources. The goal of this article is to outline some of the common needs and costs of rescuing a horse (Table 1).

- **Adoption or purchase fee.** It is common for horse rescues to request an adoption fee which can range from \$100 to over \$1,000. This fee rarely covers the rescue's investment in the horse but does provide the new owner some level of confidence knowing the horse's health, level of training, and demeanor has been assessed. When rescuing a horse from a kill pen, it is common for the new owner to purchase or bail-out the horse; this fee can range from \$100 to \$1,000.
- **Transportation.** Rescue horses likely need to be transported to their new location. If using a privately owned trailer, the trailer should be cleaned and disinfected after transporting the horse. Commercial (for hire) haulers commonly charge \$1 to \$2 per loaded mile.
- **Housing.** Will the horse be housed at a private farm or boarding barn? All rescue horses will need to be quarantined in a private area for 30

days. Although it is difficult to attach a price for horse care at a privately owned farm, quarantine board at a public boarding facility can range from \$200 to over \$1,000 each month.

- **Basic veterinary care.** A veterinary assessment prior to rescuing a horse is rarely possible. Most rescued horses will need vaccinations, a Coggins test, and a fecal egg count and deworming. Additional care may include an examination and treatment for ulcers, castration, dental work, and delousing. Prices for veterinary care vary greatly and depend on the condition of the horse. Average costs for basic care include: initial veterinary examination (\$100), five core vaccinations (\$75), Coggins (\$30), fecal egg count (\$25), annual deworming (\$60), ulcer examination and treatment (\$500), castration (\$250), basic dental examination (\$250), delousing (\$25 for product).
- **Specialty Veterinary care.** Horses in need of being rescued can suffer from a number of diseases and conditions, including lameness, laminitis, pregnancy, lacerations, broken bones, uveitis, and skin diseases, which may result in the need for medications, ultrasounds, radiographs, or even euthanasia and rendering. Some lameness issues can be resolved, while others may be long-term, untreatable, or surpass the owner's economic and management ability to treat. A basic lameness exam averages \$60 (not including the farm call), while additional treatment can range from hundreds to thousands of dollars. Although it is essentially impossible to estimate costs associated with specialty veterinary care, a recent survey determined the average costs for euthanasia and rendering in Minnesota was \$237 and \$168, respectively.

- **Nutrition.** Many times, rescue horses are underweight. These horses will require high-quality forage and a grain concentrate. On a monthly basis, these costs can average \$75 for hay, \$150 for commercial grain products, and \$50 for additional supplements (i.e. weight builders, hoof supplements). Keep in mind specific hay and grain may cost additional money on top of what is provided if the horse is boarded. Finally, the horse should slowly, over the course of two weeks, be introduced to the new diet. Horses that are emaciated will require a special and longer-term re-feeding program. In this case, please consult with a veterinarian or equine nutritionist.
- **Hoof care.** The cost of hoof care is largely dependent on the condition of the animal's hoof and the amount of prior hoof care. Costs differ greatly but can range from a regular trim (average cost of \$40) to corrective and specialty shoes that can cost thousands of dollars.
- **Training and demeanor.** Usually, the level of prior handling and training is unknown and may be limited. Although the possibility of riding may be enticing, the first priority should focus on groundwork (leading, trailering, tying, ground manners, etc.). It is important to understand one's own abilities as an owner and handler and to seek out a reputable and knowledgeable trainer when needed. Monthly training (excluding board) can range from a few hundred dollars to over a thousand dollars with the investment lasting months to years. It is also important to evaluate a horse's demeanor. Care should be taken if a horse displays an aggressive or overly fearful demeanor or has a known history of biting, bucking, rearing, bolting, or kicking. Even with extensive training, some horses will not be rideable or safe to be around.

- **Disease.** The most commonly observed disease in rescued horses is Strangles. If treated quickly, horses can recover from Strangles but costs will skyrocket if an affected horse requires hospitalization. Strangles and other infectious diseases are the primary reason a 30 day quarantine period is recommended for all incoming horses. This is especially important when the horse's history is unknown.

Although a person may be compelled to rescue several horses, it is likely a choice must be made. When rescuing a horse(s), keep in mind your long-term goal. If an owner's goal is to rescue a horse with the intent of allowing it to live out its natural life as a pet or companion, then most horses with a kind demeanor who lack major health issues or who have minor, treatable diseases would be acceptable. If an owner's goal is to have a rideable horse with the ability to perform, then a sound, trainable, younger horse that is free of major health issues is best.

This information is not meant to deter horse owners from rescuing horses, but to better equip them with knowledge of what financial resources are needed to rescue a horse and conditions that can arise. Though the initial investment of time and financial resources can be great, rescued horses can live productive and successful lives as companion and show animals.

***Note from Hearts of Horse Haven:  
If you're looking to become a 501(c)3  
organization to offset the cost of your  
rescues please contact us for more  
information. Legitimate rescues are  
happy rescues. (865) 573-8006***

## Summary

Bringing a horse, pony, mule or donkey into one's life can be a very exciting time, and for many it may be a lifelong dream come true. Equine hold a very special place not only in our hearts but also in the history of the United States. From work animals to animals of transport, they have carried our soldiers into battle and moved our mail across the plains. Since the early years of society they have been here giving 100% to the people who utilized them. However; since the invention of cars, trains and planes they no longer hold the same industrial and service importance as they once did. In this day and age, because of their domestication, they rely on responsible people to care for their needs.

By making the choice to bring one of these magnificent creatures of God into your life, you are making a commitment to give them the care needed to insure they live a healthy and safe life. Also, as soon as you become an owner, you take on the responsibility to make sure the animal thrives through proper care and maintenance. Good management allows the owner to catch and fix an issue early, insure the healthy well-being of the animal, and save the owner money in the long run.

Being prepared to address any issue that may arise is the key to being a responsible owner. Building relationships with the professionals that you can contact if a need arises like veterinarians, farriers, and trainers is essential. Also being prepared if your personal situation should change and you are no longer able to physically or financially provide for that animal is of vital importance.

Learning to understand your horse and gaining its respect results in a bonding relationship. And with that partnership comes the gift of a wonderful companion and a heartfelt friendship you will lovingly cherish.

