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# On-Farm Services



We are more than happy to provide veterinary services on-farm when and where we can. Some services must be performed in-clinic for safety reasons, but we do our best to be able to offer most services on-farm to save you the time and trouble of having to haul your stock in to the clinic. We are able to provide the following services:

- Veterinary Client Patient Relationship (VCPR) Visits
- Bovine Ultrasound Pregnancy Evaluations
- Bovine Breeding Soundess Evalutations (Semen testing)
- Bovine Insurance Exams
- Bovine Surgical Procedures
  - Cancer eye removal
  - Minor surgical procedures (lacerations)
  - Castrations (up to a certain age and weight)
- Equine Dental Floatations
- Equine Castrations
- Equine Health Exams
- Equine Ultrasound Pregnancy Evaluations
- Ram Breeding Soundness Evaluations
- Ewe Ultrasound Pregnancy Evaluations
- Canine & Feline Examinations & Vaccines

\*we are unable to offer small animal surgeries on farm\*

The above services are weather dependent, unless indoor facilities are available. If you have any questions regarding procedures not listed above, please ask us. Other procedures may be available upon request.

All on-farm procedures must be performed in a safe manner with proper equipment to properly restrain the animal. This is for the protection of the animal, yourself, and the veterinary team.

We also ask that you respect our time and have your animals caught and ready for services to be performed. This helps us stay on schedule and reduces waiting time for other clients.



# Vaccination Protocols - Adult



These protocols are based on the recommendations of the American Association of Equine Practitioners (AAEP).

The below list includes the CORE vaccines to protect foals from diseases that are endemic to our region, those with public health significance, virulent/highly infectious, and/or pose a risk of severe disease. These diseases DO NOT require contact with other horses – they are diseases that horses can contract while at home on pasture.

CORE DISEASE	BROODMARES	OTHER HORSES  Previously vaccinated against the	OTHER HORSES Unvaccinated or lacking vaccination
Tetanus	Previously Vaccinated - Annual, 4-6 weeks pre-partum	Annual	2-Dose Series
*booster at time of penetrating injury if last dose was administered over 6 months previously	Unvaccinated or Unknown history - 2-Dose Series 2nd dose 4-6 weeks after 1st Revaccinate 4-6 weeks pre-partum		Annual revaccination
Eastern/Western Equine Encephalomyelitis	Previously Vaccinated - Annual, 4-6 weeks pre-partum	Annual – spring, prior to onset of mosquito season	2-Dose Series 2nd dose 4 weeks after 1st
(EEE & WEE)	Unvaccinated or Unknown history - 2-Dose Series 2nd dose 4-6 weeks after 1**		Annual revaccination
* not in Canada but included in vaccines. Present in the USA	Revaccinate 4-6 weeks pre-partum		
Rabies	4-6 weeks pre-partum OR	Annual	Single dose Annual revaccination
	Prior to Breeding		
West Nile Virus (WNV)	Previously Vaccinated – Annual, 4-6 weeks pre-partum	Annual – spring, prior to onset of mosquito season	
<ul> <li>especially if travelling</li> </ul>	Unvaccinated or Unknown History – preferable to vaccinate open horses		25 (1997)
Strangles	Killed vaccine Previously Vaccinated – Semi-annually, 4-6 weeks pre- partum	Annual	Modified Live Vaccine – Intranasal 2-Dose Series 2nd dose 3 weeks after 1st
	Unvaccinated or Unknown history - 3-Dose Series 2nd dose 4-6 weeks after 1** 3nd dose 4-6 weeks pre-partum		
Potomac Horse Fever (PHF)	Previously Vaccinated – Semi-annually, 4-6 weeks prepartum	Annual	2-Dose Series 2nd dose 3-4 weeks after 1st
	Unvaccinated or Unknown history - 2-Dose Series 1st dose 7-9 weeks pre-partum 2nd dose 4-6 weeks pre-partum		

The below list includes the RISK-BASED vaccines. These diseases DO require contact with other horses – they are diseases that horses contract by traveling to riding arenas, trail rides, competi-

RISK-BASED DISEASE	BROODMARES	OTHER HORSES	OTHER HORSES
Equine Herpesvirus	3-Dose Series	Annual	3-Dose Series
Equine Influenza	Previously Vaccinated – Semi-annually with one dose	Horses with ongoing risk of exposure:	2-Dose Series



# Vaccination Protocols - Foals & Weanlings



These protocols are based on the recommendations of the American Association of Equine Practitioners (AAEP).

The below list includes the CORE vaccines to protect foals from diseases that are endemic to our region, those with public health significance, virulent/highly infectious, and/or pose a risk of severe disease. These diseases DO NOT require contact with other horses – they are diseases that horses can contract while at home on pasture.

CORE DISEASE	FOALS & WEANLINGS	FOALS & WEANLINGS
	of mares vaccinated in the prepartum period against the disease indicated	of unvaccinated mare or lacking vaccination history
TETANUS	3-Dose Series	3-Dose Series
	1st dose at 4-6 months of age	1st dose at 3-4 months of age
	2 <sup>nd</sup> dose 4-6 weeks after 1 <sup>st</sup>	2 <sup>nd</sup> dose 4-6 weeks after 1 <sup>st</sup>
	3 <sup>rd</sup> dose 10-12 months of age	3 <sup>rd</sup> dose 10-12 months of age
Eastern/Western Equine Encephalo-	3-Dose Series	3-Dose Series
myelitis	1st dose at 4-6 months of age	1st dose at 3-4 months of age
(EEE & WEE)	2 <sup>nd</sup> dose 4-6 weeks after 1 <sup>st</sup>	2 <sup>nd</sup> dose 4 weeks after 1 <sup>st</sup>
	3 <sup>rd</sup> dose 10-12 months of age prior to the onset of vector season	3 <sup>rd</sup> dose 8 weeks after the 2 <sup>nd</sup>
Rabies	2-Dose Series	1 Dose
	1st dose at 6 months of age	$1^{st}$ dose at 6 months of age
	2 <sup>nd</sup> dose 4 weeks after 1 <sup>st</sup>	
West Nile Virus	3-Dose Series	3-Dose Series
(WNV)	1st dose at 4-6 months of age	1 <sup>st</sup> dose at 3-4 months of age
*especially if travelling	2 <sup>nd</sup> dose 4-6 weeks after 1 <sup>st</sup>	2 <sup>nd</sup> dose 4-6 weeks after 1 <sup>st</sup>
	3 <sup>rd</sup> dose 10-12 months of age	3 <sup>rd</sup> dose 10-12 months of age
Strangles	3-Dose Series	3-Dose Series
	1st dose at 6-9 months of age	1st dose at 6-9 months of age
	2 <sup>nd</sup> dose 3-4 weeks after 1 <sup>st</sup>	2 <sup>nd</sup> dose 3-4 weeks after 1 <sup>st</sup>
	3 <sup>rd</sup> dose 11-12 months of age	3 <sup>rd</sup> dose 11-12 months of age
Potomac Horse Fever	2-Dose Series	2-Dose Series
(PHF)	1⁵ dose at 5 months of age	1⁴ dose at 5 months of age
	2 <sup>rd</sup> dose 3-4 weeks after 1 <sup>st</sup> dose	2 <sup>rd</sup> dose 3-4 weeks after 1 <sup>st</sup> dose

The below list includes the RISK-BASED vaccines. These diseases DO require contact with other horses – they are diseases that horses contract by traveling to riding arenas, trail rides, competi-

RISK-BASED DISEASE	FOALS & WEANLINGS	FOALS & WEANLINGS
Equine Herpesvirus	3-Dose Series	3-Dose Series
Equine Influenza	3-Dose Series	3-Dose Series

# **Deworming Protocols**



Creating an effective deworming protocol will help keep your horse healthy and will reduce the likelihood of resistant parasites. Deworming is used to control the number of internal parasites in your horse. While these parasites are natural and horses tolerate them fairly well, uncontrolled parasite burdens can result in poor hair coat, colic, intestinal perforation, pneumonia (as a result of migrating larvae), and diarrhea.

It is recommended that fecal egg counts be performed to determine the type and number of parasites in your horse. Both individual and pooled herd samples can be tested. While testing is an added expense for owners, it will help you determine whether or not individual horses need to be treated, and which dewormer class is appropriate for the parasites present in your horse.

RESISTANCE: following the administration of a dewormer, there is always a population of parasites which are not killed - which can lead to resistant parasite loads. If you continue to use the same dewormer class, you will gradually increase the population of parasites which are resistant. It is recommended that rotating dewormer drug-classes be used to target specific parasites and reduce the liklihood of resistance. There are 4 major drug classes, each targeting specific parasites at specific life stages:

- 1. Macrocyclic lactones (ivermectin, moxidectin)
- 2. Benzimidazoles (fenbendazole, oxibendazole)
- 3. Tetrahydropyrimidines (pyrantel pamoate, pyrantel tartrate)
- 4. Prazino-isoquinolines (praziquantel)

Foals, young horses, broodmares, seniors, and horses with health issues require more regular

deworming.



For more information and to create an effective deworming protocol to meet the needs of your horse, contact Dr. McCracken

# **General Guidelines**



ADULT HORSES: perform a fecal egg count in the spring or fall prior to deworming

#### **Low Shedders**

- Spring Dewormer: fenbendazole (Panacur)
- Fall Dewormer: moxidectin with praziquantel (Quest Plus)

If your horse is a moderate or high shedder, additional deworming may be required. While a fecal egg count is not required, it is highly recommended.

**PREGNANT MARES**: should be dewormed as usual, but when vaccinations are administered 4-6 weeks prior to foaling, deworm with moxidectin with praziquantel (Quest Plus)

#### **FOALS:**

- 2 months of age: ivermectin
- 4 months of age: oxibendazole
- 5 months of age: pyrantale pamoate (Strongid)
- 6 months of age: moxidectin with praziquantel (Quest Plus)
- 8 months of age: pyrantale pamoate (Strongid)
- 9 months of age: fenbendazole (Safeguard)
- o 10 months of age: ivermectin
- 12 months of age: fenbendazole (Safeguard)

#### NON-CHEMICAL PARASITE MANAGEMENT

- rotate pastures
- remove manure frequently
- harrow/drag pasture during a hot day and keep your horses off for 2 months
- avoid over-grazing and having too many horses on one pasture



# Administering Injections



It is important for all horse owners to know how to safely administer injections in their horse. The first step is to remember to BREATHE - the calmer you are for the process, the calmer your horse will be.

For your average adult horse, a 20 guage needle that is  $1 \frac{1}{2}$  long works best. Make sure you also have the appropriate size syringe for the dose you need to inject. It is also best to use a clean needle and syringe every time you administer anything to your horse.

The second step is to determine where you are going to administer the injection. The safest place is in the muscle on the neck, in front of the shoulder blade. This is above the cervical vertebrae on the bottom and below the nuchal ligament on the top.



Next, holding the needle in one hand, in a smooth steady motion insert the needle in a perpendicular direction all the way to the hub. Attach the syringe to the hub.

While holding onto the hub to ensure the syringe does not slip off, draw back the syringe and look for any blood. If you see blood, partially pull the needle out and redirect it to a new position. Check for blood again. If you do not see any blood, gently inject the medication.

Remove the needle, and give a nice firm rub in the location of the injection.

You should monitor the injection site for any heat, swelling, or evidence of pain for the next 24-48hrs. Contact your veterinarian if you see any of these signs.



# Nutrition



A balanced nutritional feeding program is important to maintaining your horse's health throughout every stage of their life. The forage and minerals that you feed your horse will affect their performance and longevity.

FORAGE: feeding a high quality forage is important. A horse's digestive system is designed to utilize frequent, small meals of grasses. Also, ensuring your horse doesn't have an empty stomach will reduce the risk of gastric ulcers.



SALT - ensure that your horse has constant access to salt. Not only does your horse require the salt and minerals, it also encourages your horse to drink more water, which in turn lowers their risks of colic and dehydration.

BODY CONDITION: it is important that you understand how to body condition score your horse. Being too thin or too fat will affect your horse's health. It is important that you adjust their feed accordingly by changing the type and amount that you feed them. A horse in optimal condition has ribs that can be easily felt, but not seen; enough fat cover over their topline that their loin area is relatively fat, and their spine is not raised (too thin) or creased (too fat).

DIET CHANGES: ensure that any changes to their diet occur slowly. This includes turning them out on to green grass, or switching from one type of hay to another.. Sudden changes in feed inhibit your horse's ability to digest their food - as their gut bacteria is "shocked" and can cause medical issues. Quick changes can result in colic, laminitis, and diarhea.

DENTAL HEALTH: the condition of your horse's teeth also affects what feed they are able to properly chew. Without proper chewing, they are unable to utilize all nutrients - this is especially true for older horses. Ensuring your horse received regular dental floats by a veterinarian helps prevent choke, impactions, and weight loss.

REMEMBER: Just because your hay may look "good" doesn't mean it has the nutritional requirements that your horse needs. For example, hay cut in the heat of the day has considerably higher sugar content: good for cattle, but detrimental to horses. We recommend having your hay analyzed (NPARA or MARA will be able to help you with this) and then consulting with a feed company who has equine nutritionists on staff.

# Dental Care



Dental care is a vital part of maintaining the health and happiness of your horse. Tooth problems can lead to pain, behavioural issues, and weight loss. Annual oral exams by a veterinarian can establish the need for a dental float and allow diagnosis of any oral problems.

Adult horses should have an oral exam annually, while older horses who have established dental problems may require them more frequently. During a dental exam, Dr. McCracken will:

- sedate your horse (horse's aren't like people, we can't ask them to go "ah") A mouth speculum will be used to fully open your horse's mouth and enable a thorough exam of the teeth, cheeks, and gums
- look for sharp points, abnormal tooth shape and wear, bite issues, broken or infected teeth, cheek or tongue ulcers, and other dental abnormalities
- use a power-float to smooth out tooth points and uneven chewing surfaces

If your horse has dental disease, you may see all or some of the following signs:

BIT RESISTANCE: resistance to being bridled, or while being ridden can be a sign of mouth pain, including ulcerated cheeks or sharp tooth points.

WEIGHT LOSS: weight loss can indicate that a horse is having trouble chewing and digesting his feed fully, which leads to fewer nutrients being absorbed.

DROPPING FEED: a horse who drops feed, either pieces or larger balls of feed, can be a sign of dental issues

BAD BREATH: food that gets packed in and between cheek teeth results in bad breath

HEAD TILT: a horse who tilts his head while chewing may have dental issues



# Winter Care



**SHELTER**: horses are outdoor animals and can tolerate frigid temperatures fairly well, but shelter should always be available to them so that they can get out of the elements (snow or wind).

**WATER**: ensure that your horse has access to heated water. Horses will avoid drinking water if it is too cold leading them to become dehydrated and increase their risks of impaction.

**FEED**: ensure that your horse has access to feed. If you choose to leave your horse out to paw in the pasture, consider supplementing them with grain and other feeds to ensure they are receiving their appropriate minerals and calories. If snow is deep, or there are layers of ice, your horse will have a very difficult time. It is recommended that a high-quality hay be provided.

**BLANKETING**: banketing horses in the winter can be the topic of heated discussion for some horse owners. Some things to consider:

- if you will be regularly working your horse throughout the winter, blanket your horse. Horses will get hot and sweaty, and they are to be turned out still sweaty, they should be blanketed to prevent them from getting a chill.
- if a horse is being blanketed early in the winter they will not grow an adequate winter coat and should continue to be blanketed throughout the winter.
- if you have a horse with a thin coat (as some breeds naturally are), or if you ever see your horse shivering, your horse might need to be blanketed
- if you choose to blanket your horse, make sure the check on them regularly to ensure the blanket is in good condition and not causing any sores from rubbing

**DEWORMING**: after there have been a couple good frosts, it is advisable to deworm your horse. This ensures that any parasites still on the ground have frozen, and your horse doesn't immediately become re-infected.

**HOOVES**: ensure that a horse's hooves continue to be trimmed throughout the winter. While their hooves grow more slowly in the winter, they will likely need to be trimmed up at least once during the winter months. If your horse is shod, it is advisable to remove their shoes for the winter to provide them with more traction and to help prevent snow build up on the bottom of the foot.



# **Handling Emergencies**



Every horse owner should be prepared to deal with equine medical issues and emergencies. Lacerations, punctures, colic, abscesses, eye injuries, choke - equine emergencies happen every day and it is important that you are able to recognize when a problem is occuring, know how to respond to that problem appropriately, and know when to contact Dr. McCracken.

We recommend that you check your horse(s) on a daily basis for signs of injury or illness. In some instances you might be able to detect an illness before it becomes serious or life threatening.

Emergencies, by their very nature, are crises. It is important that you remain calm when dealing with an emergency: this gives your horse the best chance of recovery. Take a moment to assess the situation, formulate your thoughts, and consider writing down vital signs and other key points to relay to your veterinarian.

#### Normal Vital Signs

VITAL SIGN	HOW TO DETERMINE	NORMAL	ABNORMAL
TEMPERATURE	Insert a lubricated thermometer into the horse's anus.  Gently push the thermometer against the colon wall.  Keep in place until the thermometer indicates the	Between 37.5 – 38.5°C	Higher than 39.0° Lower than 37.4°
HEART RATE (at rest)	reading is complete  With a stethoscope: place the stethoscope behind the armpit on the left side. Press into the armpit.  By feel with your hand: place 3 fingers against the artery underneath the cheek on either side of the face.  Count each pulse for 15 seconds. Multiple that number	26-44 bpm Up to 70-80 (foal)	Higher than 60 bpm Weak
	by 4 to have the beats per minute.	op 10 10 00 (10 y	Irregular
RESPIRATION	Standing beside the horse, count each expansion of the belly at the flank for one minute.	8-15 (adult) Up to 24 (foal)	Short, quick breaths Excessive rib movemen Foam or chewed food from nostrils
GUM COLOR	Lift the upper or lower lip of the horse and look at the gum color.	Pink	Pale Pink Blueish Grey Purple Yellow
CAPILLARY REFILL TIME	Lift the upper or lower lip of the horse. Press your finger into the gums, this will leave a white mark. Count the number of seconds it takes for the white mark to return to normal gum color.	1-2 seconds	Longer than 3 seconds
GUT SOUNDS	With a stethoscope: place the stethoscope against the horse's stomach behind his ribs. Repeat on both sides. With your ear: place your head against the horse's stomach behind his ribs. Repeat on both sides.	Should hear gurgles on both sides	Faint Infrequent None

# What is Abnormal



If your horse is exhibiting abnormal vital signs, or you have noticed any changes in their normal behaviour, it should be taken seriously as these may signify underlying medical problems. Some signs of pain include:

Legs & Feet: limping may signify pain, muscle strain, hoof puncture,

bruises or abscesses

Body: stretched out body position; humped up back

Head: hanging low, tense

Ears: laid back and head hung low indicates pain;

Tail: swishing back and forth rapidly; clamped tightly between legs

Make sure to use extreme caution if you believe that your horse is in pain. When examining your horse for tenderness or treating wounds they may bite or kick out in pain.



# When to Call for Assitance

If your horse is in severe pain, suffering from colic, or from a major wound, you should contact Dr. McCracken immediately. If you are unsure as to whether or not something requires immediate emergency care - air on the side of caution. It's better to be safe than sorry.

#### **WOUNDS**

- a wound that is bleeding heavily, or one that is deep
- a wound less than 6-8 hours old is a candidate for suturing
- any wound near a joint or along the backside of a leg (where the tendons run) should always be taken seriously
- any puncture, even if it appears small, should be explored. Often times, broken splinters can be left behind and cause serious issues

#### COLIC

• any signs of colic should be taken seriously. Contact Dr. McCracken as soon as possible, the earlier you treat, the more likely it can be resolved.

#### **FOALING**

• notify Dr. McCracken when foaling has begun - this will allow her to be prepared should you have a foaling complication.

#### First Aid Supplies to Have On Hand

Being prepared to handle emergencies means having a fully-stocked Equine First Aid kit. Having the necessary tools can help make the situation less stressful and result in a more positive outcome. Ensure that your kit is sealed and that everything inside is kept clean. While you should have a fully stocked kit at home, also consider a small kit to pack with you when out on the trail.

#### First Aid Kit:

- digital thermometer
- good quality bandage scissors
- small stainless steel bowl (for diluting antseptic with water)
- antiseptic
- cotton pads
- pillow wraps
- cotton bandage wrap
- stretch wrap (Vetrap)
- non-adhesive bandages
- wire cutters
- clean towels
- hoof pick
- shoe removal equipment if your horse is shod
- disposable diapers (make excellent absorbant bandages)
- duct tape
- medical tape
- epsom salts
- alcohol (for cleaning areas prior to injections)
- assorted needles and syringes
- Emergency Phone List
- Emergency Transport Plan

#### Other items that may come in handy:

- yard sprayer with nozzle or a calf enema bag (excellent for flushing wounds)
- stethoscope
- flashlight

#### Trail First Aid Kit

- hoof pick (you can purchase collapsable ones for easier transport)
- non-adhesive bandages
- Vetrap
- scissors
- shoe removal equipment



# Wounds



No matter what we do as owners to protect our horses from wounds - they just happen! Minor wounds can often be treated at home:

- stop the bleeding by applying pressure
- cold hose the area to rinse the wound and help reduce inflammation
- clean the wound with an antiseptic solution
- treat with a topical ointment
- protect with a dressing and wrap the area. DO NOT wrap the area too tightly especially with vetrap which can cut off the blood supply.

Most wounds will take a while to heal and may require your horse to be on stall rest to keep the wound clean and prevent it from re-opening as it heals. If your horse has a wound, bear in mind that the bone underneath could possibly be affected as well.

If at any point a wound does not seem to be healing properly, or proud flesh is developing, seek veterinary attention.

If wounds are more severe it is best to have it examined by a veterinarian. Based on the circumstances, Dr. McCracken may:

- sedate the horse to properly clean and examine wound
- if needed, radiographs or an ultrasound will be used to determine if there are fractures or foreign bodies (nails, sticks, etc.) in the wound
- debride the dead tissue to encourage proper repair and healing
- suture the wound closed
- place drains, if necessary, to prevent fluid build up and infections
- apply a splint to injured legs for stability
- provide a tetanus injection
- prescribe non-steroidal anti-inflammatory medication
- prescribe antibiotics if needed
- Keep in mind FRESH WOUNDS are the easiest to treat and suture by veterinarians. Wounds that are left too long may be too old to effectively suture, resulting in longer treatment time and greater scarring.

If your horse is bleeding heavily, it is important to apply a pressure bandage to the area to help control bleeding. If a bandage soaks with blood, DO NOT remove it. Simply add additional padding over top while you wait for veterinary care.

# Lameness



Lameness is a common issue with horses. Just like with people, horses can get sprains and strains from slipping, mis-stepping, or work-related injuries. Lameness can be minor or critical, so make sure that if your horse turns up lame, that you perform a thorough exam to investigate the cause. Most often, a horse who has come up severely lame either has an infection (abscess) or a facture.

#### **Fractures**

Finding your horse unable to bear weight on a limb can be the signs of a bone fracture - which can mean something from a small bone chip to large slab fractures and may or many not be associated with a wound. Fractures will need to be diagnosed by a veterinarian either with radiographs, or if it is higher up the leg, then with ultrasound.

In many instances, a referal to a equine specialty veterinarian may be in order. While fractures can happen from riding, it is actually more common for a fracture to occur from a pasture accident.

#### Tendons or Ligaments

A horse with a tendon or ligament injury will present with inflammation: heat, swelling, and pain. Depending on where the injury is located, these symptoms might not be readily apparent. The severity of these injuries can vary widely and may be chronic.

The first step is to reduce the inflammation by icing or cold hosing the area, providing anti-inflammatories, and pain control. Once the pain and infammation are under control, resting your horse, sometimes for even up to 6-12 months may be in order; slowly adding rehabilitative exercises in after lameness has subsided.

#### **Puncture Wounds**

Puncture wounds commonly occur as a result of stepping on old nails, sharp sticks, old equipment. It is important that you regulary inspect your horse pastures for anything that could puncture their hooves.

Most puncture wounds are relatively minor, but any that are deep, or result in a foreign body (stick, etc) being left behind can cause incredible pain and discomfort to your horse. It is a good idea to soak your horse's foot in epsom salts to help draw out any infection. However, if the injury doesn't seem to be resolving, or if you suspect a foreign body, schedule an exam. Often, these sticks or nails need to be removed and cleaned under sedation.

#### Stone Bruising





Stone bruising can occur when a horse is walking on rocky ground or roadways. Bruises will show on the soles as reddish purple marks and may result in your horse coming up lame. Generally, stone bruises are very minor and simply cleaning the hoof out will provide relief and allow the bruise to resolve. However, if lameness continues, ensure you look for signs of a puncture or abscess.

#### **Hoof Abscess**



Abscesses are infections that occur when bacteria enters the hoof via cracks, punctures, or other types of injuries. An abscess can be very uncomfortable for your horse and cause lameness. It will move through the path of least resistance and will work its way out of the hoof, often via the coronary band.

The best way to treat this is to contact your veterinarian or farrier as soon as possible to have them dig out the infected tissue and flush the area. Soaking it in epsom salt baths and applying a prepodyne solution poultice to the hoof will help provide relief. If you wrap the hoof in a poultice, do not leave it on for longer than 2 days as the hoof will get soft.

### Over-reaching or Interference



When a horse's hind legs strike the heel or pastern of the front legs, this is known as over-reaching or interference. This can occur as the result of quick-movements (such as in reining, cutting, racing) or as the result of working with uneven footing. Commonly a wound is created on the front leg, ranging from minor (removing hair) to more serious (damaged tendon sheath). It is always best to clean the wound and apply a wound gel and bandage. If more serious cases with excessive bleeding or where damage has been done to the tendon, a veterinarian should be notified.

# Colic



The term "colic" refers to any abdominal pain, not any specific disorder. The abdominal pain is often the result of impaction, gas, grain overload, or parasite infections. Colic can occur in any horse regardless of age, physical fitness, environment, or breed.

#### SIGNS OF COLIC

Sometimes it is very obvious that your horse is experiencing abdominal pain and needs to see a veterinarian immediately. Mild signs may reflect a mild colic that will quickly respond to treatment. Other times the symptoms are mild, and don't reflect the severity of the situation.

CALL THE CLINIC IMMEDIATELY IF YOUR HORSE IS EXHIBITING TWO OR MORE OF THE MODERATE OR SEVERE COLIC SYMPTOMS, OR IF MILD COLIC SYMPTOMS PERSIST FOR OVER 30 MINUTES.

VITAL SIGNS	MILD	MODERATE	SEVERE
Heart Rate	40-60	60-80	>80
Respiratory Rate	20-30	30-40	>40
Temperature	37.2—39.0 C	37.2—39.0	<37.2 or >39.0
Gum Color	Pale Pink	Pale Pink	Bluish Grey or Purple
Capillary Refill Time	1-2 seconds	3-4 seconds	> 4 seconds
Gut Sounds	Normal or increased	Decreased	Absent
Passing Gas	Yes	Yes	No
Pain Level	Sweating, intermittent paw- ing, looking at belly, lifting hind legs, stretching	Same as mild but continuous, may try to roll	Same as mild, continuous attempt to roll or thrash

#### PREVENTING COLIC

- maintain a consistent feeding schedule and introduce new feed slowly over a few days
- Ensure your horse has access to unlimited, clean, water. In the winter ensure it is warm.
- maintain a parasite prevention routine
- ensure your horse receives regular exercise. Don't overdue it on the weekend, and then leave your horse sit during the week.

# Choke



Like with people, choke occurs when food becomes lodged in the esophagus. Unlike people, horses cannot vomit and become very distressed. Signs of choke include food or saliva pouring from the nose, difficulty swallowing, stretching the neck (in an attempt to move the blockage), a swelling or lump on the left side of the neck, loss of appetite, or dehydration.

In most cases, horses are able to clear themselves. However, if it persists and your horse is in obvious signs of distress contact you veterinarian and:

- prevent your horse from eating or drinking anything
- keep the horse calm, without endangering yourself
- lower their head to encourage saliva to drain
- gently massage their neck

In many cases you can prevent choke by understanding why it occurs:

- choke is often caused by feed swelling in the esophagus if you use dry feed, add water to it before feeding
- reduce the size of treats (such as apples, etc)
- discourage cribbing (cribbing collar)
- if you have a horse eating wooden shavings consider switching bedding types
- do not allow an over-exerted horse to eat until they have cooled down, encourage them to drink water
- horses that eat quickly (especially if they have to compete with others) are at a higher risk, consider spreading feed out or segregating horses
- ensure your horse has good dental health (regular dental floats by a veterinarian) so they can properly chew their food



# Eye Injuries



Eye discharge, especially in the summer months with pollen, dust, and flies, can be common and of no concern. However, if there is anything more than normal weeping, you should investigate.

- gently wipe away any discharge
- do not force the eyelid open
- if a minor irritant is in the eye (pollen, dust, hair) gently flush with warm water
- keep the horse in a dim or darkened area, as light can irritate the eye further
- restrain the horse from rubbing it's eye on it's leg or other objects
- NEVER put any other substance in the eye to clean or flush

 NEVER remove a foreign object - this may cause additional damage and risk rupturing the eye. Contact your veterinarian.



# Nosebleed

Nosebleeds are also relatively common. If your horse is bleeding from one nostril it is often the result of mild trauma and is likely not a concern. However, if BOTH nostrils are bleeding, or if there is a significant amout of blood, this could indicate a more serious problem such as a skull injury or fungal infection. Do not try to pack the nose to stop the flow, horses are only able to breathe through their noses, not their mouths. Contact your veterinarian.

If your horse has a bloody nose after being worked, it may signal that they have Exercise Induced Pulmonary Hemorrhage. The occurs in many sport horses, although few are bad enough to be clinically affected by it. Only 5% of horses with EIPH get a visible external nosebleed. While the cause of EIPH is not fully understood, it is believed to be associated with high lung blood pressure during intense exercise, lung inflammation and shear forces within the chest generated with exercise.

If you think your horse may be affected, please speak with Dr. McCracken regarding treatment.

# Allergy Reactions & Bug Stings



Generally, insect stings and bites are minor and heal quickly without any treatment. However, in rare cases your horse might have a reaction. If your horse reacts to a sting or bite:

- apply a cold compress to the site of the bite to help control any swelling
- if there is a stinger left behind, attempt to remove it
- monitor your horse for any signs of an allergy reaction,
- if there is any swelling in the lips, tongue, or throat, notify your veterinarian immediately.

# Shock



If your horse ever experiences severe trauma, dehydration, or significant blood loss they are at risk of going into shock which can be life threatening. In these instances it is important that you contact your veterinarian immediately.

Signs of shock include:

- a weak heart rate
- shallow and rapid breathing
- shivering or trembling
- pale mucous membranes

While you wait for your veterinarian, it is important that you KEEP YOUR HORSE CALM and WARM. Cover them with blankets and leg wraps if you have any. Provide fresh water for them to drink, and look for signs of the cause of the shock (dehydration, trauma, bleeding, pain).

# Heat Exhaustion & Dehydration



Horses can succumb to heat stroke if they are overworked, especially in particularly hot weather. If horses are overweight or out of condition, they are also at an increased risk.

Do not over-exert your horse and always ensure they have access to plenty of water. Horses may drink up to 4 times their normal amount of water in hot conditions.

Also be cautious when transporting your horse in the summer - temperatures can quickly rise in horse trailers.

#### **TYING UP**

Tying up results most often from an electrolyte imbalance. When horses are over-worked and begin to lose electrolytes, their muscles "tie up" resulting in the horse becoming very stiff, reluctant to move, their muscles seize up, and they may develop a distinct "thump" to their breathing.

Ensure your horse always received an adequate warm up, is physically fit to perform the task you are asking of it, and do not over-exert your horse.

Horses who are reluctant to move, sweating profusely, have a high respiratory rate, and have discolored urine should be treated by a veterinarian immediately with IV fluids to treat the dehydration, and provide a pain and anti-inflammatory drugs. Persistant dehydration may cause renal failure

#### **DEHYDRATION**

Dehydration most commonly occurs in the hot summer (after excercise or if they do not have access to water) or in the cold winter (if they do not have access to water, or the water is too cold. Signs of dehydration include sunken eyes and when their skin is pinched, or folded, it will not lie back down immediately. If your horse has access to water but will not drink, contact your vet to administer fluids and electrolytes.

#### **HEAT STROKE**

If a horse has heat stroke you should seek veterinary care immediately as it may result in death. Signs of heat stroke include collapse, inability to take in water, high pulse rate. The horse may also have ceased sweating and may be laying down.

Immediately remove any tack, except for a halter. If the horse is still standing, move them to a shaded area. Cool the horse with cool (not cold) water primarily under the neck (where the jugular vein lies), on the forehead, and between the ears. Avoid putting cold water on their back or hindquarters which can actually slow the blood flow in these areas and increase their core body temperature.

# Casting



When a horse has gotten themselves into a situation where they are unable to get up due to their positioning, they are said to be "cast". Most often this is seen in stalls, in deep snow, on a hill, or against a fence, where a horse has laid down and is physically unable to get his feet underneath of him to get himself back up.

It is important that you assist in re-positioning your horse immediately if you ever find him to be casted. It is important that you always keep yourself in a safe location so that you are not injured if your horse thrashes or kicks out. You will need to attach ropes around the legs on the ground to assist in rolling them over, or "spinning" their front and hind end around.

Once standing, a cast horse is likely to be stiff and sore and might be unable to move initially. If casting has occured in the winter, ensure that your horse is warmed back up again and encourage them to move slowly. If your hose is stiff and sore, they may require administration of NSAIDS.



# Supplies Available through MVC

#### **BOVINE SUPPLIES**

- Weaver Leather Show & Grooming Supplies \*great for the 4-Her or Cowboy/Cowgirl in the family
- Fencing Supplies (electric fence generators, fencing tape/wire, insulators etc.)
- Calving Supplies (OB chains, calving jacks, elastrator rings, banding pliers, sorting canes, vaccine guns, fluid feeders, taggers, etc)
- CCIA/RFID tags
- Herd Management tags, including custom printing
- Electric & Fire Branding irons
- o Farm & Ranch supplies (waterers & de-Icers, etc.)
- Livestock Handling Supplies



## Mack on Track

#### **EQUINE SUPPLIES**

- Weaver Leather Tack & Grooming Supplies \*great for the 4-Her or Cowboy/Cowgirl in the family
- Equine Supplements
- Back on Track therapeutic apparel

#### **CHICKEN SUPPLIES**

- Feeders & Waterers
- Incubators
- Supplements

#### **GOAT/SHEEP SUPPLIES**

- Shearing supplies
- o Lambing/kidding suplies
- Identification including custom printing

#### **SWINE SUPPLIES**

- Sorting Panels
- Identification including custom printing

APIARY SUPPLIES

PEST CONTROL





780-836-3770
manningvetclinic.com
manningvetclinic@gmail.com
Tuesday - Saturday
8:30 am - 5:00 pm
Available 24/7 for Emergencies

Boarding Kennel: Monday - Sunday 8:30 - 5:00 pm After-hours drop-offs and pick-ups available upon request.