WINTER 2009

"From the horse's mouth"

A newsletter from Paton and Martin Veterinary Services

Our first 6 months

We are approaching our first six months of operation and your support has exceeded all our expectations. We definitely could not be here without you. The hospital has been busy helping horses get back on track. From arthroscopies and complex lameness to colics, we have seen many cases and the feedback received has been very encouraging. We unfortunately have also had to let go of some horses after courageous battles, but this is a hospital and after all, letting a horse go with dignity and respect is also part of our job. We would like to pay tribute to all those horses that left us during the last year. Their life memories are a tribute to our profession.

Thank you for your ongoing support!

PATON MARTIN VETERINARY SERVICES LTD. "We strive to Exceed the Expectations of Our Clients."

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Intervet Schering-Plough Animal Health

"Strangles" in the lower mainland?

There have been many rumors regarding an "Outbreak" of Strangles (also known as a *Strep Equi* Upper Respiratory Infection) in the Fraser Valley. There was one (1) confirmed case of *Strep Equi* by a Veterinarian in the Maple Ridge area and there was another horse in that same barn being treated by another veterinarian that was supposedly confirmed as well. There was a second barn in the Maple Ridge area that had a small number of horses confirmed. A small number of cases seem to have showed up south of Fraser Highway in the last weeks.

Strategies to minimize "Strangles" transmission

Isolate

Quarantine new horses for 2 weeks on your property. If no clinical signs develop within this time you are more than likely safe. These horses should not have any contact with other horses and should be the last to be fed and have there stalls cleaned.

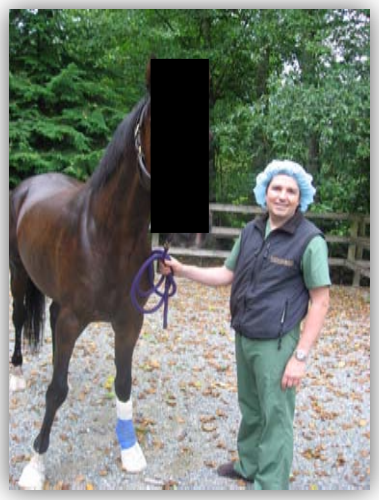
Clean

Make sure you maintain cleaning and handling supplies separated from suspected or confirmed cases. Wash your hands and change clothes when going from suspected or confirmed cases to normal ones. Strangles can remain in the environment for 6-8 weeks and conscientious cleaning and disinfection is one of the best control measures you can do. It is readily killed by heat and chlorhexidine and iodine are some of the best disinfectants.

Monitor

Following recovery, some horses may remain persistently infected also called carriers. These carriers can be detected either by culture or by detection of *strangles* DNA. A system of control based on detection, isolation and treatment of carriers could potentially be used to eradicate the organism. A series of 3 nasopharyngeal swabs evenly spaced over 2 or 3 weeks will result in the detection of about 60% to 90 % of carriers allowing their isolation and treatment.

Radiographs, such as the one above, or any other information pertaining to a horse's health must remain unidentified except to the owner or authorized agent.

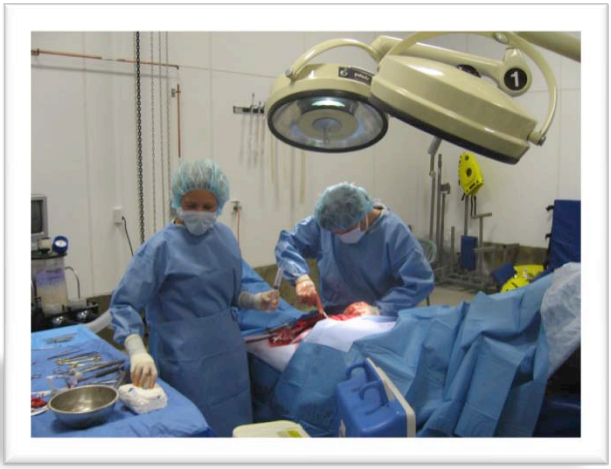


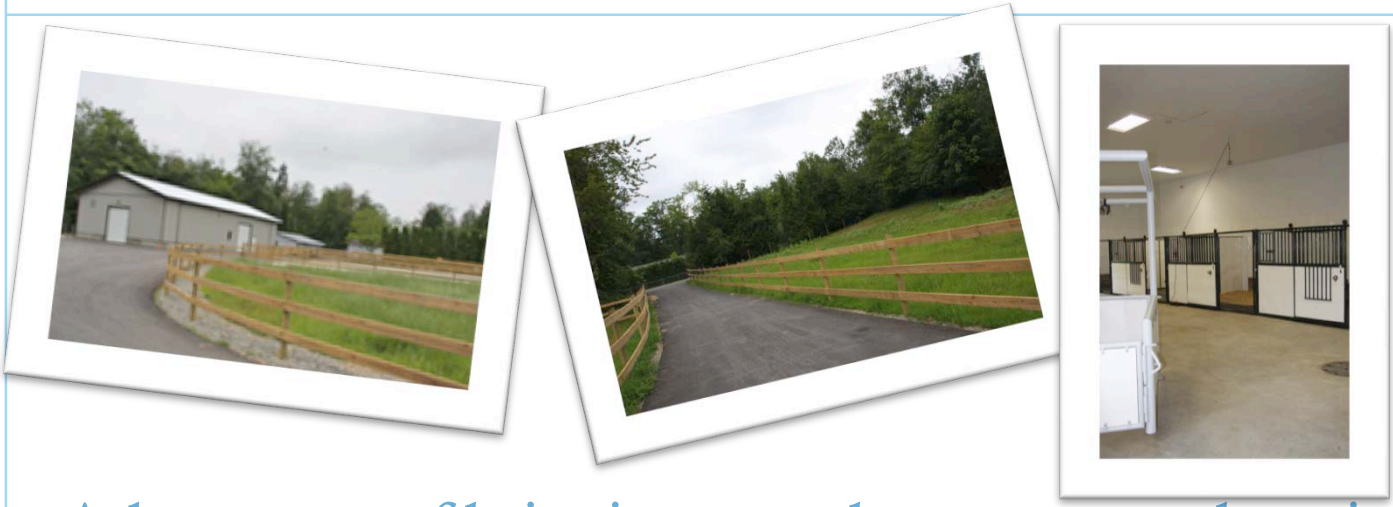
Pictures of horses showing health problems must remain unidentified unless written permission is obtained from the owner.

Our hospital and your privacy

At times, out of human curiosity, we are asked about information pertaining to other horses. We are legally bound to maintain confidentiality in all of the cases we treat regardless of the issue.

I recall a friend of mine seemed a bit surprised when, while having dinner, he casually inquired about a famous horse I had worked on. My reply, far from being presumptuous, was that I was unable to talk about it. When it comes to a person's health we accept this level of confidentiality, therefore it should not be any different when dealing with our beloved companions. Knowing about a horse's (or any of your pets for that matter) health issues may have significant repercussions, some of which are monetary. Horses are private property and as such they should remain "private". At Paton and Martin we take this very seriously and only release health information to the owner or authorized agent. At times we may seem a bit excessive or we may come across as being "difficult", but when realizing the potential implications, it only makes sense. While your horse is in our hospital or under our care, it will remain unidentified except to hospital personnel, who are bound contractually to maintain such privacy. So you can rest assured that while your horse is under our care we will not discuss its health status with no one other than yourself.





Advantages of bringing your horses to our hospital

When it comes to health care, most of us go to a doctor's office or take our dogs and cats to the small animal veterinarian's office. Horse transportation can be difficult at times, and relatively costly depending on how far you have to travel. Historically large animal veterinarians have always attended to their patients in their own environment. This aspect of veterinary practice while appealing and most importantly familiar to us, presents some limitations. The issues are mainly related and directly impacting your horse's health such as efficiency, speed and ability to perform our job. It is understood that certain services do not require a hospital environment, but others are better performed in a well lighted, cleaner, all encompassing facility with direct access to diagnostic equipment. To offer you a full range of possibilities according to your horse's needs we have established our hospital in a convenient and easily accessible central location. In our hospital you will find friendly features such as a circular driveway, so you do not have to maneuver your trailer, ample space to park and more importantly the necessary equipment and personnel to cover your horse's needs. **It is convenient**. You can simply drop off your horse in the morning and pick him up when all the work is done. No need to wait. We will communicate with you in a timely manner. In the hospital we do not have the same time constrictions associated with a farm call, we can devote more time to your horse in a more efficient manner. **It is cheaper**. Dropping your horse off at the hospital is not associated with a cost to you, while a farm call is always charged to have our veterinarians visit your horse at home. **And it is more efficient**. Lameness investigations or treating a horse repeatedly for instance will not need several farm visits, but they can all be done more efficiently at one time, under one roof, in a well-controlled environment. While farm calls are here to stay, now at Paton and Martin, we have an additional option for you and for your horse. One that can actually be better.

The Horse's Chef

The perfect bran mash

A long-time honored treat that many horses enjoy should not be abused.

INGREDIENTS

Bran (wheat): adjust quantity depending on consistency preferred by your horse

Boiling water: adjust quantity depending on consistency preferred by your horse

Molasses: 1 or 2 cups

Any other treats (i.e. apples, carrots…

Bran mashes are a traditional treat for our horses with no laxative effects contrary to popular opinion. In addition they may help you hide a medicine that you need to get into your horse. The strong flavor of the molasses will help you do that as well as adding sweetness to satisfy the sweet tooth of many of our companions. It is important to figure out the right ingredient amounts according to your horse's preference of consistency. Some like it thick, some not.

Make sure the water is boiling and comes into contact with the bran for enough time for it to absorb it. Usually 5-7 minutes is enough. Add the molasses and mix very well. To finish it up, add any other treats your horse may enjoy. If you want to add extra-calories add 1 cup of veggie oil. Remember that due to the high phosphorus content of bran it is only advisable to do it no more that 2 times per week, as long term chronic use of bran may be a risk factor to develop mineral imbalances. However if you need to do it daily for 2-3 weeks at a time due to medications or in very small quantities, you could do it safely. Just don't abuse it!

Featuring our staff
Christa Sanders RVT

Christa Sanders is Dr. Cruz's right hand and our qualified technician in charge of the day-to-day activities related to surgical and medical care in the hospital. She has received extensive training in many areas, especially in Anaesthesia by board certified anaesthesiologists at the Universities of Guelph and Cornell and by our Anesthesiology consultant, Dr. Craig Mosley Dipl. ACVA.

Christa is a native of Ontario and moved to the Lower Mainland shortly after graduating from the Veterinary Technologist program in Kingston, Ontario. She is a formally trained Registered Veterinary Technician (RVT), an important qualification for any hospital help.

Christa has ample experience with horses. She was a competitive 3-day event rider since early childhood and has past experiences as an equine technician at the University of Guelph and other veterinary practices. Christa has been with us for almost 1 year and has already proved her outstanding value to our professional team.

HORSE BITS
by Antonio M. Cruz

DEWORMING

Throughout North America parasite resistance to dewormers is becoming a significant problem in treating important parasitic infections of horses. For approximately the last 30 years, horses have traditionally been dewormed at regular intervals throughout the year, typically every 6 to 8 weeks. In foals, such regimens have been used to control roundworms. In older animals, interval treatment regimens were primarily designed to control Strongylus. However, subsequent to the introduction of ivermectin in the 1980s, Strongylus has become an uncommon infection of horses. This is largely because ivermectin, unlike earlier dewormers, eliminated both adult and immature stages of S.vulgaris. In contrast to S. vulgaris, small strongyles (cyathostomes or blood worms) have become increasingly important as a cause of morbidity and mortality in horses, and today are considered the primary reason for deworming animals that spend time at pasture.

The increasing importance of small strongyles (cyathostomes or blood worms) over the last 20 years is thought to have occurred because none of the currently licensed dewormers, except moxidectin and fenbendazole (Panacur), have activity at standard dosages against immature stages encysted in the wall of the large intestine. In addition, cyathostomes (blood worms) have been particularly adept at developing resistance. Because this resistance appears to have arisen in association with excessive and inappropriate use of dewormers, there is a need to critically examine the deworming programs used so that problems with dewormers resistance do not worsen.

It is important to appreciate that all the drugs licensed in Canada for treatment and prevention of roundworms and bloodworms belong to just three chemical classes: benzimidazoles, macrocyclic lactones, and pyrimidines. Since drugs in the same class have the same mechanism of action, if parasites develop resistance to one drug they generally develop resistance simultaneously to all drugs in the same chemical class.

When designing a deworming program it is increasingly important to use parasite control programs that decrease the rate of selection of dewormer's resistance. The most important risk factor for development of dewormer's resistance appears to be the frequency of treatments. The primary objectives for a sound parasite control program should therefore be to rotate deworming treatments and to minimize environmental contamination with parasites (manure management), although a minimal load of parasites is thought to be ideal to stimulate the horse's own immune system and to prevent or delay development of resistance. The following guidelines can help achieve these objectives:

- Use strategic deworming treatments based on the parasite's life cycle.
- Use inter-treatment intervals based on a drug's efficacy.
- Regularly monitor anthelmintic efficacy ***DO FECAL EGG COUNTS***: In Canada, a fecal egg count reduction test should be performed during the summer months, eg July/August. In order to obtain representative information for a farm, fresh fecal samples should be collected from 8-12 horses on the day of treatment and analyzed to determine the number of parasite eggs per gram (epg) of manure.
- All horses on a farm should be on the same deworming program.
- Ensure correct dosage of dewormer.
- Rotate dewormer class annually.
- Sound pasture management.
- Take ownership of control programs.

(Adapted with permission from author: Andrew S. Peregrine. Deworming program for horses. Are we doing more harm than good. *Large Animal Veterinary Rounds 5 (6), June/July 2005.)*

Full information can be found at http://www.idrounds.ca/crus/laveng_060705.pdf

Our educational column

by Antonio M. Cruz

Biosecurity is a word that may have entered your vocabulary recently or you may have heard in the news. Its definition implies the protection from biological harm. In the food industry, biological harm may translate into large economic losses or even human casualties. Some industries practice true isolation involving even showering before and after visiting the facilities where the animals are housed. It is clear that such a level of "security" is unattainable in the equine industry and it would also be impractical, because by the very nature of our business, people and horses come into contact with each other. The real challenge therefore becomes the prevention of the transmission of disease so we can maintain our horses as healthy and disease-free. Nobody likes to deal with the inconvenience and cost of dealing with a sick animal, let alone a "herd" problem or even death. For this reason, we must remain vigilant and above all respectful of others. The first step of any prevention program is the prompt identification of the disease. Only by doing so, can we identify affected animals and deal with them properly, treating and/or isolating them before they become a threat to the rest of the population. It is important to understand that such clinical findings as diarrhea or a snotty nose may hide an ugly problem, and therefore should not go unnoticed or unattended. It is possible that many of these are incidental findings, but we should not make assumptions without being cautious and asking for professional help. It is important that whether you have 1 horse or 100, you know the basics of identifying a potential infectious problem. Here is a start:

1. Maintain a healthy herd and know your horses. Keep records
2. Identify when a horse appears to be not him/herself. If this is the case, record the rectal temperature and if above 38.3 C or 101.5 F call your veterinarian promptly
3. Note the quality and frequency of manure daily and document any changes. Diarrhea should be reported.
4. During your daily routine note if there is any nasal discharge or cough particularly if dullness is also present.
5. If a horse is recumbent and cannot get up call your veterinarian immediately.

In addition here are some practices that you can do to maintain your horse's health:

1. At shows

* Use your own trailer. Don't ship your horses with horses from other farms.

* Ship only in a trailer that has been cleaned and disinfected. If you can "smell horse" in the empty trailer, it has not been cleaned and disinfected properly.* Don't let your horse touch other horses, especially nose to nose.

* Don't share equipment (e.g., water, feed buckets, brushes, or sponges).

* **Wash your hands!!,** especially after helping other people with their horses.

* Don't let strangers pet your horse, especially those with horses at home or people who have been out of the country in the past 2 weeks.

2. If bringing in New Horses

This is the most likely way for infectious diseases to come in.

* Keep every new horse isolated for 30 days. Don't use pitchforks, grooming tools, or feed and water buckets on any horse but the new one. Mark these with red tape, or use red brushes, etc., only for the isolation area.

* Work with the isolated horse last each day. Alternatively, wear boots and coveralls when working with the isolated horse and remove them before working or going near other horses. You can keep these in a plastic-covered tub near the horse.

* Always **wash your hands!** and blow your nose after working with the new horse. You could carry germs to your other horses in your nose.

3. Bringing Horses Back From a Show

* If one horse has been shown, all your horses need to be vaccinated. Horses that show can bring home germs. You can discuss with us what vaccinations the horses need, and how often.

* If possible, keep horses, which were off the farm isolated for at least 2 weeks. Make sure there is no nose-to-nose contact.

Making an Easy Footbath

You will need:

1. A low plastic pan or bin, wide enough to fit an adult's foot, shallow enough to step into easily

2. A plastic doormat (the "fake grass" mats work well)

3. A disinfectant that works when manure or dirt is present, such as Tek-trol or One Stroke Environ

4. Water

Mix the disinfectant with water following label instructions. Put the doormat in the plastic pan. Add disinfectant so that the bottom of the "grass" is wet. Ask visitors to walk through the footbath, wiping their feet on the mat. The "grass" scrubs their shoes a bit as they wipe them, and applies the disinfectant. When the liquid starts to get dirty, empty it and put in new disinfectant.

Adapted from USDA – Biosecurity – The key to keeping horse's healthy

http://www.equidblog.com/uploads/file/HorseBioSecurity_final.pdf

SEASONAL TIPS

WINTERIZATION FOR YOUR HORSE

Whether you are planning to continue riding in the winter or not, it does not alter the fact that the chilly season is a bit different than others. Sudden drops in temperature, and a different footing may be some of the challenges experienced. A changed exercise routine can also add to these "differences" encountered at this time of year. Many of us, may use the winter to rest our horses or give them (and us!) a break. It is important to understand which points are important to help us sail through the freezing season:

1. Consider that a minimal amount of exercise is good, and that completely deconditioning your horse may present challenges coming spring time thus it is not advised
2. If possible mild riding for 30 minutes several times a week would be appropriate if you are going to take it easier this season.
3. **ALWAYS** warm up your horse prior to exercise and importantly **cool down** your horse after exercise appropriately, which yes! can be challenging during winter months. Your horse needs to dry by him/herself prior to blanketing. Use appropriate blanketing for this time of year.
4. Changes in ground conditions also require changes in shoes. Adding caulks or snow pads may be some of the additions required.
5. Make sure your horse **always** has access to water. It is a good investment to buy a bucket warmer for outside conditions. Eating snow is simply not reliable in most horses. Lack of water may lead to impaction colic.
6. If your horse is going to spend large amounts of time outside, ensure that there is appropriate shelter for wind/rain/snow.
7. If your horse is going to be outside for along time, make sure that he/she has an opportunity to develop a thick hair coat. (i.e. don't blanket too early)
8. If your horse spends large amounts of time outside, make sure he has plenty of groceries available. More specifically hay.
9. Maintain a safe paddock free of icy spots and/or mud holes.
10. Don't neglect veterinary care. Dental exams and vaccinations in preparation for springtime are still needed.

HOT TOPICS

1. A study performed at Colorado State University investigated the use of intraarticular polysulfated glycosaminoglycans (adequan) and hyaluronic acid in the treatment of experimentally induced arthritis in horses. The study suggested that both products showed beneficial effects in the treatment of equine osteoarthritis when compared to placebo administration.
2. An Italian study evaluated the results of breeding barren mares with frozen semen and concluded that pregnancy rates of barren mares inseminated with frozen semen were reasonable and similar to artificial insemination with fresh semen as long as mares are < 16 years of age. Treatment with oxytocin and/or uterine lavage seemed to improve fertility.
3. The prognosis for origin of suspensory ligament desmitis in the hind leg following fasciotomy and lateral plantar neurectomy is improved when compared to rest and rehabilitation or shockwave therapy and should be considered as an alternative or in combination with other treatments. This suggests that relief of the compartment pressure present with suspensory injuries is a key to a success in healing this type of injury.