PORT PERRY VETERINARY SERVICES -QUARTERLY-

THE IMPORTANCE OF COLOSTRUM TO FOALS

Colostrum, or "liquid gold", as it is sometimes called, is the first milk that comes from the mares udder for about the first 24 hours of a foals life. It is very important that foals receive adequate colostrum for a fully functional immune system.

Foals, unlike other species of animals, are born without any immunoglobulins (IgG) in their system. Immunoglobulins are large protein molecules responsible for defending the foal's body against disease. Due to the type of placenta in mares, large molecules such as immunoglobulins cannot pass through it to enter the foal's blood stream. Therefore, when a foal is born, it must ingest these molecules from the colostrum produced by the mare and they are absorbed through the intestines and into the blood stream. If this process fails to happen, it is called failure of passive transfer, and the foal is at increased risk of getting septicemia, a serious and often fatal disease. After the foal is 24 hours old, the intestine is unable to absorb the colostrum any longer, so the foal no longer needs the colostum and the mare starts to produce milk instead.

It is recommended that a foal suckle within the first 3 hours of its life. Studies have shown that if a foal is unable to accomplish this, say it cannot stand for some reason, it will have complete failure of passive transfer. Other reasons for failure of passive transfer are poor quality colostrum, not enough colostrum was ingested, premature foals, foals born in very cold weather, mares > 15 years of age or mares with a chronic disease during the pregnancy. It is recommended to check the specific gravity of the mare's colostrum as soon as the foal is born to make sure the quality is adequate. It should be over 1.060 .

There are tests to check how many immunoglobulins a foal has absorbed. We recommend having the first foal check at 10-12 hours of age and having the foal's IgG tested at that time. This way, if the levels are not adequate, the foal can either be tubed with some of the mares colostrum (assuming it is of good quality) or can be observed to ensure it is nursing and then rechecked at 24 hours of age. By leaving the test until 24 hours of age, if the levels were low the only way to ensure the foal receives enough immunoglobulins would be to give IV plasma because the intestines will no longer absorb them. This is expensive and some foals can react to the plasma, so it is better to deal with a potential problem early on, rather than leaving it until it is too late.

WHAT'S NEW AT THE CLINIC?

We are excited to introduce our official website, visit us at **www.portperryvetservices.ca.**

Dr. Busato recently became certified as a CQM advisor. If you have any questions about the validation process, please contact her.

Over the past few months the veterinarians have been busy brushing up on their knowledge and skills. Drs. Busato and Doherty completed training in joint, tendon and abdominal ultrasound. They are now offering ultrasound during lameness and colic workups. They also attended the OABP meeting and was updated about mastitis. Dr. McCrae recently returned from the American Association of Equine Practitioner's (AAEP) conference in Texas, where he learned about a variety of equine medical and surgical topics. In a few weeks, Dr. Morrison will be heading to Hawaii for the AAEP symposium.

VACCINATING SMALL RUMINANTS

Vaccination is an important and inexpensive part of maintaining the health of your sheep or goats.

The most important vaccine for small ruminants is a clostridial vaccine. An 8-way clostridial vaccine is most commonly used. Sheep and goats are particularly sensitive to clostridial diseases, especially Clostridium perfringens type C and D. Clostridium perfringens type C can cause necrotic enteritis or acute death in neonates, and Clostridium perfringens type D can cause "pulpy kidney" or enterotoxemia which is usually characterized by sudden death in young sheep and goats on grain rations. The 8-way vaccine also protects against Clostridium tetani (or tetanus), which is important for those animals getting dehorned or having their tails docked. Animals vaccinated for the first time should receive a booster 6 weeks later, and then annually after that. Milking goats need to receive a booster at least every 6 months, sometimes every 3 or 4. To provide optimal protection via colostrum, breeding does and ewes should be vaccinated within a month prior to kidding/lambing. Their offspring should then receive their first vaccination by 10-12 weeks of age. Always remember, partly used bottles of clostridial vaccine should be thrown out at the end of the day.

The rabies vaccine available for horses and cattle is also labeled for sheep and can be used on goats too. Its use is usually limited to animals housed outdoors or those in areas of high exposure. There are other vaccines available to target other conditions that affect sheep and goats. These vaccines have variable efficacy and are generally used under special circumstances. If you have questions about your vaccination protocol, please do not hesitate to call the clinic.

Goats tend to be more reactive to vaccinations than sheep. Because of this, goats are more likely to develop swelling at the vaccination site. To preserve carcass quality, vaccines should be given subcutaneously behind the elbow.

WINTER DYSENTRY

Winter dysentery (WD) is a contagious condition that causes diarrhea and occurs primarily in adult dairy cattle. It's reported to be caused by a bovine coronavirus.

Signs: Winter dysentery is generally seen in adult cows and causes an acute diarrhea that can be dark or bloody. Usually it affects a large number of cows and tends to occur in the fall and winter months. Accompanying the diarrhea is depression, reduced feed intake, and a drop in milk production.

Diagnosis: The diagnosis of winter dysentery is often made based on the presence of several adult cows in a herd presenting with diarrhea during the fall or winter months. A blood test can be run to detect the bovine coronavirus responsible for WD. Since there are other causes of diarrhea in adult cattle, other tests should be performed. Fecal samples should be submitted so that gastrointestinal parasites, including coccidia can be ruled out and so that a fecal culture can be performed, to rule out certain bacterial causes of diarrhea, namely Salmonella spp. Salmonella is a zoonotic pathogen, meaning it can cause gastrointestinal illness in the humans working around affected cows. Other causes of diarrhea in adult cattle include Johnes disease and bovine viral diarrhea (BVD) virus and may need to be ruled out as well.

Treatment : Because WD is a self-limiting condition, treatment is aimed at keeping the affected cows well fed and adequately hydrated. Generally cows with WD do not need medical treatment unless they become dehydrated. In these cases oral or IV fluids become necessary.

Prevention: WD is a contagious condition, so attempts to minimize the cross-contamination of feed with manure, especially diarrhea, will help limit spread.