

PORT PERRY VETERINARY SERVICES

-QUARTERLY-

SUBCLINICAL MILK FEVER

Milk fever, or hypocalcemia, is a term that most producers are very familiar with as an issue that commonly becomes evident in the early fresh period in dairy cows or late pregnancy in beef cattle and ewes. Often times we think of this metabolic disease in higher parity cows, as they have less bone turnover and therefore respond slower to drops in blood calcium. Clinical milk fever occurs at a rate of roughly 5-10% in most herds. The interesting and often forgotten aspect of milk fever is the subclinical form which often occurs at a rate of 50% in many herds. Even 1st calf heifers have a subclinical disease incidence of about 25% and it increases with each lactation.

The word subclinical implies the cow appears normal and we are not seeing the typical signs such as recumbency, cold extremities, decreased rumen motility, decreased feed intake, 's' shaped neck, trembling, etc. Subclinical hypocalcemia is an important aspect to consider as this is where producers can suffer significant losses. These individuals, although they may never progress to clinical hypocalcemia, are at an increased risk of developing other diseases and experience decreased milk production.

To decrease the incidence of both clinical and subclinical hypocalcemia there are different areas you can focus on and change. Calcium enters the bloodstream from bone store mobilization, kidney filtration and intestinal reabsorption. The easiest prevention technique is giving calcium to individuals around calving to get absorbed in the small intestine. There are different oral boluses and gels, as well as injectables, etc, that may help the cows when they are unable to keep up with proper regulation and balance of calcium. Another area of improvement is in the close up dry cow diet. These diets are often high in forages. Forages are a big source of potassium and can

create mild metabolic alkalosis in the cows. Metabolic alkalosis can lead to improper receptor function in tissues that require calcium. This means that even if there is enough calcium in the cow, the muscles and tissues that need it have a harder time receiving and utilizing the calcium. Changing the dry cow diet to discourage metabolic alkalosis will also be a significant help to the cow. These are just two areas that could help your herd.

The bottom line is that hypocalcemia in the fresh cow can ultimately lead to increased risk of other diseases which causes decreased milk in the bulk tank. We need to be aware of this and strive for ways to manage both the clinical and subclinical cows.

WHAT'S NEW AT THE CLINIC?

Happy New Year everyone!
We wish you all the best in 2013.

The clinic is currently having an addition put on to allow for more office space. We are quite excited to have the extra space!

Over the past few months the veterinarians have been attending more continuing education sessions. In October, Dr. Rachel Busato attended an alpaca health management course. In December, Dr. Busato and Dr. Bob McCrae spent a week in California at the American Association of Equine Practitioner's annual convention learning a lot and spending some time enjoying the attractions. Recently, Dr. McCrae and Dr. Rachel Stadnyk attended a mastitis talk that focused on managing cows in their dry period.

IMPACTION COLIC IN HORSES

Many of you know what a horse displaying colic signs looks like. The horse is not eating, it is pawing, and lying down or rolling. With the cold temperatures we have this time of year; we see a rise in the number of colic cases, particularly impaction colics.

An impaction is essentially constipation in horses. It is a blockage of feed anywhere in the horse's lengthy gastrointestinal tract. There are a few sites where these blockages occur more commonly, particularly sections of colon that become narrow or make hairpin turns. Impactions tend to occur more commonly in the fall and winter for several reasons. Horses are moving from high moisture grass diets to primarily dry hay diets, and they often consume less water because the water they are provided with is cold or freezes. When horses drink less water the feed going

through them becomes dry and more prone to developing into a blockage. Another reason is they often receive less turn-out and exercise in the winter due to poor weather conditions, with exercise encouraging normal motility in the horse's gut.

Horses developing impactions can become depressed, show less interest in eating and will have dry manure or reduced output of manure. As the impaction develops these signs can worsen and can include complete lack of interest in feed, no manure, rolling, lying down, etc...

Should your horse develop any of these signs you should call a veterinarian. Your veterinarian will be able to diagnose the problem after performing an exam on your horse including a rectal exam where he or she may actually feel an impaction present. Treatment of impactions involves encouraging rehydration

of the blockage by using fluids (given intravenously and/or through a stomach tube) and agents to encourage it to break up, as well as pain relief. Impactions can take a few hours to resolve or several days. In rare cases, surgery is needed to relieve the impaction.

Prevention is aimed at encouraging water intake in the winter. Providing water at all times and preventing it from freezing are of utmost importance. You can wet your horse's grain or hay to help increase their water intake as well. Providing access to a salt block is important and will stimulate your horse's interest in drinking. Also, carefully monitor your horse's water consumption and how dry his manure is, so you can be proactive about preventing an impaction from developing.

PREGNANCY TOXEMIA

Pregnancy toxemia is a condition affecting ewes and does late in gestation. It occurs in ewes/does that are carrying multiple fetuses and are not taking in enough energy to meet the demands of pregnancy. Often these animals are too thin or too fat, and may not be acquiring enough energy because of competition, lack of availability of adequate food/inadequate energy in the ration, or disease that prevents them from accessing food (dental disease, arthritis, etc...)

This lack of energy in the diet causes low blood glucose levels,

causing the body to utilize fat stores for energy. This generates a by-product called ketones which have a number of negative side effects on the animal. If this process occurs for long enough, the end result is kidney and liver failure and eventually death.

Generally pregnancy toxemia occurs 3-6 weeks before the ewe/doe's expected due date. Clinical signs include a decreased appetite, depression and recumbency. In more advanced stages, the animal may have tremors, become blind, press its head against walls, walk in circles or dem-

onstrate no coordination when walking (ataxia). Ultimately the affected ewe/doe can become comatose and die.

Treatment is aimed at providing energy in the form of either intravenous dextrose or oral propylene glycol. It is also very important to reduce the dam's energy requirements by getting the fetuses out. This involves inducing the lambing/kidding using medication or by performing a c-section. Euthanasia is needed if the condition is too advanced (the ewe/doe is non-responsive and/or comatose).