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Mobile Large Animal Veterinary Clinic

Managing Calf Scours

Young calves can be very susceptible to organisms causing scours and for most producers, scours represents the number one cause of calf loss in the first 30 days of life. Several management practices can be implemented to prevent scours from occurring in calves. If scours is still a problem despite preventative measures, a careful approach to diagnosis and treatment can minimize losses.

The most important thing to understand in dealing with calf scours is that calves are exposed to scours pathogens from their environment. The most significant contributor to environmental contamination is older calves. Therefore, providing a clean environment for calving and separating older calves from younger calves is the most effective way to prevent scours problems.

BEEF

This can be challenging, but if possible, implementing the Sand Hills calving system for cattle on pasture can greatly reduce neonatal calf disease. This system consists of several calving pastures. Once cows begin to calve they are moved into pasture number one. After one week cows that have not calved are moved to a clean pasture and cow-calf pairs remain in pasture number one. After one more week cows that have not calved are moved again to a clean pasture and the new cow-calf pairs remain in pasture number two. This method continues until all cows have calved, effectively segregating the calves into one week age groups. Groups can be commingled once the youngest calf in the group is four weeks old. A short calving season facilitates use of the Sand Hills calving system. Even if producers do not have enough pastures to work with or enough water sources etc., making attempts to shorten the calving season and segregate calves by age (even if every 2-4 weeks) can help to prevent transmission of disease from older calves to younger calves. When calves are pastured together for the entire calving season the older calves act as incubators and multipliers of scours pathogens. Each new week's generation of calves is exposed to a higher and higher pathogen load. This results in scours getting worse the longer the calving season goes on.

Additionally, spreading cattle out on pasture by alternating feeding sites or unrolling hay can lower calf exposure to pathogens. All too often cattle are fed in the same location for weeks resulting in calves spending most of their lives around muddy hay feeders on ½ acre of a 40 acre pasture. Understandably, pathogen concentrations can be extremely high in these locations and can quickly overwhelm the young immune system of the calf.

DAIRY

For dairy calves, providing a clean environment for calving followed by segregation of calves individually

where they are not in contact with the feces of other calves is the best approach to prevent transmission of scours pathogens. Furthermore, sanitizing feeding equipment between calves is extremely important.

COLOSTRUM & VACCINATIONS

While minimizing exposure is critical to preventing scours, maximizing calf immunity is also important. Good intake of colostrum is of critical importance for a functioning immune system in young calves. Healthy cows in good body condition (BCS 5-6) produce the best colostrum. Calves should be up and nursing early and absorb antibodies from colostrum best in the first 6-12 hours of life. After 24 hours little to no antibody absorption occurs. Therefore, if a difficult calving occurs or a calf is slow to get up and nurse, supplemental colostrum should be administered early. Scours vaccination comes into play here as well. Vaccinating cows against scours pathogens late in pregnancy can boost immunity provided by the colostrum. If cows have not been vaccinated, specific vaccines are available for oral administration to calves at birth or within 24 hours after birth in an effort to maximize calf immunity.

TREATMENT

If calves succumb to scours despite efforts to prevent the disease, diagnosis and treatment are the next steps. If fecal samples for diagnostics are desired these should be obtained prior to the administration of any antibiotics. Calves can be tested for the presence of parasites, viruses or bacteria as causes of scours. Because scours can be caused by several different types of organisms, diagnosis can be very valuable in tailoring preventative and treatment measures.

Losses in scouring calves most often occur from the dehydration, electrolyte imbalance and the hypoglycemia and hypothermia that result secondarily to scours as opposed to the actual viral or bacterial infection itself. A veterinary examination can help to determine the level of dehydration and acidosis (electrolyte imbalance) present and the level of treatment required. Checking the calf's rectal temperature is also important. A fever often suggests severe infection and septicemia while a low temperature may indicate the need to warm the calf. A glucometer can be used to assess hypoglycemia.

The most important component of therapy for scouring calves is oral or intravenous fluids and electrolytes. Too often producers want to cure scours with a shot or bolus of antibiotics. Bacterial causes of scours are generally highly antibiotic resistant. Viral or protozoal causes of scours will not respond to antibiotic therapy at all. In fact, treatment with antibiotics may very well worsen the condition by killing off beneficial bacteria thereby eliminating the competition and allowing the pathogenic bacteria, virus or protozoa to proliferate.

CCVS can help you implement preventative strategies against scours in your herd as well as a tailored diagnosis and treatment plan in the face of a scours outbreak.

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