



OCTOBER 2024 DAIRY NEWSLETTER

BACK TO BASICS – Baby Calves

With the price of bull calves, beef calves, and replacement animals, raising a healthy next generation in a profitable manner is of the utmost importance. As we head into the colder months, here are some basics to remember in the calf barn.

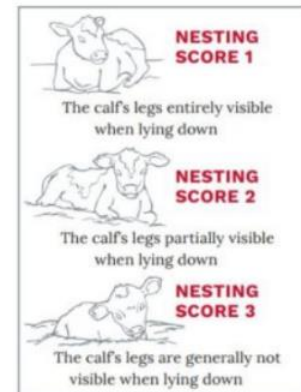
Getting off to a good start

Colostrum needs to be high quality (at least 22% on refractometer), clean (bacterial counts lower than 100,000 cfu/mL), and fed as quickly as possible. Successful passive transfer is validated by serum samples from calves 1-6 days of age with refractometer readings >8.4%.

Making their house a home

Newborn calves should have 24 ft² of space per calf, increasing to 38 ft² by weaning. The simplest thing to start with is keeping calves well bedded in the winter (gold standard is 8-12" of straw). They should be able to nest within bedding so that you can't see their legs. Adding bedding more frequently is better than adding a lot at once. Nesting in deep bedding traps air around the calf, keeping them warm and dry in cold weather.

Air in the calf barn needs to be fresh, pollutant-free, yet draft-free. In the winter, barns or calf rooms should have 4 air exchanges per hour, but air speeds no more than 10-15 cubic feet per minute at the calf level to prevent drafts and chilling. Relative humidity should ideally be within 55-75% and cold intake air should be mixed with warm air before moving across calves.



Preventing and recognizing scours

Scours can be caused by several pathogens, but the age at onset can be a good clue as to what may be wreaking havoc on young calves.

There are various preventive protocols to reduce the incidence and severity of scours. Keeping calving pens clean and dry and removing calves from dams as soon as possible will help reduce infection from *E Coli* bacteria. Vaccinating dams against *E Coli*, coronavirus, and rotavirus produces colostrum with adequate antibodies. Vaccinating newborn calves with oral formulations can help protect them from *E Coli*, coronavirus, and rotavirus. Administering Halofuginone solution helps reduce the severity of cryptosporidium infection, but remember that chlorine dioxide is the only disinfectant that kills crypto! To prevent scours from coccidiosis, feed medicated milk replacer and medicated calf starter. Ask your herd vet about any of these options.

Most Common Infectious Organisms and the Age of Diarrhea

Organism	Age of Diarrhea
<i>E. Coli</i> *	First 3 days
<i>Salmonella</i> *	Day 5 – 14
<i>Corona Virus</i>	Day 3 – 7
<i>Rotavirus</i>	Day 3 – 7
<i>Eimeria spp. (coccidiosis)</i>	Day 7 – 4 to 6 months
<i>Cryptosporidium parvum (parasite)*</i>	Day 5 – 7
<i>Giardia spp. (protozoa)</i>	Day 14 – 21

Dehydration is what will kill calves that are scouring. Signs of dehydration in calves include: recessed or sunken eyes, weak stance or inability to stand, prolonged skin tent, tacky or dry mucous membranes, weak or absent suckle reflex, and depressed or non responsive attitude.

Scour treatment

Calves suffering from scours experience various levels of pain, dehydration, malabsorption, and malnutrition. Treatment for scours mainly involves supportive care. Calves by body weight are about 75% water and those affected by diarrhea can lose up to 20% body weight per day. A healthy average 100 lb calf requires about 4.5 L of water per day. Dehydrated calves with scours require an additional 20-30% to replace losses and maintain normal function. Calves should be offered 2-4L of electrolytes per day and **milk meals should not be skipped**, especially in the winter when they absolutely require calories to stay alive.

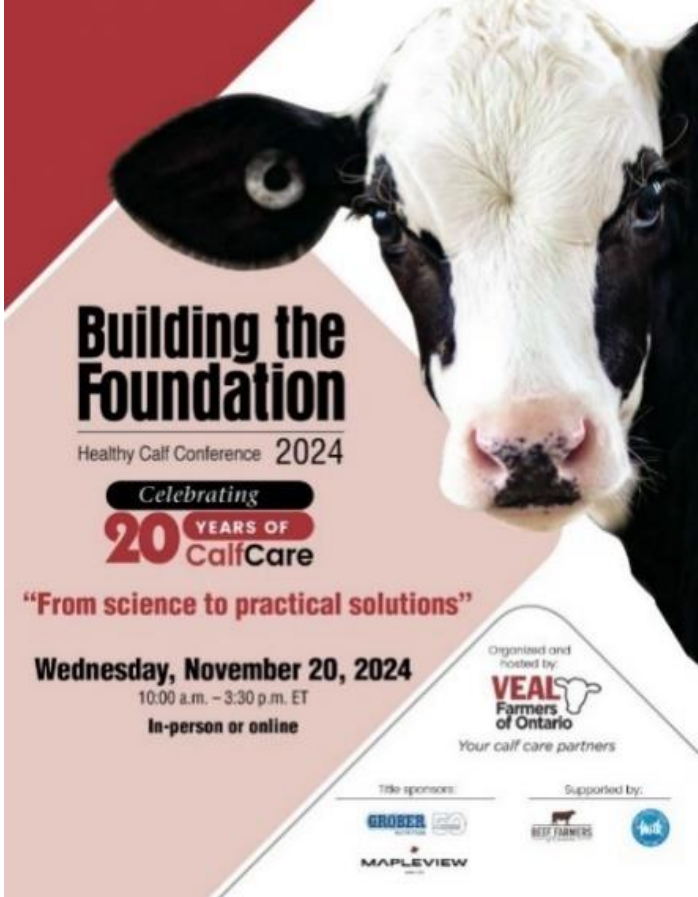
Consult your herd vet for more detailed information on treatment protocols and antibiotics.

Extra resources

Do you need someone to help with routine treatments in the calf barn or would like help identifying opportunities in calf health management on your farm? Ask about our calf program! Our skilled technician visits enrolled farms on a routine schedule to dehorn, weigh, vaccinate, test for successful passive transfer, and evaluate cleanliness of various feeding surfaces. Farms then receive a monthly report showing all on-farm results and anonymous rankings compared to other Kirkton calf program enrolled farms.

Visit www.calfcare.ca for an extensive collection of calf health resources.

Attend the upcoming Healthy Calf Conference, hosted by Veal Farmers of Ontario in Stratford.
<https://calfcare.ca/healthy-calf-conference-2/>



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Healthy Calf Conference 2024
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