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## OCTOBER 2012 NEWSLETTER

### VENTILATION

As autumn rolls ahead and cooler, wet days approach, we need to be prepared for the seasonal increases in specific health problems that come every year in the herds. As barns begin to close up, air quality tends to deteriorate. At the same time, new ensiled feeds are in various stages of fermentation and digestibility's. Dry matter intakes can be up and down, especially in the transition cow. Small drops in dry matter intake can cause cows that are border-line negative energy balance to become markedly low in energy and resulting ketosis. Ketones are major inhibitors of the immune system, so these cows are in danger of "fresh cow pneumonia" retained placenta and mastitis.

Tunnel ventilation barns that are beginning to shut down end fans need to keep in mind that we still need to maintain approximately 600 cfm airflow at the cow level. This will ensure adequate air exchanges in most barns, maintaining air quality similar to outside air. This is particularly important for calves housed indoors.

We have an airflow meter at the clinic and would be happy to check airflow in your barn if you have concerns.

There can be a tremendous difference in air quality at the calf head level compared to 5'-6' above floor level. Get down to the calf level and have a good smell! If you can smell ammonia, there is lung damage occurring. Calves living in this environment for the winter months are being set up for pneumonia.

### FALL VACCINES

Those producers' still using "killed" respiratory vaccines like Triangle 9 or Cattlemaster need to booster their cows asap. Herds that were vaccinated last fall will have quickly waning protection. Protection from respiratory disease using these vaccines is fine, but will not extend beyond 12 months, with some components of the vaccine dropping off faster than others.

## CALF NUTRITION

Another factor to keep in mind as cold weather approaches is calf nutrition. Calves housed outdoors in hutches will require more energy as temperature falls. Calves are born with 3-4% body fat. (Our leanest Olympic athletes are in the 5-10% range) Calves are designed to drink many small meals often to maintain energy levels. By feeding twice daily we really need to assess calories ingested. A typical 20:20 milk replacer fed at 225g in 2L water twice a day gives a calf maintenance for survival plus approximately 0.5lb daily gain at 20° Celsius. At 10°C ambient temperature this 225g milk replacer puts a calf into starvation mode, where it needs to use its internal fat stores for survival. At -10°C outside temperature, the same calf needs approximately 350g (56%) more milk replacer twice a day for the maintenance plus 0.5lbs gain. Those producers feeding free choice acidified milk, feeding a third meal per day or offering increases volume per feeding see the results in very remarkable daily gains, thriftiness and very low levels of calfhood disease including scours and pneumonia.

***For those interested producers, there is a Healthy Calf Conference  
being  
held on Friday, December 7, 2012  
at the Chesterville Legion, Chesterville, Ontario  
Keynote speaker: Dr. Ken Nordlund, University of Wisconsin-Madison  
Topic: Penning and the Affects on Calf Health  
Full details and registration information can be found at  
[www.calfcare.ca](http://www.calfcare.ca)***