



Kirkton Veterinary Clinic

1911 Mary Street, Box 96, Kirkton, ON
N0K 1K0
Phone: 519-229-8911 or 1-888-443-4184
Fax: 519-229-6823
Email: kvc@quadro.net
Website: www.kirktonvetclinic.com

B.J. Buckland - R.A. Clinton DVM - M.C. Littlejohn DVM - A.R. Haight DVM - G.B. Couto DVM
R.H. Elgie DVM - R.L. Cornell DVM - G.L. Davidson - T.E. Hornsby DVM - J.M. Pietersma DVM
B.T. Gilmer DVM - S.M. Miltenburg DVM

Preventing Calf Pneumonia

It's getting colder out, and that means more calf pneumonia. Calf pneumonia is a costly disease that takes significant time and effort to deal with in the short term, and results in poorer performance in the long term. A calf that has experienced pneumonia has a greater chance of decreased growth, lower production as a cow, and is more susceptible to subsequent bouts of pneumonia.

Preventing calf pneumonia can be difficult. There are many different factors that contribute, and every farm has a unique calf rearing solution. One way to check your preparation for the season is to look at some common risk factors that contribute to calf pneumonia, and assess them for your own operation.

Nine Risk Factors for Calfhood Pneumonia

Pathogen Exposure:

1. **Airflow:** Closing up barns in the winter for warmth leads to poorer air exchange, even if air is still circulating. Stagnant air allows for the buildup of moisture, ammonia, bacteria and viruses. Ideally a barn will have at least 4 exchanges of air per hour. This can be hard to measure, so assessing the air quality can be helpful. Fresh air needs to be delivered at the nose level of the calf (about 1 ft (laying down) to 3 ft (standing) from the ground) ideally below 60ft/min to avoid drafts.
2. **Space:** Ensuring adequate space for each calf is important to reduce the buildup of pathogens in the air and reduce stress within a group. Ideally, 45 square feet per calf in a pen.
3. **Separation:** Solid walls between groups of calves, separation of calves from cows until they are breeding age, and separation of calves by age will all help to reduce exposure to pneumonia agents circulated by older immunocompetent animals.

Immunity:

4. **Colostrum:** High quality (brix of 22% or higher) colostrum in sufficient quantity (4L within 4 hours) is the biggest predictor of calfhood disease, pneumonia not being an exception. Lower quality Colostrum that does not pass can be fed at the second feeding instead.
5. **Condition:** Calves need energy to fight off pathogens. Aiming for calves to double their birthweight by weaning (approximately 56 days) is a good measure to ensure that they are receiving enough nutrients.
6. **Vaccination:** Intranasal vaccines are an effective way to help promote immunity in calves. Aiming to vaccinate within 7 days of birth, and again 2 weeks before weaning is ideal. Bovilis Nasalgen is a product available at the clinic that covers many of the common pneumonia causing pathogens. Bovisheild gold FP5 or Pyramid FP5 + Presponse are injectable vaccines that can be given beginning 4-6 months of age.

Stress:

- 7. **Weaning:** Calves need to be well conditioned and eating around 1kg of starter before being grouped together. If feeding 8 L or more per day, weaning should take place over 10-14 days. An underweight calf will be more susceptible to illness in a competitive group environment that has greater number of pathogens present.
- 8. **Group Dynamics:** Trying to keep a group of calves together will help to reduce stress that comes with determining a new hierarchy. Even a constant buddy has shown to have beneficial effects such as increased starter intake and weight gain. Holding calves back or promoting them to the next group one at a time can be detrimental to each group as a whole, even if they seem large or small for their companions.
- 9. **Illness:** Calves experiencing other illnesses such as an umbilical infections or scours are more susceptible to pneumonia. Avoid moving a sick calf into a group setting as it could be contributing a pathogen and will be at greater risk for developing pneumonia.

There is no perfect solution for raising calves and each barn has its own challenges. Identifying the areas where you suspect your program is weak and formulating a plan of action with your herd veterinarian to measure and improve those areas can help to alleviate the costs of calf pneumonia.

GLYCOL – Make sure you are comparing Apples to Apples!

Please note that DOMCOL Glycol is 67% glycol and not 100%. This means the effective dose is 450ml rather than 300ml. You can check the strength by reading the label printed on the side of the pail.

Regardless of where you purchase your glycol product, always check the strength to ensure you are dosing at an effective rate

The current retail price for the 20L DOMCOL 67% Glycol from the online retailer is \$279.97. Our current price for 20L 100% glycol is \$337.27. Please see the chart below for the breakdown of cost per dose.

Product	Cost/ml	Effective dose (ml)	Cost/dose	Cost/3-day treatment
DOMCOL 67%-online	\$0.014	450	\$6.30	\$18.90
Partner 100% - KVC	\$0.017	300	\$5.06	\$15.18

