



LINWOOD
VETERINARY SERVICES

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**Manser Rd. Clinic Hours 7am to 5pm Mon-Fri and 7am-12pm Saturday
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24 Hour Emergency Service**

AUGUST 2010 NEWSLETTER

Clinic News

Please Plan ahead for the holiday weekend at the beginning of September. The clinics will be open 7am-12 on Monday Sept. 6th but there will be no regular delivery that day.

Farms that have swine as well will receive separate invoices for their July swine purchases and vet visits, from the St. Clements clinic. Please call if you have any questions!

Announcements

We are pleased to welcome **Dr. Ian Bishop** this month, graduate of Ontario Veterinary College 2009. Ian is happy to be back home, with his wife Vicki, also a veterinarian, and their dogs. Ian has been working for a mixed veterinary clinic in Saskatchewan and is excited to be joining Linwood Veterinary Services with our Bovine focus.

The Coliform Mastitis Season

This hot humid weather means an increase in coliform or "environmental" mastitis. Each case of mastitis is associated with economic loss. The non-clinical case without obvious signs of mastitis but elevated somatic cell count (SCC) above 300,000 results in production loss. This loss increases as the SCC increases. These cases may still require treatment with an infusion product and the costs associated with discarding milk. However, many cows are more severely affected by coliform infections. These cows will have abnormal milk and severe reductions in milk flow with evidence of systemic illness including depression, dehydration and decreased appetite. Aggressive treatment aimed at controlling the inflammatory response is required as soon as possible to prevent permanent udder damage at the least and possibly to save the cows life in the worst case scenario. There are economic losses due a significant death loss, to culling low production cows after recovery and dealing with cows which aborted due to the effects of the coliform infection on the pregnancy.

Plan now to reduce the number of cases and severity of individual cases by considering the following:

- The use of J-5 type vaccines will limit the clinical signs, reduce treatment costs and decrease discard milk and production losses.
- Have proper medications and protocols in the hands of trained personnel at the ready to handle cases.
- Ensure that the cow's environment is DRY with adequate drainage and is free of excessive manure. Maintain comfortably bedded stalls with daily recorded maintenance and weekly re-bedding.
- Adequate Vitamin E and Selenium in the ration have known protective effects, consult a nutritionist.
- Do anything to keep the just milked cows on their feet to allow their teat sphincters to close prior to them lying down. Try to have fresh feed in the bunks when the cows return from the parlour to encourage time at the bunk.
- AVOID wet milking since it is a strong risk factor in coliform mastitis. Have extra towels to completely dry the teats.
- Have stalls properly maintained to avoid cows lying in the alleys.
- Milking equipment must be checked for proper functioning and change liners as recommended to prevent teat irritation and chapping.
- Try to maintain comfortable environmental temperatures to help cows to stay clean.

Fridge health = Animal health

You probably have two refrigerators. A nice-looking, newer model in your kitchen, and the one it replaced in the garage or barn. While your kitchen fridge may hold \$75 worth of food, the other unit very likely stores hundreds of dollars worth of animal health products.

A poorly functioning refrigeration unit can physically destroy medications and, even more importantly, decrease their potency and effect on the animals to which they are given.

Antibiotics and vaccines should be stored according to their label directions. In general, products that require refrigeration are labelled to be stored between 35 degrees F and 45 degrees F (2 degrees C to 7 degrees C). Freezing is the biggest threat to products, since it can cause separation of their components, so a too-cold refrigerator actually is the most detrimental malfunction.

Use the following tips for maintaining high-quality storage of animal health products requiring refrigeration:

- Place the refrigerator in a well-ventilated room, with space around the sides and top for good air circulation. There should be at least four inches of open space between the back of the unit and the wall, and the base should be level.
- Post a "Do Not Unplug" sign next to the refrigerator's electrical outlet.
- Clean the front grill and condenser coils regularly with a brush or vacuum, and routinely wash door seals with soapy water.
- Regularly check the integrity of the door gaskets. If a piece of paper can slip between the gasket and the refrigerator body, the seal is not tight enough and requires adjustment of the door hinges or replacement of the gasket.
- Monitor internal temperature of the unit using a thermometer with a fluid-filled bulb or bottle. Place the thermometer in the middle of the compartment, away from the coils, walls, floor and fan.
- Store ice packs in the freezer and large jugs of water in the refrigerator to help maintain a steady internal temperature.
- Do not store food or beverages in the unit, as frequent opening and closing of the doors can cause wide internal temperature variations.
- Store animal health products in the center of the unit, not in the door as here there are greater temperature fluctuations.

Changes to Milk Testing in Ontario

Whenever you decide to use a veterinary product with a milk or meat withdrawal in an extra-label manner ("extra-label" = any use that differs from the label indications on the product), it is imperative to realize that withdrawal times may be lengthened. Recently in Ontario, milk from a cow that was treated with tetracycline in an extra-label manner triggered a positive result for antibiotic use upon arrival at a plant. The cost of this milk violation was \$24,000. The milk from this particular cow, surprisingly, had been tested prior to inclusion in the bulk tank, and resulted in a negative test. This case outlines clearly the need there is for both veterinarians as well as producers to examine how tetracycline (eg. Oxyvet) and sulfa-based compounds (eg. Borgal, Trivetin) are used for treating lactating dairy animals.

Earlier this year, official provincial regulatory tests for sulfa and tetracycline compounds were changed to become more sensitive (detect even lower amounts of antibiotic). Tests which detect microbial inhibitors, such as the Delvo SP-NT / SP MINI - NT, do not have the ability to detect tetracycline compounds at anywhere near the allowable level for Canadian milk and milk products.

As a result, withdrawal times for extra-label use of tetracycline and sulfa-based compounds established by veterinarians using tests such as the, Delvo SP-NT / SP MINI - NT are no longer reliable. Therefore, it is no longer safe to assume that milk from cows treated with these products is "ok" if it is negative on a Delvo P. Now a test must be used that detects antibiotics as close as possible to the allowable level. As an example to illustrate this point, the Delvo SP-NT / SP MINI – NT test can currently detect oxytetracycline at a level of 200 ppb. The allowable residue limit for this antibiotic, however, is 100 ppb. Therefore, milk can test negative using the Delvo P but still be above the allowable limit of 100 ppb. It is not the best approach to simply assume that "dilution" will prevent a bulk tank violation either.

What can producers do to help prevent bulk tank violations on their own farms?

- 1) Try to keep antibiotic use in your dairy herds according to the label. This includes the route of drug administration, the dosage level and the length of treatment.
- 2) It is essential to review with your herd veterinarian protocols for any extra-label drug use. Pay special attention to extra-label use of products involving tetracyclines or sulfa-based compounds. Review withhold times- it is quite possible they need to change.