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We will provide industry-leading, reliable, knowledgeable service, in a friendly, courteous and timely manner, to benefit our clients and the communities we serve.

Linwood Clinic Hours: Mon-Fri 7am – 5pm Sat 7am – 12pm **Hwy 89 Clinic:** Mon-Sat 7am-1 pm
NOTE: BOTH CLINICS ARE CLOSED SUNDAY and NO DELIVERY SERVICE SATURDAYS AND HOLIDAYS
Orders for Delivery: Please, call BEFORE 9:30 am, for same day local delivery Monday to Friday
24 Hour Emergency Vet Service call any clinic number 1-800-663-2941 519-698-2610 519-323-9002

OCTOBER 2018 NEWSLETTER

Clinic News

Mail interruptions: In the event of a mail interruption, payment can be made with online or telephone banking with your bank/credit union, Visa or Mastercard at Linwood or over the phone, debit card at Linwood, cash at either clinic, telpay or other online services you have set up. Or, let us know to note for vet, tech or delivery driver, scheduled to be at your farm, to pick up your cheque while they are there.

Residue testing in clinic for Enrofloxins (Baytril) in milk will now only be done at the Linwood clinic due to high cost of the test and infrequent testing.

Zoetis Producer Loyalty Program: for those already registered, to acquire points for **2017** purchases the invoices/sales report must be submitted by November 30, 2018.

For those who have not registered yet but intend to do so Zoetis will accept invoices back to January 2017. Please let the office know if you need a purchase report send on your behalf, to Zoetis. See Zoetis website for fall bonus points and more information.

www.plp-cattle.ca plp-cattle.ca or call 1-877-788-2119

Pneumonia in Cattle

It finally feels like fall! With the weather typically going up and down in the fall, pneumonia is a common problem in both dairy and beef operations. Pneumonia can affect cattle of all ages, so it is important to keep up vaccine protocols. These protocols are a good investment as they can help prevent treatment by boosting the cow's immune system against major pathogens. Here we discuss what bugs cause problems, what signs we can look for, and how to prevent problems with pneumonia on farm.

Who done it...the bugs at fault:

Infectious Bovine Rhinotracheitis (IBR)

This is a very common respiratory infection caused by Bovine Herpes Virus-1. When it is present, we mainly see problems in the upper respiratory tract and trachea, but infection with this virus predisposes the cattle to secondary bacterial infection. Bovine Herpes Virus-1 can also cause abortions in pregnant cattle amongst other infections.

Bovine Respiratory Syncytial Virus (BRSV)

This virus is another important agent in bovine respiratory disease. It likes to hang out in the lower respiratory tract and predisposes cattle to secondary bacterial infections. Vaccines for this virus don't prevent infection, but reduce the severity of disease.

Ever wonder why they named it the way they did? It's because the virus causes the formation of syncytial cells, which are giant cells made from a bunch of smaller cells fusing together. Neat eh!

Parainfluenza Virus 3 (PI3)

This virus, although also an important cause of respiratory disease in cattle, usually causes less severe problems. This being said, it can still predispose to secondary bacterial infection and more severe disease associated with that.

Mannheimia haemolytica

This nasty little bug is a common cause of bacterial pneumonia. It normally lives in the upper part of the cow's respiratory tract and doesn't cause problems. However, when the animal gets stressed or experiences a viral infection, the bacteria rapidly grows. It then often is inhaled into the lower respiratory tract where it battles with the cow's immune system causing tissue damage and buildup of pus.

Pasturella multocida

We don't fully understand how this bacterium works. One way we think it may work is when a cow has chronically infected or damaged lungs, pasteurilla takes this opportunity to move in, settle down, and grow.

Histophilus somni

We are seeing this bacterium more and more in cattle that have had issues with viral infections. Histophilus is special vs the other bacteria as it often goes into the blood stream and spreads to the brain, heart, and joints. When it spreads to the brain it causes a neurological condition called ITEMME (infectious thrombo-embolic meningo-encephalitis, phew what a mouthful!), which can look like polio. If cattle get this condition it can cause death.

Mycoplasma bovis

This is also a unique bacterium that is becoming more common in veal and beef operations. Mycoplasma is a slow growing organism that can infect more than 80% of the lung causing caseous (cheese-like) necrosis. Gross! In addition, it often spreads to the inner ear, causing a head tilt, and joints, causing lameness. It often is resistant to antibiotic treatment and animals have to be euthanized due to its chronic nature.

What do we see?

An important part of managing respiratory disease in cattle is detecting and understanding clinical signs. Typical clinical signs associated with respiratory disease are fever, coughing, nasal discharge, ocular discharge, and difficulty/increased breathing effort (puffing). Some cattle will show all of these signs, and some will show only a few depending on how severe the infection is and what type of infection it is. If the pneumonia is bad enough the animal will eat less or stop eating all together, which can cause other issues.

As veterinarians, we rely on clinical signs we see during our physical exam to determine respiratory disease is a problem. In addition, if we are coming to see a dead animal and do a post mortem, we inspect the lungs carefully for lesions associated with viral or bacterial pneumonia. The lesions we look for can include consolidation (lungs get tough and rubbery when they should be squishy), exudate (too much fluid in the lungs or airways), and fibrin formation (body tries to form an internal bandage). Sometimes we even see abscesses if it's been a chronic problem!

What can we do about it?

There are many ways you can try to prevent pneumonia issues in your herd. One important factor is ventilation. When there isn't enough fresh air and air movement in a barn, viruses and bacteria spread more easily between animals in the stagnant air. Ventilation can be improved by installing fans, opening doors and windows, and bringing other ventilation systems in. It is important to note that the air needs to be moving and fresh, but to prevent draftiness too.

Another way to help prevent pneumonia issues in your herd is to vaccinate against the major viruses associated with respiratory problems. There are many safe and effective vaccine programs available, just call and ask about them and we can help! And of course, we are there for you if your animal gets pneumonia. Early detection and treatment are key for optimal recovery.