

## DR. MURRAY RUNSTEDLER DR. PAUL SOSTAR DR. ANDREW MACLEOD DR. KELLY HAELZLE DR. KELLY FISHER DR. MEGHAN WINSOR

**Linwood Veterinary Services** 

 1010 Industrial Cres. St. Clements, ON N0B 2M0 519-698-2610 519-699-0404

 Hwy 89 Veterinary Services, 7434 Hwy 89 Mount Forest, ON N0G 2L0 519-323-9002

 1-800-663-2941
 Fax 519-699-2081

 linwoodvet@linwoodvet.ca

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

St Clements Clinic Hours: Mon-Fri 7am to 5pm Open Saturday 7am-12pm

Hwy 89 Clinic Hours: Mon-Sat 7am to 1 pm

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 519-698-2610 519-323-9002 519-699-0404 1-800-663-2941

## FEBRUARY 2023 NEWSLETTER

### February Holiday

<u>Monday February 20th</u> there will be no delivery service on Family Day. Vet will be available for emergencies. Clinics will be open only in the morning for pick ups and early residue tests.

## **Respiratory Cattle Vaccines**

The most common cause of pneumonia in the first year of life in a dairy cow is from a viral source (IBR, PI3, BRSV, BVD) followed by a secondary bacterial infection (Mannheimia haemolytica, Pasteruella multocida, Histophilis somni, Mycoplasma bovis). Management and prevention is key to reducing pneumonia within your herd. Management consists of adequate colostrum, proper housing and hygiene, good plane of nutrition, timing procedures and reducing stress during disbudding and weaning, avoiding adding new animals to an established group, reducing nose to nose contact and airflow between young calves and older cattle and using vaccine protocols. Vaccine protocols are best used to precondition the animal before stressful events or in the face of an outbreak to help limit clinical signs and ultimately reduce antibiotic use. Proper storage, handling, timing of vaccine, route of administration(intranasal, subcutaneous or intramuscular) and using the vaccine within it's expiry are all extremely important considerations when using a vaccine and its desired outcome in preventing disease. Intranasal vaccines prodied fast protection, within 4-5 days, but do not protect for long, 60-90 days, and <u>do not</u> contain a BVD fraction.

### How do you choose a vaccine?

While there are many vaccines on the market the two large categories are MLV (modified live vaccine) and killed or inactivated vaccines. While MLV vaccines tend to be superior, killed vaccines have their use and advantages. A killed vaccine has no live components of the virus, they use a viral protein to trigger an immune response. A MLV contains an attenuated version of the live virus to mimic a true infection. For that reason MLV tend to have a stronger and longer response than killed. Because killed vaccines do not contain any live virus they are safer to give at any stage in the cows life, whereas MLV can cause abortion

in pregnant cattle that have never been exposed to the vaccine before. For this reason there is an advantage in using a MLV within the heifers first year of life so that she gains exposure and it is safer to use a MLV series in her future with less risk of abortion.



Diagram does **not** include *all* vaccines available at the clinic, please ask/discuss with your vet.

### Why give a second/booster dose?

Most vaccines require a second or booster dose anywhere from 2 to 6 weeks after the initial series. One of the major reasons behind this is because it allows the body to mount a stronger response to the vaccine and therefore a better response when exposed to natural infection. Another reason to booster is to ensure coverage of the entire herd. While the majority of cattle will respond well to the first shot, some will only respond ok and some not at all and that is why a second dose provides greater protection to your entire herd.

Example Protocol/Recommendation:

- Initial MLV+ bacterial component intranasal (Naslagen, Once PMH, Inforce 3) at 3 days of age
- Booster MLV + bacterial component (Naslagen, Once PMH, Inforce 3) before/around weaning 6-8weeks of age
- Booster MLV injectable (Bovi-One Shot, Pyramid Presponse, Vista Once) 4-6 months of age
- Booster MLV injectable (Express FP 10, Pyramid 10, Bovi-Gold FP 5) 11-12 months prior to breeding

In the last five years, we have seen an increase in the number of cases of bacterial pneumonia in adult dairy cows. On individual farms, where these numbers have been substantial, we have instituted use of whole herd straight bacterial pneumonia protection and have seen improvements in the number of cases on these farms

# How do you choose a vaccine and follow a protocol that is individualized to your farm? Ask your Linwood Vet today!