



DR. MURRAY RUNSTEDLER DR. PAUL SOSTAR DR. ANDREW MACLEOD
DR. KELLY HAEZLE DR. AMANDA TOPP DR. BETH VAN RYS DR. KRISTYNE SMITH

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: 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

AUGUST 2020 NEWSLETTER

Clinic News

Upcoming Holidays: Clinics will be open for the morning only Monday Sept 7, for Labour Day holiday. Vets will be on call for emergencies. The delivery service will **not** be running on the holiday.

Did you know we have disinfectants?

Hydrogen Peroxide:

Comes in a 4L jug and is great for disinfecting milkhous surfaces and wounds.

Prevail Concentrate:

A hydrogen peroxide disinfectant which kills both viruses and bacteria. Highly concentrated, so a 4L jug will last a long time (25ml concentrate per 1L of water). Works for disinfecting milkhous surfaces and animal housing such as calf hutches, calf pens and maternity pens.

Dutrition Tablets:

A concentrated tablet which mixes with 5L of water. Once mixed must be used. Only disinfectant with a label claim to kill crypto. Great for disinfecting calf housing and feeding utensils (bottles, nipples, buckets, etc.)

TOXIC MASTITIS

No farmer, or cow, is happy when the milk has flakes or clots in it (a sure sign of mastitis) but the worst feeling is seeing the milk turn watery. Watery mastitis, also called **toxic mastitis**, is caused by E. coli bacteria and results in a very sick animal. Cows become infected from the environment, usually from manure contamination, and progress very quickly. E.coli is a particularly bad bacteria to have in the udder because it is capable of spreading toxins throughout the cow's body. Other bacteria stay in the udder and cause damage locally, but E.coli tends to cause trouble elsewhere.

What does a toxic mastitis cow look like?

- Watery milk, in 1 or more quarters
- Sunken eyes (dehydration)
- Off feed
- Weakness resulting in a down cow

Treatment

Treatment is often successful if she is diagnosed and treated **quickly** - toxic mastitis is an **emergency** and should be treated as soon as possible. Once a cow is down and unable to stand for more than a few hours, she begins to damage her muscles. This lowers her chances of being able to stand up once she has been treated. Treatment has 3 parts:

1. Kill the bacteria which is causing the problem
2. Treat the effects of the E.coli toxin
3. Remove as much infection as possible

To kill the bacteria which is causing the problem, we typically use a TMS antibiotic such as Borgal. We give the first dose (3ml per 100lbs) in the vein to ensure a rapid response, and the remaining 4 doses are given once daily in the muscle. This is generally sufficient to kill any bacteria in the cow's bloodstream.

In order to treat the effects of the toxin, we need to rehydrate the cow, and provide her with energy, and strength. We do this with hypertonic saline, dextrose, and calcium in the vein.

- Hypertonic saline is a highly concentrated and sterile version of salt water. The purpose of this type of fluid is *rapid rehydration*. A small volume of hypertonic (just 2L) is equivalent of almost 20L of regular IV fluids but the cow **MUST** drink water afterwards. Most cattle will drink 20-40L of water after an IV dose of hypertonic saline! If they do not drink on their own, cows which have been treated **must** be pumped with water.
- Dextrose and calcium are needed as the toxin tends to leech these very important molecules out of the cow. We replenish them so that she is able to stand up and recover.

Providing her with an NSAID (such as Metacam, Anafen, or Banamine) has many positive effects - reduces fever, minimizes muscle damage, provides pain relief, and binds toxins. There is some debate about which one to choose, but the most important thing is that the cow receives one!

The last step to treating a toxic mastitis cow is removing as much infection as possible. This means stripping, or milking out as much watery mastitis milk as possible. Her milk must be dumped (**NOT FED TO CALVES**), and equipment should be thoroughly cleaned to avoid spreading the bacteria to other animals.