

Bringing farmers evidence based knowledge on improving your herd health, welfare and production.

Cryptosporidium: the number one cause of calf scours

Cryptosporidium spp were the most frequent isolated agents causing scour in calves less than a month old in Ireland in 2012. On postmortem 104 calves (23%) and on dung samples 1240 calves out of 4637 were found positive.

Cryptosporidium is a protozoan (waterborne, one-celled) parasite of the intestines causing disease in neonatal calves but also in lambs, kids, foals, piglets and humans.

Humans can become infected from other infected persons, animals or contaminated drinking water. Infection in humans can be without symptoms but can also lead to diarrhoea especially in children. This is similar in cattle; healthy cows without symptoms are shown to shed eggs of Cryptosporidium called oocysts in the dung, especially around calving. These oocysts and in greater number oocysts shed by other infected, scouring calves infect newborn calves in their first week of age by mouth.

Severity of the disease depends on the infection pressure, calf's age and immune status and if other infectious agents are prevalent at the same time but usually scour occurs around 7-10 days of age.

There is no treatment of calves suffering from cryptosporidiosis; antibiotics working against bacterial infections are of no use. Therapy consists of appropriate oral rehydration in combination with continued milk feeding.

Cryptosporidiosis is a difficult disease to control but the following steps can be taken:

1. Good hygiene at calving time
2. Prevent prolonged labor, which could reduce intake of biestens.
3. Provide adequate colostrum: 1-2-3 rule (first milk within 2 hours 3 liters)
4. Reduce build up of infection during calving season: isolate infected animals, clean and disinfection of calf rearing houses with ammonia based disinfectants, reduce stocking rate and apply all in all out policy. Chlorination does not kill Cryptosporidium.
5. Prevent entry of infection on your farm through rodent control and exclude pets from calf feed and milk feed storage areas. Don't buy in calves or if calves are bought-in don't mix with homebred calves.
6. Using preventive treatment of all newborn calves with halofuginone lactate (Halocur®). Vaccines preventing bacterial and viral scours do not cover protection against Cryptosporidium.
7. At the end of calving season: high temperature, high-pressure steam cleaning followed by ammonia based disinfection and fully drying of calf pens.

Winter issue 2014

- *Cryptosporidium: the number one cause of calf scours*
- *Health Calendar January, February, March*
- *Ectoparasites: a common problem during the winter*

Burrenvets

Spanish Point

0657084019

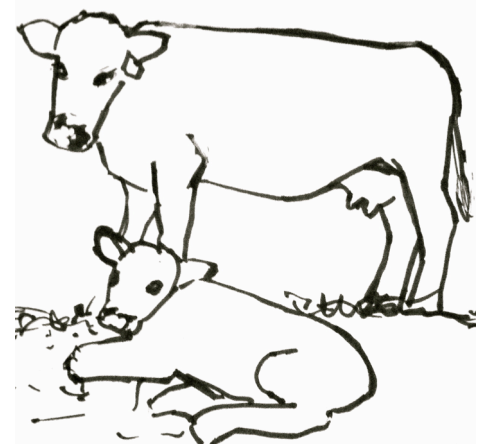
Ennistymon

0657071155

burrenvets@eircom.net

www.burrenvets.ie

Please forward your email address if you would like newsletters via email



Health Calendar January, February, March

Calves

- Prepare for calving season: have in place clean and dry bedding, calving ropes, bucket, iodine and lube.
- 1-2-3- Colostrum: first milk, within 2 hours from birth, minimal 3 liters
- Cryptosporidium: Halocur®
- BVD eartag calves by preference before 7 days. Legal requirement ear tagging remains before 20 days
- Feeding dairy calves: 3 litres twice daily, offer starter early. Wean when calves eat 1kg/day

Yearlings

- Treat for lice if needed
- Test dung sample for fluke eggs and (re) treat if needed
- Salmonella: booster if vaccinated last month with Bovivac S®
- Leptospirosis: booster with cows or 1st vaccination and 4-6 weeks later booster min 4 weeks before breeding
- Target weight one year old at turn out: 50% of mature weight. Target at breeding, end of 14 months, aim 55%

Cows

- Lice as "Yearlings"
- Fluke as "Yearlings"
- Provide minerals during last 2 months of pregnancy.
- E coli/Rota/Corona-scour vaccination 1-2 months precalving.
- Annual booster Salmonella: 8 weeks pre calving and Leptospirosis & BVD 4 weeks pre breeding.
- Monitor energy status: BCS, milkrecording and/or bloods. Target BCS at calving: 3-3.25 for dairy cows

Best wishes for 2014

Ectoparasites: a common problem during the winter.

Ectoparasites thrive at housing due to increased direct contact between cattle, the low light levels, thicker winter coat and cooler skin and especially lice.

1. *Lice*
 - 1.1 *Biting or Chewing Lice* affects all ages and is found on neck, shoulders, back and rump causing irritation resulting in scratching, rubbing on feeding barrier, licking and poor coats.
 - 1.2 *Sucking Lice* affects mainly young stock and is found around neck and head causing less irritation than biting lice but due to ability to suck blood, can cause anaemia.
 - 2.1 *Mange mites: Sarcoptes scabiei, Psoroptes ovis, Chorioptes bovis.* These mites affect cattle of all ages, causing severe itching, scratching, hairloss, crusts and thickening of the skin, weight loss and

decreased milkyield resulting in economic losses. The different mites have their own preferred locations: Sarcoptes under the neck and brisket, tail, inner thigh and udder, Psoroptes along back, shoulders and tailhead, Chorioptes on lower part leg, back of udder and tailbase.

Treatment should be given when animals are scratching, generally if not treated preventive at housing around January/ February. Sometimes repeated treatment after 3- 4 weeks is necessary as insecticides are not very effective against louse eggs.

Treatments available are pyrethroids (= insecticides), endectocides or macrocyclic lactones (=antiparasitic drugs that are active both against endo- and ectoparasites) and Amitraz.

For lice control it is best to use a pour-on, for mange control an injectable product can be used for sarcoptic and psoroptic. Remember to treat all the animals or not to mix treated animals with untreated animals.

More info and pics at: <http://www.animalhealthireland.ie> and <http://www.nadis.org.uk/bulletins/skin-conditions-in-cattle-ectoparasites.aspx>

Parasite	Treatment	Product example
<i>Biting or Chewing Lice</i>	Endectocide externally applied	Ivomec® Pour-on Eprinex® Pour-on
<i>Sucking Lice</i>	Endectocide externally Endectocides injectable Pyrethroids	See above Noramectin® injectable Butox® and Ectospec® Pour-on
<i>Mange mites</i>	Endectocide & Pyrethroids Amitraz	See above Taktic®