

BLACKWATER VETERINARY CLINIC

Newsletter

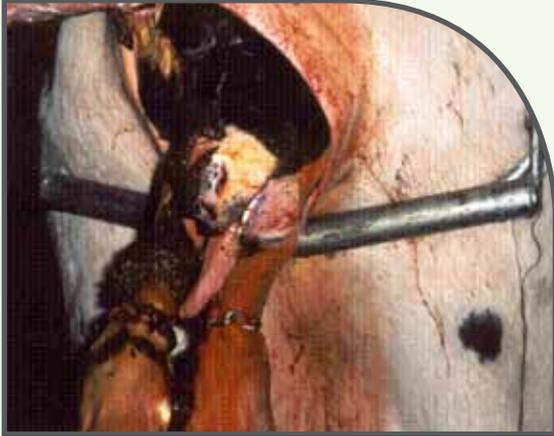
Mallow, Co. Cork.



**WHAT
DO I
NEED?**

The First Seven Weeks

It takes two years to get a new-born calf to the calving pen. It will take another two years (plus) before that heifer is back there with her own calf, or if a beef animal, sent to factory. The next 7 to 8 weeks are critical, because this is when cattle mortality is at its highest. Minimise the risks by checking the following points on your farm.



- **Have clean, dry, private calving pens** – (new-borns are wide open to the viruses and bacteria that build up from adult animals “passing through”)
- If in doubt about a cow’s progress, soap up well and check the calf’s presentation. Let a heifer for ~4 hours and a cow for ~ 2 hours once the hooves show.
- Get your vet if you have any doubts. Letting the cow become tired or dried out before the vet is called is the difference between profit and loss.
- **Give 10% of body wt. of colostrum within 4 hours of birth** – (45 Kg calf gets 4 Litres). – If it’s night time, or if you’re busy, use a feeding tube that has been washed, disinfected and stored cleanly since the last use.
- Never use colostrum that contains manure, mastitis, or blood. They cause illness and reduce antibody absorption.
- The dam’s first colostrum is by far the best, provided she lives on the farm and has had a dry period of more than 45 days.
- If the dam’s colostrum is unsuitable for any reason, then use frozen colostrum from another home cow.
- If you’re in the BVD programme, **tag the calf at birth** to avoid confusion in a busy calving season.
- **Remove the calf to a single pen** to get it away from adults that can be a source of infections which are serious for a new-born. Aim to feed milk at a minimum of 10% and up to 20% of body weight per day until weaning. (ie. 45 Kg gets 4.5 litres per day)
- Provide meal and forage (straw or hay) from 7 days on. Keep meal fresh and do not feed immediately after milk.

Facts About Calves

A calf spends 80% of its time lying down. Wet bedding with manure can infect the navel and lead to joint ill. Also the fumes of ammonia from urine irritate the airways opening them to pneumonia.

10% of calves die within the first week of life.

70% of calves sent to the RVL had received insufficient colostrum. They were more at risk from poor immunity than a “disease outbreak”.

40% of calves surveyed nationally had low blood antibody levels.

Colostrum can be stored in a fridge for 24 hours safely, otherwise freeze it to store. Thaw it out gently – never microwave! Holding it at 60 C for an hour is a good way of killing off many disease agents while keeping its quality intact.

For herds in a Johnes disease control programme colostrum management is vital. Make sure your veterinary herd health/productivity plan takes this into account. Replacement calves should not be fed mixed milk, but put on replacer after colostrum.

Colostrum quality can be improved significantly by vaccinating the dry cow so that she produces more antibodies against specific diseases that have caused problems in the past.

Your vet can test colostrum for the amount of antibodies present. In addition, a blood test within 48 hours from a number of calves can be used to check that antibody transfer has been successful.

BVD calf tagging is the first step for many farmers who want to control BVD. Because it is not 100% reliable, have your vet explain the other ways to check the herd for infection and reduce the risk of a PI in next year's calf crop. Remember, any virus positive result means that BVD is in the herd, and the sooner you find the carriers the better. Testing does not mean that you can stop vaccinating. Without vaccination, any BVD virus present (or introduced) will spread unhindered and undetected.

If possible have one person responsible for calves. They can concentrate on making sure that a good routine is followed – special clothing, clean utensils and equipment, regular feeding. Calves noticed not feeding should have their temperature checked, along with 3 or 4 comrades.

If there is trouble in the first week, have the vet first check the colostrum, and blood a few calves. Scouring calves should not be taken off milk, but fed two normal feedings with extra feeds of electrolytes as needed.

Heat Detection

After calving, cows will begin to cycle in about 20 to 30 days. This is nature allowing the cow's womb to return to a normal size and condition so that it will be in a position to accept and nurture a healthy embryo and carry it to full term. This may be extended in high yielding cows or those affected by disease post calving.

Oestrus Detection

Oestrus is defined as the period of maximal sexual activity.

The average duration is thought to be only 8 hours for the modern dairy cow, however it can range from 2 – 30 hours. There are various signs and different animals will express these to varying degrees.

Signs include:

- a. Increased restlessness and activity.
- b. Decreased feed intake and milk yield.
- c. Bellowing when isolated.
- d. Slight increase in body temperature.
- e. Clear vulval mucus.
- f. Rub marks and sores over the tail head.
- g. Mounting other cows, particularly mounting the cow from head on.
- h. Standing to be mounted.

To detect oestrus we need to be able to observe and record this behaviour. The key sign is **standing when mounted**. There are various reasons why heats are missed. These are usually because cows are not showing heat strongly or staff are not observing cows when they are in heat.

The main causes of this are:

- a. Increased herd size leading to more cows per member of staff.
- b. Inadequate staff training in heat detection.
- c. Looking for heat at the wrong time of day.
- d. Poor environment; slippery floors and overcrowding will reduce the chance of cows exhibiting normal behaviour.
- e. Short weak oestrus; the average cow is in oestrus for a shorter period than she was 25 years ago. This has partly been blamed upon increasing milk yields.

Improving heat detection

For good heat detection there must be:

- a. **Clear identification** of cows by freeze branding or easy to read ear tags.
- b. **Adequate light** to ensure cows can be seen in heat and identified.
- c. **Regular oestrus observation** (three periods of 20 - 30 minutes per day not associated with feeding or milking and one of these to be between 6pm and 6am when most mounting activity takes place)
- d. **Good records** (computerised or manual) with all heats recorded including those before the service period.
- e. If indoors- nonslip floors to allow cows to exhibit normal oestrus behaviour.

Heat detection may be further improved by using:

- a. Heat mount detectors (eg Kamars™).
- b. Tail paint (needs to be reapplied when it becomes dry and cracked).
- c. Pedometers. These are attached to leg bands and any increases in walking activity are remotely detected and recorded on a computer.
- d. Regular milk progesterone assays. These are only practical on a large scale when used as in line detectors in milking parlours. They are not available here yet.
- e. Synchronisation. Groups of cows can be synchronised with hormone treatment to allow fixed time AI. In some herds it may be appropriate to use hormone regimes to allow fixed time AI or to allow compacted periods of heat detection.

When you are recording heats in pre-breeding programme then it is of great value to have pre-breeding scanning done on those animals that have not been seen bulling, have short cycles or prolonged cycles. There are various hormone treatments available for cows with ovarian cysts and those that are anoestrus ('not cycling'). There are several options and the best one for your herd can be discussed with your vet.