# **SELECTIVE DRY COW THERAPY (SDCT)**





### **Looking forward to dry off.**

Over the past number of years there has been significan effort put into promoting the practice of SDCT on Irish dairy farms by Teagasc, dairy cooperatives and the veterinary profession. Consequently most herdowners are familiar with the concept at this stage. The legislation that is driving the desired change from blanket dry cow therapy to SDCT is unchanged and is summerised below. The legislation is essentially giving guidance to your veterinary practiciner who has the responsibility for prescribing prescription only medicines for the animals on your farm.



**Dennis Howard Munster Bovine** 

"Antibiotics are not to be applied routinely nor used to compensate for poor hygiene, inadequate animal husbandry or lack of care or compensate for poor farm management.

Preventive administration of antibiotics to an animal or group of animals is only possible where your veterinary practitioner determines that an individual animal or a restricted group of animals are at a very high risk of infection."

In addition to the above legislation, the Vet meds, Feed meds and fertilizer bill was passed in the houses of the Oireachtas on the 6th of July. The National Veterinary Prescription System (NVPS) is a new Department of Agriculture, Food and the Marine (DAFM) national database to which all prescribing and dispensing transactions related to Veterinary Medicinal Products, for food producing animals and all horses only, are to be submitted. As part of the new legislation, it is a legal requirement for all vet to use this system. In the future this will facilitate tracking and benchmarking of antibiotic and antiparasitic usage on individual farms and nationally. It will also likely facilitate analysis of the prescribing practices of individual vets and veterinary practices.

When your vet is prescribing dry cow antibiotic tubes for your dairy cows, they will be obliged to prescribe within the parameters of the legislation while keeping the best interest of your herd's welfare and your farm's profitability in mind. From a herdowners perspective any on farm improvements that can be implemented in the short and longer term to improve udder health should be implemented. The more information your vet has when the dry period is being planned and treatments are being prescribed the better.

## Review last year's dry period performance.

The bottom section of the CellCheck report provides excellent analysis of last seasons dry period performance. The report compares individual cow SCC results before dry off to the first milk recorded SCC results after calving. The milk recording after calving needs to be completed in the first 60 days after calving for the result to be included in the report.

- New infection rate in cows This looks at the % of cows that were 200K or less in the milk recording prior to dry off and are over 200K in the milk recording post calving.
- The target here is to be less than 10%. A high new infection rate is a strong indication of bacteria getting into quarters during the dry off procedure or from the cow's environment during the dry period.
- New infection rate in heifers This looks at the % of heifers that are high in the first milk recording within 60 days of calving. The target here is less than 15 %. A high new infection rate here is a strong indication of bacteria getting into quarters in the weeks prior to the first calving from the environment.
- Cure rate This looks at the % of cows that were greater than 200K in the milk recording prior to dry off and are 200K or less in the milk recording post calving. The target here is that greater than 85% of these cows should be cured. A poor cure rate indicates that many of the cows were chronic and too difficult to cure or that the treatment was ineffective, or the dry period was too short. The total number of cows to cure is also highly significant. A high number of cows to cure means that SCC is not under control and that there was significant spread during the season.

	First Test since calving	All calvings in current lactation
New infection rate over the dry period		
Cows	50%	12% 8
No. of cows calved that had a SCC <=200 in recording prior to calving (4) and >200 in the current recording (2).	Target: Less than 10%	Target: Less than 109
Heifers	N/A	6% 1
No. of helfers that had a SCC >200 in the current recording (0) as a percentage of all helfers calved (0).	Target: Less than 16%	Target: Less than 159





## **SCC during lactation.**

The goal is to keep the average monthly bulk tank SCC well under 200K. The lower the bulk SCC is, the fewer the number of infected cows present in the herd which means the risk of cows picking up infection during milking will be lower. Keeping SCC as low as possible will mean more cows will be eligible for SDCT, but it also means that the risk of a cow that was low at her last milk recording, picking up a contagious bacterial infection between the last recording and dry off is lower.

### Actions between now and dry off.

- Take action on problem/high SCC cows Depending on their history, dry the cow, dry a quarter or treat if appropriate.
- Stop spread of contagious bacteria at milking time Correct post spraying, wear gloves, cluster dipping after milking high SCC/mastitis cows.
- Cow environment during the autumn do as much as possible to keep cows clean between now and dry off to
  prevent environmental infections and have clean cows at dry off which will make achieving excellent dry off
  procedure much easier passages, collecting yards, cubicles and feed areas.
- Culture and sensitivity Take samples from infected quarters of high SCC cows. Use the California Mastitis Test to identify the infected quarters. Samples can be frozen and submitted to the laboratory later.

#### Herd criteria for SDCT

One of the most important herd criteria for SDCT is achieving a below target rate for new infections over the dry period. If targets cannot be met with antibiotics, it is likely that the situation will disimprove without antibiotics. Other herd criteria include:

- Bulk SCC less than 200,000 for the entire lactation.
- A minimum of 4 milk recordings in current lactation.
- Culture negative for Strep. Agalactia.
- Housing and hygiene One cubicle space per cow. Optimal housing during dry period and around calving.

Herds that are using SDCT successfully are picking suitable cows, but crucially are meeting these herd criteria also.

Getting to a place where a significant proportion of your herd are being dried off successfully without dry cow antibiotics means that udder health is excellent on the farm, SCC is well under control and the environment that the cows are producing milk in should be close to optimum. I believe there are further reaching benefits, apart from fighting antimicrobial resistance, to reducing our dependence on antibiotics when drying off cows, in terms of the microbiome of healthy udders and in terms of calves that do not receive a dose of antibiotics in the colostrum and transmission milk they receive. Working with your vets and advisors to achieve this is well worth it aside from the legal obligations.