

HOW TO MAKE BEST USE OF YOUR MILK RECORDING REPORTS IN 2023.



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2022 saw a significant increase in both cows and herds recorded across the Munster Bovine catchment area. In 2022 Munster Bovine milk recorded 626614 cows in 5961 herds – 40% of the cows nationally. Bandon Coop see milk recording as one of the key measures that herdowners can implement to improve efficiency, reduce antibiotic usage, reduce the carbon footprint of milk produced and improve overall sustainability. Milk recording is essentially a data generating exercise. It is how you use the information and the data that will determine the return on your time and financial investment.

Controlling SCC and Mastitis – The importance of an early milk recording.

Every milk recording generates an SCC result for every cow in your herd. This result combined with the previous results for the last year generates an SCC history for that cow.

In your milk recording report cows are categorised depending on their SCC history into green (healthy), red (persistently infected), orange (recently infected) and blue (recently cured). Knowing the SCC history of the cow is critical to make good treatment and management decisions.

Why is any early milk recording so important?

Getting an early milk recording completed within 60 days of the first cow calving is important for two reasons:

1. **Identify cows or heifers that have picked up a new infection** – the majority of these are often picked up during the dry period.
2. **Identify cows that have not cured over the dry period** – they were either too chronically infected to cure or the treatment didn't work.

The mastitis control: Dry period/Calving section of the CellCheck Farm Summary report calculates the new infection rate over the dry period for cows and heifers. It also calculates the cure rate over the dry period in cow.

A high new infection rate in cows (>10%) indicates potential issues over the dry period around hygiene or dry off procedure. The highest risk being the dry-off procedure and the 2 weeks post dry and pre calving.

A high new infection rate in heifers (>15%) is generally down to hygiene in the run up to calving. A new infection/mastitis case in a heifer is like a horse falling at the last fence, as all the time and investment has been done up to that point.

A low cure rate (<85%) indicates that either the treatment was ineffective, the dry period was too short or the infection was too chronic to cure. Retaining cows with a poor history is the biggest culprit of a poor cure rate.

Mastitis Control: Dry Period/Calving N/A		
Note: Cows with first recording >60 days after calving are not included.		
New infection rate over the dry period	First Test since calving	All calvings in current lactation
Cows No. of cows calved that had a SCC <=200 in recording prior to calving (0) and >200 in the current recording (0).	N/A Target: Less than 10%	13% 29/230 Target: Less than 10%
Heifers No. of heifers that had a SCC >200 in the current recording (0) as a percentage of all heifers calved (0).	N/A Target: Less than 15%	19% 22/115 Target: Less than 15%
Cure rate over the dry period		
No. of cows calved that had a SCC >200 in recording prior to calving (0) and <=200 in current recording (0)	N/A Target: Greater than 85%	65% 24/37 Target: Greater than 85%

Actions to take after your first milk recording

Cows not cured over the dry period – These cows can be found in the persistently infected list. They were high in their final recording in the previous lactation and are still high in the first recording of the current lactation. The average SCC for the previous lactation along with further SCC readings are also available to give a good history of the cow. These cows have probably had a long dry period and dry cow antibiotic therapy and have not cured. They will not cure now.

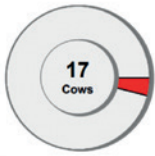
1. CMT these cows to find the offending quarter or quarters.
2. Dry a quarter – If only one quarter is identified, consider drying off this quarter.
3. If more than one quarter is affected – dry the cow.



Persistently Infected Cows



Somatic Cell Count - SCC



Persistently Infected

These cows have two consecutive tests over 200,000 SCC in the current lactation or if this is their first test after calving they did not cure over the dry period. % of Cows with Persistent Infections in your herd was 4%; target is less than 8%.

- Avoid spread from these cows to the non-infected cows in the herd.
- Implement parlour controls; pre and post spraying and/or cluster flush or dipping.
- Consider culling if more than one quarter is infected and they remain persistently high, or drying off the quarter if a single quarter is infected.

Cow ID	Calving Date	Lact	Current SCC 09/03/2022	% Tank SCC	SCC 04/11/2021	SCC 10/09/2021	SCC 01/07/2021	SCC Last test previous lact	SCC Average previous lact
3059	22/01/2022	7	2696	4.3		2234	1696	2234	515
167	08/02/2022	5	2027	3.4	397	69	4345	397	840
4039	22/02/2022	6	2437	3.3	494	1164	311	494	478

These cows have not cured over the dry period, have a poor SCC history and will not respond to treatment. Drying a quarter is a viable option.

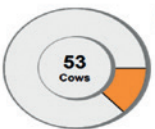
New Infection over the dry period – These cows or heifers can be found in the recently infected list. They will likely have a good SCC history – no high reading in the previous lactation.

1. CMT these cows to find the offending quarter or quarters. If you don't find any quarter, they may have self-cured since the recording. Monitor these cows.
2. Treat these cows – these cows or heifers are often worth treating and will respond well to the correct treatment.
3. Culture and sensitivity – Take sterile samples from quarters you identify as infected. Submit for culture or freeze for future use.

Recently Infected Cows



Somatic Cell Count - SCC



Recently Infected

These cows exceeded 200,000 SCC at the current test and were less than that at the previous test, or if this is their first test after calving they have been infected over the dry period or since calving. Recent Infection Rate since last recording in your herd was 13%; target is less than 7%.

- CMT these cows and identify the infected quarter needing immediate treatment.
- Prompt treatment will result in a better outcome.
- Avoid spread from these cows to the non-infected cows in the herd.
- Implement parlour controls; pre and post spraying and/or cluster flush or dipping.

Cow ID	Calving Date	Lact	Current SCC 09/03/2022	% Tank SCC	SCC 04/11/2021	SCC 10/09/2021	SCC 01/07/2021	SCC Last test previous lact	SCC Average previous lact
627	31/01/2022	2	3726	5.5	49	47	46	49	48
188	05/02/2022	3	4166	3.5	57	46	122	57	60
180	26/01/2022	4	1430	3.4	135	48	58	135	64

These cows and heifers have picked new infection. The cows have an excellent history. Treatment is worthwhile and justified in these cows.

Stopping the spread of infection

If infected cows are carrying a contagious bacteria, the infection can spread from cow to cow in the liner or on milker's hands.

1. **Post Spraying** – This measure should always be carried out on all cows. Full teat coverage is critical. Bacteria from the previous cow are killed before they get a chance to grow. A product with a good emollient will also help with teat condition.
2. **Selective cluster dipping** – Flushing the clusters with peracetic acid solution will cleanse the cluster from infected milk from the previous cow helping to stop spread.
3. **Milking infected cows last** – while often not practical, this is highly effective as no other cow will be milked after the infected cow.

Drying a quarter

Drying a chronically infected quarter prevents high SCC milk going to the tank, but more importantly, if the quarter is not being milked, the infection cannot spread to clean uninfected cows.

Milking the quarter once every second day for a number of days works extremely well. The quarter will start to soak up and the milking out will help prevent the high SCC quarter turning to clinical mastitis.

Warning – do not use any antibiotic treatment when drying a quarter during lactation. The antibiotic can be in the milk of the other quarters.