

Move on those problem cows!

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At this time of year, approaching the end of the lactation cycle for many dairy herds, the identification of problem cows is a key task in the management of cow performance. A cow that has had at least three clinical cases of mastitis during the lactation period or has had a high somatic cell count (SCC) in two consecutive lactations despite antibiotic treatment during the dry period is a problem cow. The cure rates for each species of bacteria vary. Recurrent contagious mastitis cure rates are poor for Staphylococcal infection and can be as low as 6%. Cure rates for both Streptococcal and coliform mastitis (mainly environmental mastitis) are often in the range of 70%-90%. Both culture and susceptibility testing with the sampling of mastitic cows during the lactation period of at least 10 cows provide an adequate pathogen profile for your herd. The cost of mastitis can amount to €117 per cow per year taking into consideration both clinical and subclinical cases.

In addition, the following questions should be considered in the further identification of problem cows:

- Did any of your cows have a history of cell count or cases of mastitis, milk fever, retained placenta, hard calvings or chronic lameness?
- What was the drying off strategy used on your cows last year?
- Was the dry cow therapy method effective?
- Was the administration of either lactation or dry cow therapy effective?
- What is your mastitis case rate for the year?
- Are you carrying empty cows at this stage?

For those who milk record, the assessment of mastitis performance should be based on a review of the milk recording Farm SCC report available on the ICBF website at www.icbf.com in particular the problem cow report.

Milk recording Farm SCC report - Problem cow report

The report lists and ranks any cow with a record history of a SCC>200,000/mL which is indicative of a probable case of mastitis. The ranking of the cows is based on percentage contribution to the herd's SCC. Age, lactation stage (days in milk), lactation number and the number of tests >200 are highlighted in the report. This information, as well as any available mastitis treatment and culture results, should be considered as part of your treatment or culling decision in consultation with your vet or advisor. If the latest SCC is greater than 200,000 SCC/mL, the cow should have a California Mastitis Test (CMT) to identify problem quarter or quarters.

Cow ID	I&R-Tag	Calv. Date	Lact. Days	Mastitis Incidence History (Current Lactation)				Prev. lact.			
				Tests > 200	Latest SCC	Previous SCC (*1000) herd tests		Ave. SCC			
Cow name	Age	Group	Test	Mast Treats	Last treat	Previous mastitis treatments	Tests > 200				
Sire ID							Mast Treats				
					27-jul	13-may	08-mar	29-sep	27-jul	28-may	
		08/02/22	10	2	4370	3839	29				142
	11y 10m		169		19.5						1
	Spring		3								0
		02/02/22	3	3	2936	2749	524				60
	4y 6m		175		15.8						0
	Spring		3								0
		24/02/22	5	2	2288	252	49				612
	6y 6m		153		15.5						4
	Spring		3								0

As well as identification of problem cows in late lactation, the report can be used during early lactation to prevent the spread of mastitis within the herd. A milk recording carried out within 30-60 days of drying off will also identify problem cows and provides an excellent back up for selective dry cow therapy.

The ideal replacement rate is 18%- 20% allowing the herd to achieve its full potential in terms of milk production. The rearing of a dairy heifer replacement comes at a cost of close to €1,500. It takes approximately 1.6 lactations to cover the cost of taking a home bred heifer through to calving at 24 months.

While the clinical history of your cows is reviewed to identify problems, the effectiveness of your drying off strategy will also need reviewing if culling is exceeding 18%- 20%. If your mastitis case rate within the first month of calving exceeds 5% of your cows calved, or 2% of your cows per month during lactation problem cows should be identified. The identification of a cohort of problem cows using your CellCheck Farm Summary Report is also possible examining mastitis control in the dry period or calving. If the new infection rate in your cows or in your heifers is greater than 10% and 15% respectively with a cure rate of less than 85%, any increase in SCC readings of specific cows between consecutive recordings before and after the dry period will also highlight possible problem cows.

The CellCheck Farm guidelines provide very useful advice during the various stages of lactation and are available on AHI website at [Animal Health Ireland CellCheck Farm-guidelines and management notes](http://AnimalHealthIreland.ie).