

GUIDELINE 15

Culling persistently infected cows

In this guideline:

15.1 Consider culling any cow when you find her third clinical case for this lactation

15.2 Consider culling cows with high cell counts in two consecutive lactations

Despite long acting formulations that maximise penetration into the udder tissues, antibiotic DCT do not cure all existing infections. Studies in New Zealand, and around the world, have established that cure rates are lower for:

- Older cows
- Infections of long duration
- Presence of the cow-associated bacteria, *Staph. aureus*

Culling cows is the only way to eliminate some infections from the herd. Since these chronically infected cows represent a source of infection for other cows, culling can help to protect healthy, young cows that are the future of the herd.

A small number of high SCC cows can have a significant impact on the bulk milk SCC and the risk of grading. Culling decisions should take into account the risk of spreading infection as well as the replacement costs.

Culling is not the only answer to a farm SCC problem. Failure to prevent new infections will mean that other cows will soon take their place at the top of the high SCC list.



Culling benchmarks

Between 1-2% of the total cows in the herd appears to be a realistic and practical benchmark for cows culled annually for reasons directly related to mastitis. Check the value of your culling rate using the [SmartSamm Gap Calculator](#).



Good Read

[Technote 15 – Culling persistently infected cows](#)

15.1 Consider culling any cow when you find her third clinical case for this lactation.

Ensure that cows that have had three clinical cases of mastitis during the current lactation have been considered for culling.

If only one quarter is involved, one option may be to dry-off that quarter and milk the cows as a 3-titter. Use a simple and visual system that all milkers are familiar with to identify the cow, to reduce the risk of accidental attachment of the teat cup to that quarter.



Do not treat cull cows with antibiotic DCT

For cull cows that have been accidentally treated with antibiotic DCT, the withholding period of the product must be adhered to.



Mastitis Focus

Generate a [Mastitis Focus](#) report for your herd to check the to check the effectiveness of your culling policy. The **Culling to control mastitis** box indicates the number of cows that should be considered for culling, that are still in the herd.



See [Guideline 4.13](#) for options for drying off chronically infected quarters.

Example of a Culling to control mastitis box from a Mastitis Focus report:

Culling to control mastitis		★
	Your Herd	Trigger
Cows prone to clinical mastitis Cows in herd with 3 or more clinical cases in a lactation	2 cows	Any Cows
Cows infected in multiple lactations Cows still infected after 2 consecutive prior lactations despite intervening DCT	56 cows	Any Cows

15.2 Consider culling cows with high cell counts in two consecutive lactations.

A cow with high SCC in two consecutive lactations, despite antibiotic Dry Cow Treatment (DCT) in the intervening dry period, has a chronic infection that is unlikely to cure, and/or is a cow that is prone to infection.

If strategic or voluntary culling is possible, include persistent high SCC as a factor, along with age, level of production and reproductive status.

Do not use antibiotic DCT on cows which are going to be culled within the next 2-3 months. For cows that have been treated with antibiotic DCT the withholding period of the product must be adhered to before culling the cow.



Mastitis Focus

The [Mastitis Focus](#) identifies the number of cows that have had a high SCC (>150,000 cells/mL) for three consecutive lactations, despite intervening antibiotic DCT. These are cows that have had multiple opportunities to cure and are therefore, high priority culls. See the Culling to control mastitis box.



High cell count cows

If cows with high cell counts are retained in the herd, they pose a risk to other cows. If possible, separate and milk them last, as described in [Guideline 8.4](#).

Example of a Culling to control mastitis box from a Mastitis Focus report:

Culling to control mastitis		★
	Your Herd	Trigger
Cows prone to clinical mastitis Cows in herd with 3 or more clinical cases in a lactation	2 cows	Any Cows
Cows infected in multiple lactations Cows still infected after 2 consecutive prior lactations despite intervening DCT	56 cows	Any Cows