

# TOP FARMERS KNOW-HOW

## SELECT COWS FOR DRY COW THERAPY



Dry cow therapies (DCT) are prescription medications dispensed under veterinary authorisation after reviewing your mastitis management with your vet. Learning more about the general approach to selecting dry cow therapy can help you have a more informed conversation with your vet.

The goals of using DCT are to<sup>1</sup>:

1. Cure existing subclinical mastitis infections
2. Prevent new infections by protecting the udder throughout the dry period and into the next lactation

### USE ANTIBIOTIC DCT TO CURE INFECTED COWS/QUARTERS

#### Which cows/quartets are considered infected?<sup>2</sup>

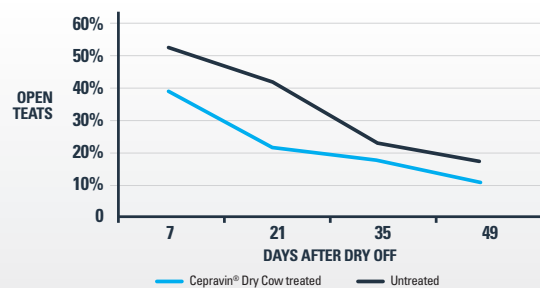
1. Cows with somatic cell counts >150,000 cells/mL on a late-season herd test
2. Mixed-age cows with a history of clinical mastitis in the current lactation
3. Milking heifers (R3s) with a somatic cell count >120,000 cells/mL on a late-season herd test
4. If no individual cow somatic cell count data or clinical case records are available, cows or quarters which are RMT positive within a few weeks of dry off should be considered infected.

#### Which cows/quartets should NOT get antibiotic DCT even if they are infected?

1. Cases unlikely to cure with antibiotic DCT (cull or three-quarter the cow instead)<sup>3</sup>:
  - Old cows (eg >8 years old)
  - Cow with multiple-quarter infections
  - Cows with a high cell count at several herd tests
  - Back quarters with confirmed Staph. aureus
2. Cows with clinical mastitis. If a cow has clinical mastitis on the scheduled day of dry off, keep milking that cow and treat her with a lactating mastitis treatment until she has cured.
3. Cows/quartets which could endanger the milk supply next season due to an inhibitory substance grade.
  - Cows making <5L of milk per day at dry off
  - Dry quarters
  - Cows with an expected dry period shorter than the milk withhold for the antibiotic DCT

### USE A TEAT SEALANT TO PROTECT ALL AT-RISK COWS/QUARTERS FROM NEW INFECTIONS

#### TEAT CLOSURE AFTER DRY OFF



- It's impossible to predict which quarters will remain open for weeks after dry off, so all quarters need to be protected with either an antibiotic DCT, a teat sealant, or both
- Teat sealants like ShutOut® provide protection by physically blocking the teat canal
- All antibiotic DCTs provide some protection against new infections for their labelled length of action
- Your vet can help you decide if all cows and heifers, or just those which have not received an antibiotic DCT, need a teat sealant

### SUMMARY

- Cull cows or three-quarter cows which are unlikely to cure
- Treat clinical mastitis with a lactating treatment before drying off. Never use DCT to treat clinical mastitis
- Use an effective antibiotic DCT for remaining subclinical quarters
- Protect all quarters from new infections

#### FOR MORE:

Visit [TopFarmers.co.nz](https://www.TopFarmers.co.nz)

Or find us on YouTube by searching: [TopFarmersNZ](https://www.youtube.com/TopFarmersNZ)

Or visit: [msd-animal-health.co.nz](https://www.msd-animal-health.co.nz)

# TOP FARMERS KNOW-HOW

## SELECT COWS FOR DRY COW THERAPY



### REFERENCES:

1. DairyNZ SmartSMM. (2020). TechNote 14. Drying off: Decide dry cow management strategy. [www.dairynz.co.nz](http://www.dairynz.co.nz)
2. McDougall, S. et al. (2017). Predicting infection status at drying-off, and the efficacy of internal teat sealants in dairy cows. 2017 Conference Proceedings of the Society of Dairy Cattle Veterinarians of the NZVA.
3. Sol, J. et al (1994). Factors associated with the bacteriological cure after dry cow treatment of subclinical staphylococcal mastitis with antibiotics. *Journal of Dairy Science* 77(1):75-79.
4. Williamson, J.H. et al. (1995). The prophylactic effect of a dry-cow therapy antibiotic against *Streptococcus uberis*. *NZVJ*. 43: 228-234.
5. Dairy NZ. (2020). Drying off Technote 15: Culling persistently infected cows. [www.dairynz.co.nz](http://www.dairynz.co.nz)

