

Management of cows at drying off

How cows are managed around drying off can have a large impact on udder health during the dry period and in the following lactation. This guide provides information that applies to all cows being dried off regardless of the dry cow therapy they receive but also discusses the management of cows being treated with Teatseal®.

Dry cow therapy selection and administration technique are extremely influential on the success of drying off but are not covered in this guide. For more information on dry cow therapy selection ask for a copy of our **Teatseal & Dry Cow Solution Guide**. For more information on best practice administration of dry cow therapy ask for a copy of our **Best Practice Administration Guide**.

1 GENERAL MANAGEMENT ADVICE

The benefit of dry cow therapy can be undermined by other factors that increase the risk of mastitis. Management practices around drying off should aim to minimise milk leakage and exposure to environmental risk factors (e.g. wet/soiled pasture) in the early dry period, regardless of the dry cow therapy being used.

Plan drying off dates well in advance

Allow leeway for bad weather and the recommended stand-down time between drying off and transportation of cows. Avoid drying cows off on the very last day of the season if cows need to be transported or continuity of care may be compromised due to staff changes. Dry cows off in small enough groups to ensure the process is methodical and not rushed. Carefully choose paddocks for cows that have just been dried off (clean, no bare dirt, no lying water).

In the week before drying off

Cows that leak milk after drying off have a fourfold higher risk of dry period clinical mastitis¹. In New Zealand dairy systems, the proportion of cows leaking milk and/or developing new *Streptococcus uberis* intramammary infections in the early dry period can be reduced by manipulating feed intake in the lead up to drying off².

Cows producing <10L/day can be dried off immediately without reducing milk yield. For cows producing ≥ 10 L/day, reduce intake in the seven days before drying off by 30-50%³.

Reducing milking frequency (e.g. changing to once-a-day milking) has been shown to reduce milk yield but not the incidence of milk leakage or new dry period intramammary infection with *Streptococcus uberis* on New Zealand dairy farms². Furthermore, some studies have shown that changing to once-a-day milking in late lactation results in elevated BMSCC, particularly in cows with already elevated SCC⁴, though others found that it does not⁵.

Do not practice skip-a-day milking as it is a risk factor for early dry period mastitis⁶. Never withhold water from cows.

Early dry period management

Avoid drying cows off in wet weather. Do not let cows lie on bare ground or expose them to wet conditions or surfaces contaminated with manure/effluent in the first two weeks of the dry period, especially the first four days⁶. This applies regardless of the farm system since any management system has the potential to expose cows to excessive environmental challenge (e.g. pasture, crop feeding or use of feed pads).

In the first 10-14 days of the dry period, reduce intake to maintenance requirements for cows producing >5L at drying off⁶ and avoid transporting cows, since transportation may expose cows to heavier environmental contamination and the cows may be more likely to lie on contaminated surfaces. It is essential that transported cows are not leaking milk.



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2 MANAGEMENT ADVICE SPECIFIC TO COWS BEING TREATED WITH TEATSEAL

Aside from the dry cow therapy administration protocol, the late lactation and early dry period management of cows dried off with Teatseal is no different to cows not dried off with Teatseal. Teatseal reduces the incidence of new intramammary infections but does not prevent 100% of them. Therefore, farmers should still manage other risk factors for environmental mastitis.

Cows can still leak milk in the early dry period even when treated with Teatseal as well as an external teat sealant⁷ but milk leakage is not thought to affect Teatseal retention⁸, though this has not been formally tested and leakage should still be minimized through careful drying off management.

Milk yield at drying off or early in the subsequent lactation (as a proxy for milk yield at calving) do not appear to be associated with the presence or absence of a Teatseal plug at calving⁹. Presence of a Teatseal plug at the first milking was not found to be associated with the risk of intramammary infection at the same time point⁹. Therefore, the importance of minimizing milk leakage in the early dry period for cows dried off with Teatseal is not a function of Teatseal treatment per se but a general mastitis prevention principle.

FOR MORE INFORMATION

Talk to your veterinarian or visit the Dairy Wellness or SmartSAMB websites.

www.dairywellness.co.nz

www.dairynz.co.nz/animal/cow-health/mastitis

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