GUIDELINE 9

Manage teat sores and cracks

In this guideline:

Healthy teat skin is easier to keep clean, minimises preparation before milking, and minimises the risk of new infections occurring.

Mastitis is a numbers game - greater numbers of bacteria near the teat end increases the risk that bacteria will enter through the teat canal. Rough or damaged teat skin and teat sores provide sites where bacteria become lodged, and multiply.

Teat skin condition is affected by exposure to mud and water, by faulty milking machines and poor milking practices, and by infectious organisms.

Water and mud strip the protective natural oils from the skin, leading to cracks on teats (and also on milker's hands). Cracks and teat sores are painful and lead to poor cow behaviour during milking, with increased kicking, stomping and defecating, as well as poor milk let-down.

Good Read
Technote 9 - Manage teat sores and cracks.

9.1 Assess teat skin and teat ends systematically.

Maintaining healthy teat skin is vital for successful prevention of mastitis.

Normal colour

Normal teat end

Factors or organisms that affect the teats of dairy cows fall into one of three broad categories:

- Milking induced (i.e., faulty machines or milking management)
- Environmental (e.g., water, mud, windy cold conditions, sunburn)
- Infectious (i.e., viral or bacterial infections)

These changes can produce short, medium or longer term changes in teat condition.

Regular checks of teat condition are recommended in all herds to pick up and identify emerging issues and take action.

Systematic scoring of teat condition (of at least 10% or 25 randomly selected cows, whichever is the greater) can provide a more accurate assessment of the herd situation, and help identify underlying problems.

Seek help
Accredited vets can provide systematic assessments of teat condition.

See *Healthy Udder - Prevent 4* for tips and pictures of teat conditions.

See *Technote 9* for more on common causes of short, medium and long-term changes in teat condition and hyperkeratosis, and common teat skin lesions.

See *Technote 9* Table 7 for information on unacceptable levels of teat damage or conditions.

Short term changes

Short term changes in teat condition are seen immediately after a single milking and can include:

- Skin colour
- Firmness or swelling
- Open teat orifice
- Sensitivity to touch.

Skin Colour

Red teats

Blue teats

Firmness and swelling with redness and rings at top of teat

Rings at base of teats

Firm red teats with rings at base

Teat orifice remaining open, or sensitive teats or udder

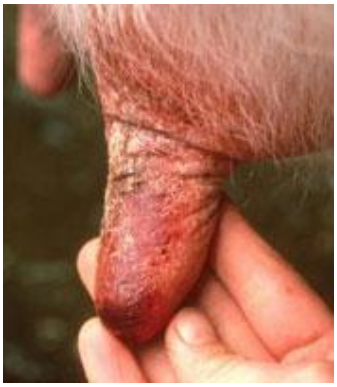
Open orifice

Sensitivity to touch

Medium to long term changes

These usually take a few days or weeks to become obvious. These include:

- Photosensitisation
- Petechiations
- Chaps and cracks
- Hyperkeratosis (rough teat ends).



Photosensitisation
Looks like sunburn, dry, cracking and peeling.

Petechiations
Tiny red blood blisters, particularly around the lower end of the teat.

Chaps and cracks
Chaps and cracks, particularly around the upper parts of the teat.

Rough skin or cracking around teat orifice - also known as "teat-end hyperkeratosis"

No ring (healthy)

Rough ring

Smooth or a slightly rough ring

Very rough ring 1

Teat sores or lesions associated with viral or bacterial infections

Common teat lesions associated with viral or bacterial infections include

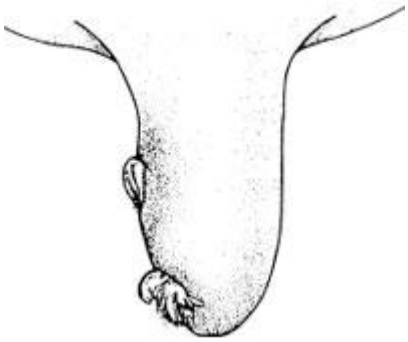
- Pseudocowpox
- Teat warts
- Bovine Herpes Mammillitis
- Blackspot

Consult your vet if you suspect cows have any of these infectious diseases. Teat spray and disinfection is important.

Isolate cows from the main milking herd and milk last to prevent further spread of the disease to healthy cows.

Take care as some diseases can affect humans too, so use gloves and disinfectant.

Pseudocowpox



Teat warts

Bovine Herpes Mammillitis

Blackspot

9.2 Minimise the build-up of mud on teats.

If wet and muddy conditions cannot be avoided for lactating cows, and the rate of new clinical cases starts to increase, teats should be washed and dried before each milking. Slow the milking process down and/or use an extra person in the milking team to ensure teats are washed and dried before cups are attached.

See *Guideline 26* for tips on fixing areas that make udders dirty.

9.3 Minimise water on cows' udders.

Ideally, cups should only go on to clean and dry teats.

Avoid wetting the udder - just wet the teats if they need to be washed. Always use clean, low pressure water to wash and dry dirty teats.

See *Guideline 5.3* for tips on udder cleanliness and pre-milking preparation.

9.4 Check teat spray mix, particularly emollient concentrations.

During spring or when teat condition is poor, the addition of 10% emollient, such as glycerine, to teat disinfectant helps improve teat skin condition.

Check the details on your teat spray label. Ensure everyone is mixing teat spray the same way.

See *Healthy Udder - Prevent 2 & 3* for tips on checking teat coverage and teat spray mixing systems.

See *Guideline 7* for tips on selecting the right teat spray and correct mix.

9.5 Check important milking machine factors.

- Check vacuum level
- Check pulsators
- Check liner suitability.

Seek help
Call a *NZMPTA certified milking machine tester* if concerned that the milking machine is contributing to teat damage.

See *Guideline 6* for tips on monitoring and maintaining milking machines.

9.6 Avoid the use of teat ointments, especially those that come in tubs or jars.

Teat ointments which are dispensed by repeated dipping into a jar become easily contaminated with bacteria and may spread infection. Keep containers covered in the farm dairy.

9.7 Seek advice from your veterinarian if problems persist.

If more than 5% of cows have teat damage, seek professional help.

Seek help
Contact your vet if problems persist.