

**Confidence – Moderate**

This recommendation assumes that most heifers enter springer mobs with a low prevalence of infection.

**Research priority – Low**

Analysis of the timing of clinical cases of mastitis, as part of the milk recording statistics, would provide better benchmark information on new infection rates.

**1.2 Be alert to the number of cases of mastitis occurring, especially in freshly calved heifers. This is an indicator of the state of the paddock.**

Mastitis in freshly calved heifers (first calvers) may result from infection that has occurred during their development since puberty or in the few weeks immediately before calving.

Heifers may be particularly susceptible to infection during the calving period. This is because they tend to spend longer calving, especially on the ground, and they often suffer from some degree of udder oedema that may reduce the ability of the teat and udder tissues to resist bacterial challenge (Slettbakk *et al* 1995). Field observations indicate a greater tendency of animals with oedematous teats to develop *Strep uberis* infections.

Clinical mastitis was observed at calving in 8% of first-calf heifers in a study of 11 herds in New Zealand (Pankey *et al* 1996). Environmental streptococci were isolated from 68% of these clinical cases.

The warning index of three or more cases in the last 50 calvings is an estimate based on the average incidence of clinical cases observed in the first month of lactation. Data on the incidence during the calving period (two weeks before and two weeks after calving) would allow this index to be refined, but it serves as a reasonable guide. It is probably of more relevance in seasonal herds where relatively large numbers of calvings occur over a short period (and 50 calvings may occur in as little as 1-2 days).

If this index is exceeded a reassessment of the calving environment and management should be made. It is often useful to have an independent adviser help with this to obtain the benefit of a 'fresh pair of eyes'. It is also worth noting that sometimes a high incidence of mastitis occurs at calving, even though the environment appears clean and dry. These may be infections that occurred at an earlier time (for example at drying-off) and then became clinical at calving.