

TECHNOTE

22

Conduct annual mastitis control activities and review achievements

Each year, time must be set aside for planning mastitis control programmes and changes in milking routines and equipment. Regular monitoring and review are an integral component of quality management programmes, which are central to the production of quality milk by the dairy industry.

Every farm should have a mastitis strategy to suit its individual goals. Progress toward these goals can be achieved by setting targets. An annual review produced by the farmer provides a factual basis for:

- Assessing the progress of the mastitis control strategy.
- Providing a context for current activities.
- Planning the following year's activities and targets.
- Assisting advisers asked to investigate or comment on mastitis in the herd.

Although it is essential for farmers to own their strategies and annual reviews, advisers may often facilitate this process. A number of mastitis monitoring services are offered by individual advisers – through herd health services, as adjuncts to milk recording services, or as on-going monitoring services following the resolution of problems in herds where major mastitis investigations have occurred.

There are significant business opportunities for advisers who develop services that help farmers plan and monitor the progress of their mastitis control programmes.

22.1

Mark 'a day in the office' on your calendar or diary to review progress and set goals.

The most effective mastitis programmes are those that are tailored to suit individual herds, have realistic goals and are based on factual information.

A mastitis programme is a health equivalent to a farm budget. It should be planned in advance so that interventions are timely and spaced throughout the year, training needs of staff are recognised, and progress is regularly monitored.

A plan should be written annually for each dairy herd and contain the goals of the mastitis programme, identify areas of change, and how and when the change will be achieved.

The tasks, and their intent, should be understood and endorsed by the farm manager. There is much to be said for the manager writing the plan in consultation with the farm team and advisors. The document should be available to the whole milking team and kept short, simple, and not highly technical.

Components for the farm manager to consider when developing a mastitis plan for the herd include:

- A summary of the current situation. This helps provide a context to the current programme and identify areas for improvement.
- Identification of broad goals – such as earning premium payments for milk for at least three months during the next season, reducing the rate of new infections, up-skilling staff etc.
- A list of the major goals. The goals should be very specific, realistic, and achievable during the next 12 months. If they are the first step in achieving a longer-term goal, this should be noted.
- Specifying activities that will help achieve these goals. Specific tasks should be listed, and each should state who is responsible and when it will be completed. Examples include routine teat spraying after each milking, wearing gloves at every milking, concreting the track near the dairy shed, etc.

The most difficult step is writing the first mastitis programme and establishing a starting point. Ideas can be obtained from local dairy advisers and discussions with peers but ultimately the value of the plan depends on its focus and its ownership by staff.

It is important to review the plan (e.g. every 3-6 months) to monitor progress and to document unexpected events such as floods and droughts that may influence progress.

Without a planned programme and regular review, mastitis control on farm will be reactive and unlikely to prioritise areas for improvement. In contrast, businesses with focussed programmes may pre-empt problems and reduce the risk and severity of mastitis outbreaks in high risk seasons.

22.2

Involve all members of staff and family working on the farm.

Every person who works on a dairy farm has an impact on the udder health and mastitis control in the dairy herd. This includes family members, and full-time, casual and relief milking staff as well as dairy advisers. Quality management programmes require that people have clearly defined roles, understand their duties and know who is responsible for what tasks and issues.

Some benefits of staff and family members feeling that they are part of a team are that it:

- motivates them;
- increases their willingness to co-operate and share information;
- broadens their understanding of the goals of the farm;
- increases their confidence; and
- may stimulate interest in developing new skills.

Team building is strengthened by involving everyone in reviews and planning, and will ultimately increase the effectiveness of the mastitis programme. People should be able to state their views honestly and be encouraged to give and receive constructive feedback.

Signs that may indicate problems are:

- over-reliance on one person;
- excessive questioning of each decision or action taken;
- people taking the easy way out (e.g. remaining silent) rather than causing conflict;
- frustration at a lack of progress;
- feelings that the programme is too big or inappropriate; and
- conceding to opinions that are presented as facts with no supporting data.

Some farms extend the incentives in the milk payment systems to their employees.

22.3

Arrange for your milking machine technician to test, service and (where necessary) upgrade your milking system.

Technote 25 describes the test, service and upgrade of milking machines.

22.4

Calculate the figures for your farm for past 12 months, and set new targets.

A 12 month review

An annual summary may include:

- A brief description of the herd. For example, the number of milking cows, age structure of the herd, number of introductions, and production figures.
- The major components of the current mastitis programme. For example, teat disinfection practices, the number and type of dry cow products used, the dates of machine services, and visits from dairy advisers, etc.
- A list of the results of any special investigations. For example the result of milk cultures, upgrades of milking machine equipment, etc.
- Any major events that affected the mastitis programme. This should include unplanned activities that competed for resource or labour.
- A review of mastitis indicators. For example, the rate of clinical cases, the proportion of bulk milk cell counts below 400,000 cells/mL, the proportion of milk supply below a farm trigger or goal level, etc.
- A brief description of the farm staff. This should include the number of people, their skills and any additional training during the year.

Setting targets

The farm targets:

- should be realistic and achievable;
- should be more ambitious than the minimum standards required to satisfy the dairy company quality management programme; and
- must be more stringent than the SmartSAMM recommended warning levels for mastitis indicators.

Annual targets should measure the:

- rate of clinical cases – available from clinical case records;
- level of subclinical mastitis in the herd – based on herd recording information;
- proportion of milk supply attracting premium payments if available – from factory records; and
- estimated cost of culling due to mastitis – depending on the amount of detail kept by the farmer.

22.5

Seek advice if farm indicators are above the warning levels.

Confidence – Moderate

Advice on warning levels is based on limited experimental observations and extensive field experience.

Research priority – Moderate

Some further benchmarking information would be useful to enable farmers to better judge their performance and progress, and to set targets.

Some of the questions used in the mastitis and milk quality investigations in Technote 13.1 can be adapted for review purposes.

A comprehensive Mastitis Focus Report provides performance measures for key management areas including clinical mastitis, spread of new infection and dry off strategies.

Technote 6 describes checks for milking machine function.

Technote 11 discusses monitoring of bulk milk somatic cell counts.

Technote 12 discusses interpretation of individual cow cell count measures.

Technote 13 gives warning levels (critical and trigger alerts) for some mastitis indicators.

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Key papers