

Review and Planning

Each herd should set a specific time that suits to review and plan

GUIDELINE

21

Buying cows - check histories and examine udders

22

Set a time to do annual mastitis control activities and review achievements

23

Sign on for milk recording

24

Review farm records

25

Test, service and upgrade milking machines

26

Service teat spray units and review teat disinfectant to be used

27

Fix areas that make udders muddy



Each herd should set a specific time that suits to review and plan

Mastitis management and SCC levels should be reviewed constantly throughout the lactation as preventing clinical cases and lowering SCC requires constant attention - it is important not to take your eye off the ball, even when reaching goals.

However, specific time should also be set aside each year to review and plan mastitis management for the coming lactation.

It's also important to assign time to carry out farm maintenance on areas that can reduce mastitis risk in the future.

This set time may be the dry period for seasonal herds or alternatively any convenient time for all year round herds.

Farmers should make a time to review cow numbers, and set in place a purchase strategy for buying new cows. SCC, mastitis history and health status should be fully reviewed for all cows coming into the herd.



GUIDELINE

21

Buying cows - check histories and examine udders

- Bulk tank SCC history
- Buying heifers
- Checking cows
- DCT history
- Individual cow SCC history
- Introduced cows
- Milk sample culture
- California Mastitis Test

One of the most common ways of introducing contagious mastitis bacteria into a herd is in the udders of cows that are brought in. Bacteria such as *Staph. aureus* and *Strep. agalactiae* can spread rapidly through a herd - it is better not to introduce the bacteria in the first place.

21.1 Buy heifers before calving rather than cows, where possible.

It is likely (although not certain) that a heifer that has never been milked in another parlour will be free of the major bacterial causes of mastitis.

21.2 Only buy cows if the bulk tank SCC from the herd of origin are available.

If the average bulk tank SCC for the past twelve months is less than 200,000 cells/mL, it is likely that mastitis is reasonably well controlled in that herd, and the risk of infection will be lower.



21.3 Ideally only buy cows if they have information on individual cow SCC.

Ensure that you have records from at least one full lactation - one milk recording is not enough.

As a guideline - avoid buying cows from herds with an average bulk tank SCC for the past 12 months > 200,000 cells/mL. The risk of buying in animals with infected quarters from these herds is significant.

Avoid buying individual animals from farms without milk recording (at least 4 recordings during the last 12 months). On milk recording farms, avoid cows with an individual cow SCC > 200,000 cells/mL during the previous 12 months.

Be especially wary of older cows, particularly if records are not available.

21.4 Ask about dry cow treatment history.

If cows have received dry cow treatment, you should know the product used and the date of treatment.

21.5 Manually check cows before buying them.

Feel udders for uneven consistency or lumps.

Look at teats for teat sores or damage.

If lactating, check foremilk by stripping milk, preferably onto a black surface, and definitely not onto your hand.

21.6 Check new cows again before milking them with your own herd.

Feel udders for uneven consistency or lumps.

Look at teats for teat sores or damage.

Check foremilk by stripping milk, preferably onto a black surface, and definitely not onto your hand.

Use a California Mastitis Test (CMT) on all new cows at first milking, to identify any problem quarters.

Milk containing infection may be spread during this procedure, so gloves should always be used, and hands washed in running water and disinfected between cows.

If abnormalities are detected, have a milk sample cultured.

Refer to Guideline 5.2:
Forestrip all cows, for early detection of clinical mastitis.



California Mastitis Test should be done on each quarter of newly purchased cows.



21.7 Consider having a milk sample cultured even if no abnormalities are found when you check the udder.

A milk sample (containing an equal portion of milk from each quarter) is likely to show *Staph. aureus* or *Strep. agalactiae* if it is present. The cost of the culture is likely to be a good investment.

If *Strep. agalactiae* or *Staph. aureus* is found, segregation and treatment is advised.

Consult your vet for more advice.

21.8 Milk introduced cows last until you are confident that they are free of mastitis.

21.9 Don't milk other people's cows with your herd.

Not all 'brought in cows' are 'bought in'. The risk of introducing mastitis by sharing milking facilities with cows from other herds is high. This includes temporarily milking 'carry over' cows for neighbours or sending cows away from your herd to be milked for a temporary period. To avoid costly mistakes it is best to maintain the principle of a closed herd at all times. This may include periods of emergency when electricity is down, but sharing milking facilities has serious biosecurity implications and needs to be managed with extreme caution.

Refer to Management Note A: Milk cultures.



Bio-security for buying-in cows.

See the Biosecurity section of the AHI website www.animalhealthireland.ie for biosecurity guidelines for purchasing animals.



GUIDELINE

22

Set a time to do annual mastitis control activities and review achievements

- Set time aside
- Involve everyone



Working Together.

Highly productive workplaces are like successful sporting teams. While the performance of individuals is important, success requires that those individuals also work well together. Whether your farming business is a small or large concern, family or corporate structure, you will benefit from improving team work on your farm.

Refer to Guideline 25: Test, service and upgrade milking machines.

Refer to Guideline 6: Maintain and monitor milking machine function.



Organise 'to do' lists.

Make a list of tasks to be completed. Make sure that these tasks are allocated to someone and they set a regular time to do them, for example whenever liners are changed, check the teat sprayers too.

22.1 Mark 'a day in the office' on your calendar or diary. Set time aside well in advance.

22.2 Involve all members of staff and family working on the farm in developing and reviewing mastitis control activities and achievements.

Consider also involving your CellCheck Advisor.

22.3 Make an appointment with your milking machine technician for testing, servicing and (where necessary) upgrading your milking system.

Make the appointment well in advance. The technician should be qualified to IMQCS standard.

Your milking machine should be fully tested and serviced twice a year, and you should receive a written report.

In addition, it should be monitored, tested and adjusted as often as necessary during lactation.



- Milk recording

23.1 Sign on for milk recording.

After all year round teat disinfection, regular milk recording is the next most important tool in dealing with high SCC and mastitis.

ICBF coordinates the Irish milk recording service and there are two types of milk recording service, the Recorder service or the Electronic DIY (EDIY) service. The newer EDIY offers flexibility and is designed to remove the hassles and take away the excuses.

EDIY makes it easy:

- no upfront meter costs
- no 'stranger' in pit or disruption of your routine
- farmer is in control
- meter auto agitates and auto samples
- no writing - less mistakes
- quicker turn around time for results.

Monthly milk recording gives best results for mastitis control allowing:

- regular and prompt identification of problem cows
- reviewing of treatment efficacy
- monitoring spread of infection within the herd
- monitoring stage of lactation SCC changes.

Milk recording makes money:

- the lower the milk price the more important to identify 'passenger cows' and get rid of them
- monthly milk recording is cheap - approx. €16 per cow annually
- a 5,000 litre cow generates €1,250 milk income at 25cpL => even at this price you can afford to milk record.



Milk recording is a valuable source of information.

Refer to Guideline 12:
Use individual cow SCC for management decisions.



Use the CellCheck Farm reports for your herd.

The CellCheck Farm reports (Summary and Analysis) use your milk recording results, and clinical case records to give an accurate overview of udder health in your herd. They help you identify problem areas and potential risks as well as tracking progress after any management changes are made.

Contact ICBF or your CellCheck Advisor for more information, or visit www.cellcheck.ie or www.icbf.com



Monthly milk recording allows you to review individual cows for:

- somatic cell count
- yield of fat, protein and milk
- identify infected cows early which facilitates timely treatment.

Monthly milk recording allows you to review cow groups:

- ICBF reports break animals into group by age and stage of lactation e.g. older cows and heifer groups allowing you to address their problems specifically
- ICBF reports allow targeted interrogation during on-farm investigations.

You can't manage what you don't measure.



Review farm records

- Review figures
- Set targets
- Seek advice

Each year, time must be set aside for mastitis programme activities affecting the whole herd or milking system. This set time may be the dry period for all cows in seasonal herds, or a convenient period in year-round herds.

24.1 Compare the figures for your farm in the past 12 months against recent years. Set targets for the next 12 months.

24.2 Seek advice if farm figures are above the trigger levels.

Your advisory team can include your IMQCS technician, CellCheck Advisor, milk processor representative and vet. All of these will help to develop an appropriate plan to investigate and provide solutions to a problem on-farm. Remember the earlier you address your problems the quicker they will be solved.



GUIDELINE

25

Test, service and upgrade milking machines

- Service twice a year
- IMQCS technician
- Written test report
- Carry out recommendations

Virtually all infections enter the udder through the teat openings. Your milking machine spends 50 - 100 hours attached to each teat in lactation. Machine malfunctions can cause teat damage and increase the risk of infection.

25.1 Fully test and service your milking machine twice a year.

Refer to Guideline 6:

Maintain and monitor milking machine function.

In addition, it should be monitored, tested and adjusted as often as necessary during lactation.

25.2 Use a milking machine technician who tests to IMQCS standards.

Refer to Management Note H: IMQCS milking machine test reports.

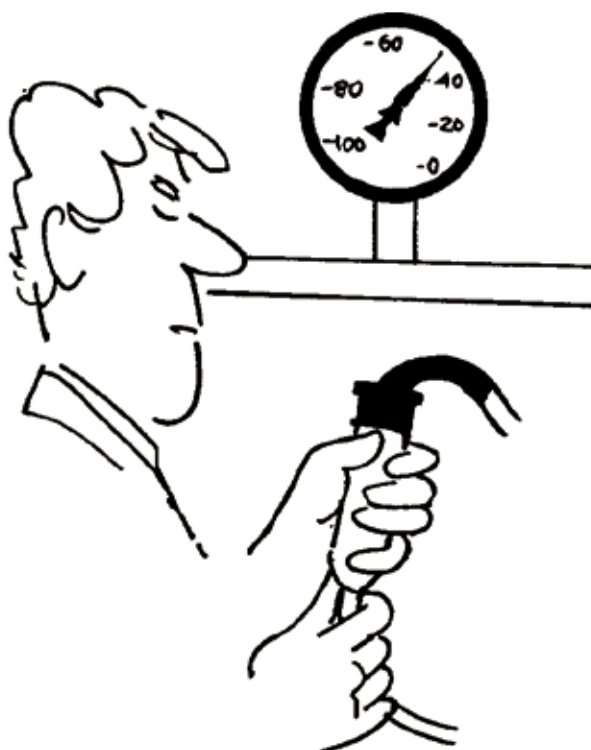
Make sure the technician performs the tests according to IMQCS standards and the technician should preferably have a current IMQCS qualification (or equivalent). Confirm this before making the booking.



Don't rely only on the routine service

Immediate additional testing and service is recommended if any of the following are observed:

- cows appear to milk slowly or incompletely
- clusters slip or fall off frequently
- teat condition is poor
- cows appear nervous or uncomfortable.



25.3 **Insist that the technician provides and explains a full written report.**

The IMQCS test report form provides details of milking machine performance after a routine service. It also indicates any outstanding faults and recommendations.

The technician should explain the details of the report to you.

Compare the test report with a previous year. Assuming the installation hasn't been modified they should be similar. The service checklist should also be completed, as it provides a comprehensive list of what has been checked and serviced.

If there is a problem with mastitis in the herd the milking machine should be tested before any servicing or adjustment is done and again after the service. In this case two test reports should be completed.

25.4 **Carry out all recommendations.**

Make a plan with a schedule which will fit in with work commitments and cash flow. Don't put off making your plan for some other time.

You may also find it useful to discuss the plan with your other milk quality advisors (your CellCheck Advisor, vet or other milking specialist).



GUIDELINE

26

Service teat spray units and review teat disinfectant to be used

- Clean and check teat spraying equipment
- Review teat disinfectant
- Method of application

26.1 Clean and check teat spraying equipment.

26.2 Review teat disinfectant and method of application to be used.

Factors to consider include:

- previous experience on the farm (including hand skin reactions, teat skin condition)
- published effectiveness of products
- how much you want to be able to see the teat disinfectant on the teats after application - some products are coloured and easier to see
- price (taking account of dilution - larger volume products may not be as cost-effective as smaller volumes of stock solution when diluted to the recommended concentrations)
- how the teat disinfectant is to be applied to teats - it is easier to do a better job of covering teats by dipping than spraying. Spraying typically uses twice as much disinfectant to get the same teat coverage.

Refer to Guideline 7:
Use post-milking teat disinfection.



27

Fix areas that make udders muddy

- Dirty teats and udders
- Roadways
- Housing

27.1 Clean and renovate areas around troughs, gates, roadways, housing and the entrance to the parlour area.

Adequate drainage and proper construction of roadways will decrease problems with dirty teats and udders.

Don't allow cows to enter rivers or ponds or other waterways to drink. This poses large biosecurity risks.



Well drained roadways with good surfaces are essential to keep udders clean.

27.2 Housing must be maintained and fully cleaned each year to ensure that it is in good shape for the winter period.

Clean housing is essential to minimise dirty teats. Cows being housed all year round must be kept in clean housing.



Make sure collecting yards and other high traffic areas are clean to ensure clean udders.



Clean, disinfected housing is essential for good mastitis control.

Refer to Management Note L: The impact of housing on mastitis and SCC.



Notes

