Quality milk, eh!
Ontario rolls out pilot for new prevention-based national program

A few times over the years, Ken Weitzel has had to dump part of a bulk tank of milk because the cooler got left off overnight. He actually inquired about a warning system when he had a new tank installed about two years ago but a local dealer suggested he really didn’t need it.

Now Ken has one with a warning light and firmly endorses it. The light is “pretty hard to miss. If something goes wrong, you’ll know,” he says.

The warning system was installed on his farm recently as part of the new National Quality Assurance Program. Dairy Farmers of Ontario (DFO) rolled out the program over the summer as a pilot project.

Ken also likes the time-temperature recorder that was installed. It lets him keep tabs on the bulk tank, showing temperatures at given times. As well, it reveals whether wash cycles of the complete system,
Ken checks wash line and tank temperatures regularly now—difficult to do without the recorder.

including pipeline, were done properly.
Ken checks the wash line and tank temperatures regularly now—difficult to do without the recorder. Not long after the recorder was installed, he found one instance when the milking system wasn’t washed properly. It turned out that a tap had been left on inadvertently.
He compares the recorder to the transfer line safety switches producers had to install some years ago to keep wash water out of bulk tanks. “I really like it (the recorder). It gives you confidence that everything’s working properly,” he says.
The pilot project in which Ken’s participating includes the farms of all DFO board members. Ken’s wife Sharon is DFO’s board member for Region 10, representing Huron and Perth counties. The couple milks 34 cows in a tie-stall operation near Stratford in Perth.
The pilot project could be expanded later. Eventually, DFO envisions all dairy farms in the province being on the prevention-based quality program. The pilot will provide experience in implementing the program. There’s also the opportunity to work out administration details and find ways to improve it, explains George MacNaughton, DFO’s farm policies and field services manager.
For the last several years, industries from electronics to food processing, along with some agricultural commodities, have been developing quality programs based on HACCP, short for Hazard Analysis Critical Control Points. Dairy Farmers of Canada (DFC) was responsible for initially developing a program at the national level so dairy farmers could implement HACCP-type principles on their farms.

In the case of milk production, explains MacNaughton, the program’s goal has been to review on-farm practices and establish standard operating procedures. Having everyone on the farm following these procedures greatly increases the likelihood of producing top-quality milk.
A regular study that DFO con-

A milk quality assurance sampler

DFO will be rolling out the national quality assurance program in stages. The first stage would cover areas deemed to have to the greatest quality benefits. These are animal identification, livestock medicines and pesticides management and milking procedures. A workbook developed for the Canadian Quality Assurance Program provides a ready reference. Note that good record-keeping is needed in all these areas:

**Cattle Identification.** You must identify all cattle on your farm under the National Livestock Identification program. As well you need to identify them for keeping your own records.

**Biosecurity.** You need a plan to prevent the introduction of infectious disease to your herd. The plan should include provisions for reducing the risk of spreading diseases that may already be present. Mastitis treatment and prevention are a big part of biosecurity as well.

**Livestock Medicines.** As proposed, you or a farm employee would have to complete a Livestock Medicines course successfully to be part of Ontario’s quality assurance program (see Quality Corner, page 16 for details). Among the quality assurance criteria are administering livestock medicines, keeping records of their use and observing withdrawal times. Storage of these medicines is part of the package too. Proper use and storage of pesticides, treated seed and fertilizer are other key items.

**Cow Environment.** This area covers manure management that ensures cattle cleanliness.

**Water.** Since milk is 87 per cent water, you need to ensure that what your cattle drink is of good quality. You also need to ensure you’re using good quality water, free from harmful bacteria, to clean your equipment. Maintaining water quality includes regular testing.

**Milking Management, Cooling and Storage.** This is where the time-temperature recorder is invaluable for checking proper operation of milking systems. Inspecting equipment regularly for cleanliness and other maintenance is part of it too. As well, this area includes using standard operating procedures for milking and taking steps to deal with mastitis.

**Training and Communication.** You need a written plan to ensure everyone involved in the operation knows and understands responsibilities. This includes responses to situations that could compromise the safety of the milk and meat you produce.
ducts on public attitudes towards milk shows many consumers have concerns about product quality, production practices and animal welfare, MacNaughton notes. A HACCP-based system can re-assure consumers that quality safeguards are in place. This has the potential to increase sales and market share.

Individual farms should also benefit. “There are many quality defects that result in partial or whole bulk tanks of milk being discarded on farms,” he says. “Reducing these occurrences will improve profitability.”

Another big part of the program is having producers documenting procedures used on their individual farms, MacNaughton says. “Most farms have standard operating procedures. If I had to milk your cows tonight, for example, you’d be able to tell me what to do. The only real change for you, under this program, would be to write it down so I could follow your directions precisely.”

Many dairy farmers might balk at having to write out instructions on how to milk and tend cows. “When you first get into it, you wonder why,” says Ken Weitzel. “Now, I can see where it has real value.”

On the Weitzel farm, three other people besides Ken could be responsible for a particular milking. “I’ve been doing it (milking) for years but someone else may miss some of the steps. This way, all they have to do is check the procedures and they can ensure the milking is done properly.”

When you start documenting your procedures, you realize how many steps there are, he says. He’s already been fine-tuning them to ensure the wording is clear.

There were no real changes needed for his procedures in the areas of cleanliness and sanitation. However, a staff review did identify a risk in antibiotic treatment record keeping. While Ken identified treated cows to keep inhibitors out of the bulk tank, the review found he needed to do a better job of recording treatment dates.

Staff made a similar recommendation to Bruce Saunders, DFO’s vice-chairman, also board member for Region 11, which covers Grey and Bruce counties. The Saunders family farm milks 150 cows in a free-stall operation. With up to four family members and an employee involved in milking, having proper procedures is crucial.

“Staff found a risk in the way we handled dry cows,” Bruce says. “The solution was simple. It was just a matter of identifying a treated animal better by putting a mark on her leg for identification between treatment and separation from the milking herd.”

The farm was already using a blackboard in the barn to show which animals had received antibiotic treatments. But the review also recommended improvements to permanent record keeping of antibiotic use.

“Better record keeping raises your awareness,” Bruce says. And, once it’s set up, it’s just a matter of minutes, not hours, a week to keep up to date.

He’s been close to the quality program since it was at the idea stage. A DFO representative at DFC, he chaired the Canadian Quality Milk Steering Committee. This group oversaw the program’s inception, a pilot project on British Columbia dairy farms and progress through to the current stage.

As a producer, he sees real merit in the program just from a farm management standpoint. “It’s encourages a better management style. It lets you
“Very few producers would have to change much, if anything, in the way they do things now.”

identify risks and solve problems before they happen.”

The Saunders farm has had a time-temperature recorder since March 2000, installed by DFO to test the equipment before the pilot project rollout in Ontario. It’s already proved its worth. After three or four days, Bruce explains, you can identify a regular pattern. If there’s a deviation, you know there’s a problem.

Such deviations have shown up twice. “In both cases the blend temperature in the tank during milking was higher than normal,” says Bruce.

“We identified a solenoid on a plate that remained closed and wouldn’t open. We were able to find the problem and have it fixed. Another example was when we discovered the bottom compressor of our two-compressor bulk tank wasn’t working.”

Bruce figures these problems would have been discovered eventually but the recorder provided an early warning, before the farm had to lose a tank of milk.

That’s a big part of the thinking behind quality assurance. “I could foresee this program, if implemented provincially, could easily save a few hundred bulk tanks of milk per year,” he says.

On his farm, saving just one 7,000-litre tank, worth more than $3,500, would more than cover the capital costs of the equipment involved (DFO is currently investigating equipment from various manufacturers. Cost estimates range from $750 to $2,500).

Aside from capital costs, however, producers might be leery of having to follow set procedures. Bruce is quick to allay such concerns. “Very few producers would have to change much if anything in the way they do things now. It’s a matter of putting on paper what you do every day.”

That’s where he sees benefits to assuring the quality of milk you produce and safeguarding your income. “What it (the program) does is raise the profile of risks your operation faces and how you should deal with them.”

The program is gaining acceptance, he adds. In July, after DFC’s annual meeting, producer delegates attended a quality assurance workshop. Producers from almost all provinces spoke positively about how they would be implementing the program at home.

At the national level, the program manual has reached the final draft stage and is ready for printing. The steering committee’s work essentially is done and now an implementation committee is needed, Bruce says. Implementation would include program certification by the Canadian Food Inspection Agency (CFIA).

In Ontario, DFO has to get CFIA that the province’s proposal meets government quality assurance requirements. As well, DFO will be spreading the word to grassroots producers. Quality assurance will be a major topic at the annual Geneva Park policy conference this fall.

The program basically boils down to these key points, Bruce says. They are:

- say what you do (written and posted procedures);
- do what you say (follow those procedures);
- prove it (keep records).

“If there is a problem, correct it and record when it was corrected. “We have a good product, a quality product, but we need to prove it to the consumer,” Bruce says. “This program, in effect, allows us to prove it.”

Bill Dimmick is editor of Ontario Milk Producer.