

Ry MICHEL DOSTIE Editor Translation by Nicole De Rouin



In the Brismer herd

there is no skimping on conformation



or Jean-Guy Brisson, breeding really got underway with the first classification round. He was already interested in the subject, having asked his father to "buy a cow with papers." But there's nothing more motivating than moving from theory to practice!

The experience began with the purchase of six purebred heifers. At the first classification visit, one of them had not been presented to the classifier. Fortunately, he questioned her absence, because Plasse Suzette Senator classified VG. For Jean-Guy Brisson, the future was clear: he wanted to work exclusively with top-notch cows.

Suzette, 1*, is one cow that left her mark on the herd, in particular through her daughter Ylauguv Starbuck Susan, VG, whose descendants include granddaughter Brismer Storm Sue, VG-87 2*, dam to three daughters, including two EX, and, in the family's fifth generation, Brismer Seaver Suelya, EX. The latter has distinguished herself with a production of 39 392 kg of milk in three lactations, with 4.2% fat and 3.4% protein, for BCAs of 240-265-248.

Brismer Nicolas Necky, EX-91 4E 3*, also played a role in the herd's development. In addition to being the first cow bearing the Brismer prefix to classify EX, she demonstrated good longevity, producing until the age of 12. She passed this trait on to her

four daughters, a quartet that includes Brismer Carlton Necka, EX 4E 2*, a cow that produced over 100 000 kg of milk in nine lactations and gave birth to eight daughters, including 1 EX, 2 VG and 4 GP. Another of her daughters, Brismer RM Neckty, VG-89, produced over 60 000 kg of milk and yielded five daughters, including 1EX, 2 VG and 1 GP.

The development of the Brismer herd has also been influenced by Brismer Gibson Guilla, EX-92 5E 2*. Also an example of good longevity, with a lifetime production of over 80 000 kg of milk, Guilla is dam to ten daughters, seven of which were sired by *Duplex* (1 EX, *Brismer Duplex* Gibson, and 6 VG) and originated from the same embryo transfer. One of those embryos was given to the farm's nutritionist and friend of the family, Simon-Pierre Loiselle, when he launched his operation under the prefix Kosta. That embryo became Brismer Duplex Gionta, VG-88-3yr.

Embryo transfers

A constructive response to an outbreak of neosporosis, a disease that induces abortion in cattle, was a major determinant of the herd's development. In 1997, the appearance of this parasite prompted the breeders to focus on embryo transfers as a way to get around the negative effects of the disease. The embryo flushes that followed led to many of the herd's excellent bloodlines, including the daughters by *Duplex* mentioned above.

when an embryo from Brismer Journalist Alphine, VG-87-2yr, led to the birth of Brismer Windbrook Alpha, EX-93, the first cow bearing the Brismer prefix to score 93 points (MS:94) at classification. Among other honours,

Another transfer also proved to be decisive

Brismer herd

Number of animals: 94, with 48 cows in

Average production: 9844 kg of milk, with 4% fat and 3.4% protein

Quota: 57 kg BF/d BCA: 209-214-219

Classification: 11 EX, 22 VG and 14 GP Cropland: Of the 80-ha total, 54 are used to produce forages for the herd, with 30 seeded to an alfalfa-timothy mixture and 24 to corn. The forages are fed in a TMR.

Alpha won Reserve Grand Champion at the Huntingdon-Ormstown-Beauharnois (H-O-B) Holstein Club's Coupe des éleveurs in both 2016 and 2017.

Ferme Bri-Mer plans four or five embryo flushes each year. Lylehaven Fever Leesy, VG-86-3yr, of the Lila Z family, will be one of the embryo donors. Acquired in 2014, at the age of five months, Leesy was selected "because we wanted to choose a member of a worldclass family," Jean-Guy explains.

> Since then, Leesy has gone on to win second Intermediate Heifer at the Brome Fair, in 2014, and given birth to two daughters, one by Doorman and the other by Fitz.

Beautiful cows on the show circuit

Not long after getting their start in breeding, the Brisson/Mercier family took part in their first dairy show. For Jean-Guy, meeting with other breeders at the shows was a motivating factor. They entered only one heifer at the first show, but came away with a



For the owners of the Brismer herd, cows with wide-sprung ribs and excellent udders are the foundation of their selection program.

fifth place, which encouraged the family to pursue their efforts.

The children were the most enthusiastic participants. The eldest, Marie-Philip, set the example at the age of nine, with the 4-H group. She even won a showmanship competition in Toronto, which stimulated the family's interest and encouraged her brother Emmanuel and sister Véronique to follow her lead.

Last year, Emmanuel led *Brismer Dempsey Sugar* to a second-place finish in the Summer Yearling class at the TD Canadian 4-H Dairy Classic in Toronto. The same year, *Sugar* also won first Summer Yearling and Honourable Mention Junior Champion at the Eastern

Ontario / Western Quebec Championship Show (EOWQ), and was named Reserve All-Canadian 4H Summer Yearling.

Jean-Guy Brisson recalls that the family also "got goosebumps" in 2012, when *Brismer Damion Jasmine*, led by Véronique, won the Summer Yearling class of the TD Classic. Earlier in that season, *Jasmine* had won the Junior Championship in Huntingdon and finished the year with a number of titles, including Reserve All-Canadian 4-H, Honourable Mention All-Canadian and Honourable Mention Tout-Québec.

The breeders no longer need urging to show one of their animals in an important event when the opportunity arises. Such was the



In 2016, Brismer Dempsey Sugar, finished second in the Summer Yearling class at the TD Canadian 4-H Dairy Classic in Toronto and was named Reserve All-Canadian 4-H Summer Yearling.

case this year, when *Brismer Avalanche Neige* finished third Senior Calf at the Supreme Dairy Red & White Show. The competition in that class was quite strong, since the top two animals were named Junior Champion and Reserve Junior Champion, respectively.

In 2015, the Brismer herd won the Junior Exhibitor banner in Ormstown, and, in 2016, won both junior banners at the H-O-B Holstein Club's show. The farm was also the recipient of the Club's Silver Breeder award, created in 2017, that was presented to seven of its members who have raised over 25 Excellent cows.

Specific selection criteria

When selecting sires, Jean-Guy Brisson focuses on two main conformation traits. He insists that the bulls "have good scores for ribs and udders." A bull that is barely positive for those traits will automatically be rejected.

In addition to these two primary points, a potential sire must have a Conformation proof of at least +15 and have good numbers for dairy traits, a somatic cell score of 2.9 or less, and good marks for fertility. The same criteria apply for young bulls with genomic proofs, which are used for 70 per cent of their matings.

As for the females, to keep their place in the herd, they must score at least 83 points at first classification. For a number of years now, longevity has also been a consideration for selection, such that the average age of the cows in the herd is now five, with 50 per cent of them at their third calf or more.

Bri-Mer, a family farm

On this farm in Sainte-Barbe, in the Montérégie region, Jean-Guy encouraged his parents, Yvette and Laurent, to develop the Ylauguy prefix. When Jean-Guy and Betty Mercier united their destinies and acquired the family farm, they opted instead for the Brismer prefix. In developing the herd, Jean-Guy says he benefited greatly from the advice of friends and experienced breeders in the region, in particular Alfred Latulipe (Mapleley) and Germain Leduc (Lauduc).

On a day-to-day basis, Jean-Guy Brisson takes care of the milking with his son Emmanuel, who is also in charge of feeding. Betty takes care of the calves, in addition to the bookkeeping, and sees to the cleanliness of the premises and does some of the field work, because she has a soft spot for tractors. Most of the field work is contracted out however.

For the future, which depends on the children's interest, the breeders hope to earn a Master Breeder title and breed and show a class winner at a major dairy event.



The team behind Ferme Bri-Mer: Betty Mercier and Jean-Guy Brisson and their three children, Marie-Philip, Emmanuel and Véronique.



BY MICHEL DOSTIE Editor Translation by Nicole De Rouin



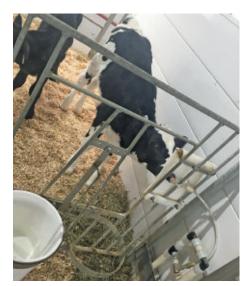
For the Silverstream herd a nursery reinvented



nce over the threshold at Ferme Anderson inc., in Howick, in the Montérégie region, Mark Anderson and Jodi Wallace lead their visitors to the nursery. They're convinced that heifers should start life in the best possible conditions, and this new facility delivers on that objective.

Jodi, Mark's spouse, is a veterinary practitioner at the Ormstown Veterinary Hospital. She has developed an expertise in calf health and rearing and regularly gives conferences on these topics. Their nursery is a reflection of all her knowledge of the subject. The facilities promote rapid growth and excellent health, say the breeders, and ensure a first calving by 22 months.

Immediately after birth, a newborn calf is transferred to a heated incubator for the first hours of its life, to dry its coat and receive colostrum. The calf is then transferred to a pen with one or two animals of the same age. Acidified milk is fed to appetite through nipples that are connected to tubing installed in the floor, alongside another tube that circulates hot water to keep the milk at a temperature of 22°C. As Jodi explains, this temperature promotes good milk intake without leading to the gorging that may occur



In this temperature-controlled nursery, acidified milk is circulated through tubing installed in the floor, ensuring optimum growth and excellent health in the heifers.

with warmer milk. After weaning, the heifers are housed together in a free-stall barn until they calve.

Acquiring a new herd

The Silverstream Holstein herd is relatively young, and it wasn't until Mark's arrival that its development really got off the ground. Mark has been in charge of herd management since graduating from Macdonald College, in 1992, with a diploma in Farm Management Technology. Two years later, he registered the herd.

Mark's friends, in particular Mac McRae, of Raeburn Holsteins, were the ones who introduced him to the advantages of classification. In 2000, the results of the initial round, with first-calf heifers, made Mark especially proud. Firstly, two animals classified VG, one with 87 points; and secondly, an average of 81.5 points for a first classification was a record score for the Huntingdon-Ormstown-Beauharnois (H-O-B) Holstein Club. Within two years, the entire herd had been classified.

The herd was doing well when an outbreak of neosporosis, caused by a stray dog, affected the heifer barn, infecting 90 per cent of the animals housed there. At the time, Scott and Marina Templeton, Master Breeders and owners of the Templedale herd in Howick. were planning their retirement. When the Templetons heard about the Anderson's predicament, they thought they might move forward on their plans and sell them their animals. In Mark's view, it was a clear and timely opportunity to purchase animals with high genetic value. The four breeders were already acquainted and had formerly bought a few animals together. The sale was finalized at the end of 2012, and the animals were integrated into the Silverstream herd at the start of the new year. The transaction also allowed Scott Templeton to visit the Ferme Anderson inc.

Number of animals: 220, with 95 cows in

Average production: 10 500 kg, with 4.1%

fat and 3.6% protein **BCA**: 231-244-237

Classification: 3EX, 23 VG and 55 GP.

Farmland: 476 hectares

Maple stand: currently 4600 taps, but 7000 are planned for spring 2018.

Silverstream farm regularly and to play an advisory role there, a gesture greatly appreciated by Mark.

Today, the herd still includes 25 cows bearing the Templedale prefix, and 65 heifers are Templedale descendants. One of this latter group has an interesting history. Acquired as a newborn, *Templedale Mogul Paris*, was in extremely poor health, but Mark wanted to give her a chance and brought her home straight away. Since then, she has delivered a first-lactation milk yield of 10 163 kg (251-267-241), and has produced three classified daughters, 1 TB and 2 GP, and two heifers and a few bulls, including *Silverstream Porter*, a young bull with a GPA LPI of 3301 that is awaiting proof at Semex and has already sired 314 registered daughters.

The herd also includes *Templedale Shottle Donna*, EX 92 2E, a high-producing cow whose fourth lactation yielded 15 376 kg, for BCAs of 293-245-272, and her full sister, *Templedale Shottle Deb*, EX 3E. Their dam, *Templedale Goldwyn Jojo*, EX-92 3*, laid the groundwork for them, with 10 daughters (2 EX, 4 VG and 4 GP) and a yield of 43 053 kg of milk in three lactations.

From the original herd, *Silverstream Ratio Fallon*, EX-91 2E 2*, the first Silverstream cow



Templedale Mr Top Petite, VG-87, is in excellent company, with, to her left, Jodi Wallace and Mark Anderson, their four children, Sean, Kristen, Jonathan and Cloe, and the dog, Lea. To her right are her breeders, Scott and Marina Templeton.

to classify Excellent, also left her mark, in particular through her daughter *Silverstream Nicolas Francesca*, EX, and her grand-daughter *Silverstream Stormatic Fancy*, VG-86-2-yr.

Previously, the Anderson farm was also a coowner of *Tramilda-N Baxter Emily*, VG-2yr 22 *, with Michel and Alcide Boisvert. Emily is dam to Genervation Epic, and one of his daughters, *Silverstream Epic Shelley*, VG-3yr, has kicked off a successful milking career, with her second lactation projected to yield 13 054 kg of milk, for BCAs of 275-286-280.

Income-oriented selection

Because milk is the farm's main source of income, Mark Anderson greatly appreciates the Pro\$ index, and his herd is ranked 72th on that list in Canada (08/17). As Jodi Wallace explains, their selection program was already income-oriented; they began working that

way well before the new index was introduced.

With the focus on production, the selected sires, proven or genomic, must have a milk index of at least 1500, but ideally 2000. Their selection program also targets various health traits, in particular the somatic cell score, which Mark considers a reliable selection index; a score of 2.8 is his upper limit. In terms of conformation, a great deal of attention is paid to feet and legs. Feed efficiency is another of the tools they use. In fact, says Jodi, research in that field indicates that a new index will likely be developed.

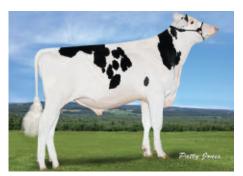
Embryo production on the farm was halted a year ago. Since the farm already has plenty of embryos in reserve, the herd's needs are satisfied for the time being, and the least productive cows (25 per cent) are used as recipients. In Mark's view, all the other cows

are of more value for reproductive purposes. The couple has thus decided to invest instead in sexed semen.

A new free-stall barn

The farm was originally located in the village of Howick, along Route 138. The owners had already made plans for new buildings, but since neighbouring land became available at the same time, the Anderson family decided instead to invest in acquiring more farmland. Eventually, however, they were forced to think about housing, and, in 2008, a new barn was built on one of the farms they had purchased. The free-stall facility is outfitted with 102 freestalls and a double-eight milking parlour. The transition went relatively smoothly, Mark recalls, extending over a period of two to three years, and only four or five of the older cows were unable to adapt.

The new facility addresses another of Mark and Jodi's concerns, which is milk quality. In 2013 and 2014, Les Producteurs de lait du Québec awarded the farm a certificate of Great Distinction.



Silverstream Porter, a young bull with a GPA LPI of 3301, is awaiting proof. Available through Semex, Porter has already sired 314 registered daughters.

Six generations of Andersons in Howick

The Anderson family farm in Howick has been in existence since 1821, and Mark and his brother Danny are the sixth generation to operate the farm, in partnership with their father Robert. The brothers' spouses, Jodi and Dawn, as well as their mother, Penny, are also involved in the business. Mark began helping with the herd from the age of 12, when his father was suffering from farmer's lung. His mother insisted, however, that that work could not impinge on her son's school work.

Mark takes care of the herd, with the help of his spouse and their four children, while his brother sees to the field work, maintains the machinery, and feeds the animals. Their father devotes most of his time to the maple stand.

The farm covers 476 ha and produces a number of field crops, with 304 ha seeded to corn, 101 to soybeans, 40.5 to barley, and 30.5 to grass and hay for silage. A part of the harvest is used to feed the animals a TMR, comprising corn silage, straw, semi-dry silage and a supplement. The little hay that is produced goes to the calves. Year after year, the corn silage harvested in the fall is fed only as of Christmas, when it has had ample time to ferment before being consumed.

BY MICHEL DOSTIE Editor Translation by Nicole De Rouin



Biosecurity

Holstein Québec is taking the initiative



hile the risks of disease have always been present, the current source of concern is the bacteria *Salmonella* Dublin, which is bringing the issue of biosecurity to the forefront for breeders. As a result, Holstein Québec has decided to take a proactive approach in supplying its members with an information kit on the subject, through the Association's 26 Holstein clubs.

Producers have long been aware of the consequences of poor animal health on their operations; they know that besides a loss of revenue, they will also have to pay more for veterinary care and medication, in addition to bearing the stress of the situation. But there is a big difference between knowing about the inconveniences of disease and taking the steps required to protect against infection. It was to bridge that gap that Holsten Québec resolved to put together this biosecurity kit.

Among the myriad diseases that can infect dairy herds today are paratuberculosis, digital dermatitis, Staphylococcus aureus mastitis, leucosis and neosporosis, to name but a few. Furthermore, some of them, such as salmonellosis, cryptosporidiosis and ringworm, are transmissible to humans, and so represent a public health issue.

As event organizers, producers who open their doors to visitors and hold barn days, have no desire to infect their herds with new diseases, nor do they want to spread any diseases that may already be present in their herds, much less transfer a zoonotic disease to their visitors. (A zoonosis is a disease that can be transmitted to humans by vertebrate animals.) Likewise, visitors certainly have no desire to bring pathogens home from another farm. Hence prevention is the only way to avoid the problem.

Pathways of transmission

A number of factors contribute to the spread of disease. First, an animal may become infected when exposed to a pathogenic organism. The main cause of this type of transmission is most certainly contact with another animal, whether that animal shows

signs of disease or not. In fact, animals frequently carry diseases without exhibiting symptoms, as is often the case with *Salmonella* Dublin. This pathogen can also be transmitted by people who carry it on their shoes, clothing or hands. Contaminated equipment, feed, food and vermin can also be vectors of disease.

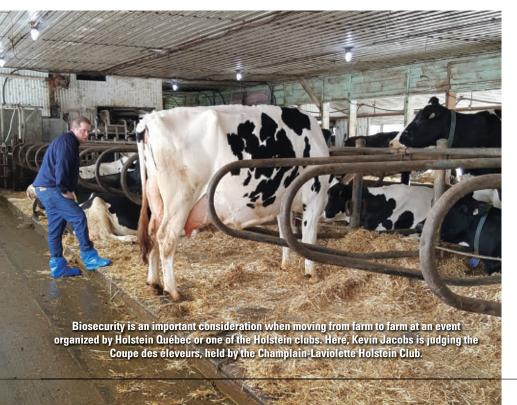
All animals are not equally likely to fall sick however. To become infected, an animal must be susceptible to the pathogen. An animal that has suffered previously from the same disease may be protected from it. Likewise, an animal with a good immune system will be able to avoid or even fight off infection.

Among the indications that an animal is suffering from illness, the most obvious are a loss of appetite, reduced water consumption, decreased milk production, listlessness, fever, diarrhea, coughing or respiratory difficulty, nasal or ocular discharge, or nervous signs, such as tremors or loss of balance.

Buying and selling animals

Buying animals is the main risk factor for the introduction of infectious diseases in a herd. The danger is even greater if the buyer opts for animals from unknown sources. Moreover, the higher the genetic value of the herd, the greater the economic impact of an infection, and this applies to many of the 4800 Holstein operations in Quebec.

Holstein Québec's biosecurity initiative includes updating the leaflet on the buying and selling of animals that was first put together a few years ago, when biosecurity was not as prominent as topic as it is today. The recommendations for disease prevention measures will be renewed to make them more accessible and a leaflet will be



distributed to members outlining the five key steps to limiting the spread of disease:

- obtain information on the background of the herd;
- submit the animal to a medical examination, screening tests and vaccination follow-up by a veterinarian;
- obtain medication records:
- use a transport provider that keeps vehicles and equipment clean;
- implement an isolation protocol and monitor animals for signs of disease.

Establish a biosecurity program

It was thus with the help of the MAPAQ and the participation of Dr. Luc Bergeron, through the Salubrité, biosécurité, traçabilité et santé et bien-être des animaux program, and the collaboration of the Association des médecins vétérinaires praticiens du Québec (AMVPQ) and Dr. Marie-Ève Paradis, and that of the Faculté de médecine vétérinaire (FMVQ) and Dr. Gilles Fecteau, in addition to input from veterinarian Jean Durocher, at Valacta, and agronomist Chantal Fleury, at Les Producteurs de lait du Québec, that Holstein Québec, under the supervision of Geneviève Drolet, was able to put together its biosecurity information kit.

Holstein Québec had a number of reasons for wanting to undertake this project. There is obviously the risk of spreading infectious diseases, in particular when animals are gathered in one place, and the impact of disease on farm profitability, but there is also the danger of a major health crisis in the dairy sector jeopardizing the positive nutritive image associated with dairy products. The Association has also shown that the high value, both genetic and monetary, of Quebec's dairy stock is well-established, and that it must be preserved if breeders here are to continue to develop the full potential of their herds. Promoting the information kit is also a part of the project, and to that end Holstein Québec and its affiliate clubs are organizing open-house events, barn days, field days, training activities and auction sales. In some cases, the activities bring together animals from different sources and of possibly different health status. Adopting a more proactive approach to biosecurity becomes an essential tool in the coordination of these activities. Right now, the breeders who are managing the clubs as volunteers feel ill-equipped to take action and are looking for an information package that

Organizing an open-house event

Offering to hold an open house on a farm comes with a number of responsibilities. To ensure that those involved are better informed, Holstein Québec will circulate its recommendations at conferences. The first of these recommendations is that breeders ensure the collaboration of their veterinarian, whose expertise in the field and in-depth knowledge of the herd will be of valuable assistance.

During the planning process, a person responsible for biosecurity will need to be designated. The organizing team will then need to determine access routes, parking areas, prohibited areas and circulation routes, all of which will need to be kept clean throughout the event. Staff will also need to be allocated to monitor the movement of visitors on the site.

It is also important to be especially vigilant where contact between animals is concerned. Should people be permitted to touch the animals, or feed them? Although feeding the animals is known to be a positive experience for visitors, the animals designated for that purpose will need to be chosen with care. Likewise, any animals that are sick or vulnerable to stress, in particular very young calves and recently freshened cows, should be excluded.

Provisions will also have to be made to implement biosecurity measures at entrances and exits, such as having visitors sign a logbook and informing them of the need to wear clean clothing. Footbaths and disposable boots should be put at their disposal, or they should be asked to wear washable boots, in which case a bucket, hose and brush will need to be provided to avoid contaminating the footbath with organic matter and risk contributing to the spread of disease. At exits, boots should be washed and disposable boots recuperated. Lastly, hand washing is good public health practice that also protects visitors. Cleaning wipes and a disinfectant may be provided if necessary.

Finally, to protect the health of visitors, it is advisable to avoid offering food or beverages in areas where animals are kept and never serve unpasteurized milk. Parents should also be discouraged from allowing their children to bring toys or soothers onsite. As a final point, the organizing team will need to make sure all these directives are posted in full view of visitors.

contains not only the material but also a protocol that will enable them to use it effectively.

Finally, since the Biosecurity for Canadian Dairy Farms National Standard is in place, Holstein Québec aims, through this project, to develop and adapt tools for the application of these standards in accordance with the proAction program. Moreover, Holstein Québec's initiative will help communicate the different biosecurity recommendations made by the MAPAQ, the AMVPQ and the FMVQ.

Promoting the kit and biosecurity measures

This initiative by Holstein Québec also involves organizing conferences that could be presented at breeder meetings or at activities organized by the different clubs. Among others, the document will highlight the following elements:

- the need to implement biosecurity measures at public events;
- the spread of disease in the context of such events;
- general recommendations for producers who plan to attend such an event with animals;
- signs that may indicate that an animal is ill;
- recommendations for event organizers:
- quidelines for the purchase of animals.

An effective action plan

The primary purpose of this project, writes Holstein Québec, is to facilitate the implementation of biosecurity measures. Without this approach and the accompanying kit, many members might be discouraged by the complexity of the measures and abandon their efforts, putting themselves and their





When a large number of visitors are taking part in an event, implementing biosecurity measures at entrances and exits is important. Here, at the 2017 Picnic, everything needed to wash and disinfect footwear was easily accessible.

herds at greater risk of contamination. This kit will help simplify the process and promote more extensive implementation of biosecurity practices.

This project will have a collective impact, as each of the 26 clubs is offering two to four activities per year, expected to draw about 100 participants per event. The dairy producers organizing these events will demonstrate greater concern for biosecurity, and in doing so, will set the example for others. The spillover effect will help raise awareness among producers. Ultimately, this preventive action will touch thousands of consumers, offering reassurance as to the quality of the dairy products they purchase. Hence, the project will not only significantly impact producers, but will also influence the many stakeholders who visit dairy farms on a

regular basis. Moreover, other breed associations will also be able to use the kit, further increasing the scope of the program.

Over time, the project will enable the dairy sector to:

- identify the risks of contamination and implement appropriate screening measures;
- reduce the prevalence of certain diseases;
- · control the spread of disease;
- educate stakeholders in the principles of biosecurity;
- establish these measures as standard dairy farm practice at activities that involve farm visits or animal movement.

As a breed association that organizes activities that present a risk for the spread of disease, Holstein Québec fully intends to take a leadership role in implementing a biosecurity program.

Contents of the information kit

The user-friendly kit prepared by Holstein Québec will include:

- leaflets presenting good biosecurity practices;
- explanatory posters on various topics related to biosecurity;
- signs to identify parking areas, controlled access zones and restricted areas:
- a visitors' logbook.

The kit will also include the materials required to control the spread of disease: a mat, a disinfectant, a bucket, a brush, barricade tape to close off different areas, plastic boots, garbage bags, alcohol-based hand sanitizer gel, and disinfectant wipes.



At an open-house event, wearing disposable or washable boots is an effective safeguard against the spread of disease.