

The Welfare of Dairy Cattle

Over **one million dairy cattle** are raised on farms in Canada under a variety of conditions. Dairy cows in BC have freedom of movement within concrete pens and sleep in bed stalls usually padded with sand, sawdust, mattress or a rubber mat. Unfortunately, concrete floors and rough stall surfaces can cause injuries to cows' legs and feet and many cows do not have any access to pasture.

Lameness

The most common injuries to dairy cows are bruising or ulcers on the soles of their hooves (pictured to right) and sores on their legs caused by rubbing against concrete bed stalls. These injuries cause animals to become "lame," which means they have difficulty walking. Pasture or other soft, dry surfaces can help reduce the risk of these injuries.

Lameness is one of the most serious welfare concerns for dairy cows because it is painful, and unfortunately it is also very common. Research demonstrates that about 25% of dairy cows at peak lactation in BC are clinically lame – on some farms this number can escalate to over 50%. Animal welfare scientists are working hard to find ways to detect lame cows early so that they can be treated. They are also working with farmers, veterinarians and other professionals to find new ways to design and manage dairy barns to prevent cows from becoming lame in the first place.

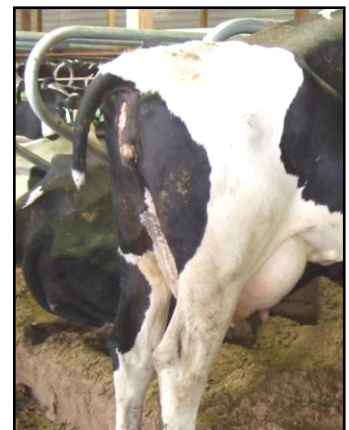


Transition Period Diseases

Dairy cows give birth every year in order to continue producing milk. The transition from pregnancy through giving birth to producing milk is full of changes and challenges, and has been aptly named "the transition period". Not surprisingly, some dairy cows cannot cope with all of these challenges and illness is common during the transition period. This vulnerability to disease is largely due to the incredible energy demand that lactation places on their bodies. As much as 30-50% of cows become sick with metabolic or infectious disease during this period. For this reason, it is critical to ensure that cows have good access to high-quality feed at this time. Canada's Code of Practice for the Care and Handling of Dairy Cattle recommends that 2 feet of space be provided per cow at the feeder, and ideally an entire group of cows should be able to eat at the same time.

Tail Docking

Painful procedures routinely practiced on farms also raise concern for the welfare of dairy cattle. For example, many dairy farmers have decided to routinely amputate the tails of their calves at a young age. This has generally been performed without an anaesthetic or analgesic, despite the fact that the procedure causes acute pain during the procedure and may also leave the animal with long-term chronic pain. It was traditionally believed that removing the tail (which can become covered in manure) contributes to cleaner cows, reduced risk of udder infections and improved working conditions for farm staff – but research has found no benefit of tail docking in these regards. Routine tail docking is now considered unnecessary and must not be performed in Canada according to the Code of Practice for the Care and Handling of Dairy Cattle.



Welfare of Dairy Calves

Calves are separated from the mother within 24 hours after birth and are raised by farm staff. There are benefits and drawbacks to this practice. Research has found that there are benefits to both cow and calf if they are allowed to stay together. For example, mortality and disease incidence are lower when the calf stays with the cow. However, if the pair is separated before bonding, the stress caused by their separation is much lower.

Feeding and Weaning of Calves

Calves are born without a fully functioning immune system, and they depend on colostrum (the first milk a cow produces after calving) to provide a boost of immune proteins to protect them until their own immune system develops. If a calf does not drink at least 4 litres of high quality colostrum within 12 hours after birth, she is left susceptible to disease, a significant welfare concern.

The welfare of calves depends greatly on how much milk they drink and how they drink it. Dairy calves are typically given about 4 litres of milk per day divided into two feedings: 2 litres in the morning and 2 litres in the evening. In contrast, calves would nurse from the cow 5 - 10 times per day and drink about 10 litres of milk if left with the cow. It is common practice to feed milk from a bucket but calves are strongly motivated to suckle. Accordingly, feeding at least 8 litres of milk per day from an artificial nipple can substantially increase calf welfare.



Young calves are commonly housed individually to reduce the risk of disease spreading between calves, and to ensure better control over feeding. However, individual housing limits the calf's opportunity to socialize and exercise. Alternatively, housing calves in well-managed small groups (fewer than 10) can provide opportunities for these activities without compromising their health.

New technology like computer-controlled calf feeders are making it possible to feed controlled amounts of milk to calves housed in a group, ensuring each animal receives a full daily ration.



At one point, all calves must be weaned from milk and make the transition to eating solid food. This is likely the most stressful event for a calf. Typically at the age of 6 - 12 weeks (much earlier than it would naturally occur), the milk is taken away abruptly. It has been a common belief that if calves are provided with less milk early on, they will start to eat solid food earlier, making it easier for them to adjust to weaning. However, feeding less milk causes other welfare issues such as hunger, slower growth and increased risk of disease. Weaning can be performed more humanely by weaning calves gradually – i.e. slowly reducing the amount of milk fed over several days.

Dehorning and Disbudding

Female dairy calves are dehorned in order to prevent injury to each other or to people later in life. Using a procedure called "disbudding," the small emerging horn bud is prevented from growing by burning the tissue with a hot iron or a caustic chemical paste (pictured to right).

Research has shown that pain caused by these procedures can be eliminated by giving calves a combination of a sedative, local anesthetic, and analgesic. In Canada, it is now required that at least some kind of pain control is used when dehorning or disbudding according to the Code of Practice for the Care and Handling of Dairy Cattle.



For more information on the facts of milk production, please read our dairy production factsheet.