

# **STRESS**

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It seems that stress is a timely topic for beef producers at this time of year as calving is happening or is approaching. However this article will talk about stress in cattle.

**Tradition:** It seems traditional for cow/calf producers that most processing of cattle happens once a year. Very often that would be one day in the fall when all cattle are rounded up and brought to the handling facilities. Cows are examined for pregnancy. They are given a vaccine and dewormer if pregnant and culled if not. Calves are weaned, vaccinated, dewormed, dehorned and castrated. Although there are some practical reasons to reduce the number of times cattle are handled, there are some compelling reasons to consider spreading out these procedures.

**Impaired Immune System:** From a biological standpoint spreading out those procedures has some advantages. Weaning is stressful for both cows and calves. Stress is immunosuppressive. That means the animals' bodies will not respond well to the vaccine they are being given. This is undesirable for many reasons. Firstly it is a waste of money but more importantly people will believe animals are well protected from common viruses when in fact their poor or absent response to the vaccine will leave them susceptible to disease. This false sense of security can be a problem when buying, selling or showing animals. With reduced immune function calves are also more likely to get sick during or after the weaning process.

Stress also reduces the ability of the body to heal. Castration and dehorning sites are more likely to get infected and reduce cattle performance while they heal.

**Stress Reduction in Calves:** With this information, reduction of stress would seem to be of paramount importance. How can stress be reduced? Each farm is different so not all the following suggestions will work on every farm. I would challenge each of you to think about how you can get calves through this critical period with the minimum amount of stress possible for your operation.

**Castration and Dehorning:** This is a good time of year to start thinking about change. Some of these procedures such as castrating and dehorning can be done within the first month of life. The 2013 Code of Practice for beef production suggests castrating and dehorning calves as early as possible. This may not be possible for all bulls on all farms since many beef producers sell or keep some bull calves for future herd sires. However is there an opportunity for early castration for bulls from cows in the bottom half of the herd (and/or bull calves with horns)? Some advantages of early castration and dehorning include smaller wounds to heal, physically smaller calves to work with, quicker procedure, increased operator safety and most importantly reduction of stress on the calf. This would appear to be one of the classic win-win-win scenarios. Win 1: the calf has less stress and

heals from the procedure quickly. Win 2: the producer can get the job done quicker, easier and cheaper. Win 3: It allows us to tell a good news story to our consumers about how progressive the industry is in trying to promote practices that are best for cattle health and welfare.

**Selection of Replacements:** Another reason to think about processing calves now is because it may influence bull and replacement heifer selection. The easiest way to dehorn a calf is to breed your cows to a double polled bull. This way no calves are born with horns. Selection of replacement heifers may also be influenced by the absence of horns.

**Stress Reduction in Cows:** To ensure cows respond well to vaccination we can reduce stress by vaccinating them after they have calved and before they are bred. At that time it is possible to use a modified live vaccine (MLV). These vaccines are often less expensive and often give better immunity. It is important to note that vaccine manufacturers have spent a lot of effort in recent years to improve vaccines. Some MLV vaccines are now safe for use in pregnant cows IF they were properly vaccinated as heifers. Please talk to your veterinarian for more advice on this as abortions can happen when pregnant cows are vaccinated with MLV vaccines if they are not properly set up with booster shots as heifers.

**New Plan:** A new tradition in Ontario may be to gather up all the cows and calves before the new breeding season and after all the calves are born so that the cows can be vaccinated with a MLV vaccine and the calves can be castrated and dehorned as necessary. In the fall calves can be weaned from the cows with less stress by using a 2 stage weaning process or fence line weaning. After weaning the cows can be examined for pregnancy and dewormed as necessary. Two weeks after weaning the calves can be vaccinated with a MLV vaccine and dewormed as necessary. I believe with a bit of ingenuity and a willingness to try something new, improved animal health, decreased expenses, and better public perception will result.

**Beef Code of Practice:** I would highly suggest reading the 2013 Code of Practice for the Care and Handling of Beef Cattle. Follow this link:  
[https://www.nfacc.ca/pdfs/codes/beef\\_code\\_of\\_practice.pdf](https://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf).

Most of the information from this article can be found there along with many other helpful tips like "Calving: When and How to Help".

Enjoy the spring!