

CALVING EASE

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Vaccinating During Winter Weather

- **Vaccinating calves during winter weather is an effective risk management tool to suppress the treatment rate for respiratory illness.**
- **Vaccines need special handling when used in sub-freezing weather in order not to compromise effectiveness.**
- **Build some flexibility into your vaccination schedule – under extreme weather conditions it may be cost effective to reschedule giving shots.**
- **With weather-stress added to other stressors be careful to manage all stress events carefully.**
- **Vaccinate only healthy calves – have a protocol for rescheduling vaccinations for sick calves.**

Stick with your vaccination program

The pathogens that cause respiratory illness do not go on vacation just because of cold weather conditions. We vaccinate as part of a risk management program that should be in place all year. As weather conditions change from hot extremes to below freezing temperatures we just have to work smarter.

Vaccine handling procedures should be seasonally appropriate

Do you recall the advice for hot-weather vaccine handling? Keep the vaccines in a cooler with an ice pack and don't leave them in the direct summer sunlight.

During sub-freezing weather it is still a good idea to use the same insulated cooler. Only substitute a source of warmth for the ice pack. I like to use one or more small plastic bottles with a screw top (e.g., milk or soda bottle) filled with straight hot tap water.

Dress appropriately. That is, wear insulated overalls or a coat that has a handy pocket for the vaccine. Pull out the bottle, fill the syringe, and pop the bottle back in that nice warm interior pocket in your coat or coveralls. It's not cost effective to try to create immunity by injecting a vaccine that has been frozen and thawed.

Skip those days when the vaccine freezes in the needle

If you have calves housed outdoors as I did for many years there are days when the wind chill takes the temperature into the extreme low range. On a day when the vaccine freezes in the needle before you can inject it? Better to wait for a warmer day.

Best management practices suggest having a regular schedule for administering vaccines. That's the way we can be sure the vaccinating gets done. However, it is also good management to have some flexibility. If you usually vaccinate on Tuesday's and move weaned calves to transition housing on Wednesday's maybe swapping days would work. Or, bed today and vaccinate tomorrow.

Add cold weather stress to your stress management planning

We all know that stress conditions act to limit the effectiveness of vaccines as we try to create stronger immunity in our calves. Stressors that come into play among our preweaned calves, regardless of the weather, include changes in feed and/or housing, in feeding schedules, dehorning, and sickness. Extremes in environmental conditions also create stress – very hot and very cold.

Do what you can to spread out stress events a little more during sub-freezing weather. Remember that calves are using up a lot of energy under these conditions just to maintain their core body temperature. In order for a vaccine to create immunity the calf has to have extra available energy for her immune system beyond maintenance. Each stress event sucks up extra energy, too. For example, adding a few extra days between dehorning and vaccinating could significantly boost the vaccine's effectiveness.

Vaccinate only healthy calves

If we are already treating the sick calf with antibiotics put her on the “skipped” list. I maintained weekly lists of calves to be vaccinated. When I skipped a sick calf one week I simply added her number to the next week's list. Check with your veterinarian about when to vaccinate calves that have been treated with sustained-release drugs.

I may have been overly conservative on vaccinating my calves. If I had a calf that was off-feed and not sick enough to treat I still carried her over to the next week's vaccination schedule. My reasoning was that her energy supply was compromised. She might not have enough energy beyond maintenance to respond well to the antigens in the vaccine.

If you know of someone that doesn't currently receive **Calving Ease** but would like to, tell them to **WRITE** to **Calving Ease**, 11047 River Road, Pavilion, NY 14525 or to **CALL** 585-591-2660 (Attica Vet Assoc. office) or **FAX** (585-591-2898) or **e-mail** calvingease@rochester.rr.com with **Subscribe** as the subject. Back issues may be accessed on the Internet at either www.atticacows.com or www.calfnotes.com and clicking on the link, Calving Ease.

Remember to Google “Calves with Sam” blog for profit tips for calf rearing.