

The best defence is a good offence: Creating the right preventative strategy for your farm

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I'm going to start by stating the obvious: Having sick cattle is costly. I wanted to talk about it because it is not just the dollars and cents for the cost of treatment. There will also be a cost to cattle productivity when they are sick that can be measured in either growth and finish or reproductive performance. There is also a significant cost in time that some people forget to factor in unless they are paying staff to sort and treat cattle. This can be calendar time in hours or days of labour, but also should include time spent in stress or worry especially if you are treating multiple animals. So now, looking at the full picture, sick cattle can cost you dollars, productivity and time.

So, how can we reduce this cost? The best way is to create a tailored preventative strategy for your cattle operation. The components of this strategy will depend on the number of cattle you run, your production type (cow-calf, background, feedlot or mixed), cattle source (home grown, locally sourced or auction), your herd status (open or closed to new animals), your facility, feeding strategy, and where you want to improve. I can break it down further to say that each strategy can have preventative medicine and preventative management components. What I mean by this will become clear as we work through an example.

Let's start with what you want to prevent and then look at some options. I will pick a disease to discuss as an exercise, but this is where having a good working relationship with your veterinarian becomes very important. It is a good investment to set up a yearly meeting or discussion with your veterinarian to review your current preventative strategies, the areas in which you would like to improve and set some achievable goals. They can help you come up with the best strategy for your operation, or confirm that you are already on the right path. You may be the exception, but in my experience, there is always room for improvement.

With the change in season, I'm going to talk about pneumonia. A complete pneumonia preventative strategy will include a preventative medicine component and a preventative management component. **Figure 1** is an illustration of this concept. The preventative medicine component for pneumonia most often involves vaccinating cattle against the most common pneumonia disease causing agents, which will be viruses and bacteria for the most part. In **Figure 1**, this is under 'Prevention' in the 'Host Immune System' category. Vaccination helps the immune system recognize and attack these disease-causing agents, resulting in either the body getting ride of the infection or a less severe case of pneumonia. There are many different options for respiratory vaccines (intranasal, modified live injectable or killed injectable) and vaccine schedules (vaccination at birth, at weaning, before shipping, on arrival, before breeding, etc). This is where your veterinarian can help you decide which option is best suited for your operation. The preventative management component for pneumonia in **Figure 1** is under 'Prevention' in both the 'Disease agent' and 'Environment' categories. This is because, no matter how well the immune system is prepared for an attack, it doesn't have a chance if it is overwhelmed by the number of 'bugs'

it is exposed to or the immune impairment that results from high stress. You can reduce the number of 'bugs' an animal is exposed to in a few ways, such as isolating new animals for a set period of time before introduction into the herd, identifying and isolating sick animals into a hospital pen early to prevent exposing other animals, etc. You can reduce immune impairment due to stress in a number of ways as well, such as providing good air quality and movement, humidity venting, adequate bedding and space, adequate bunk space, good feed, good access to clean water, and more. In **Figure 1** this preventative strategy mostly covers the area under 'Prevention' but I would also let it extend to include the area under 'Early Signs'. Having a good monitoring and treatment protocol can help you get on top of pneumonia cases before they become severe, go chronic or become an outbreak in your herd. The goal is to have the fewest cases get to the 'Full Disease Progression' category as possible.

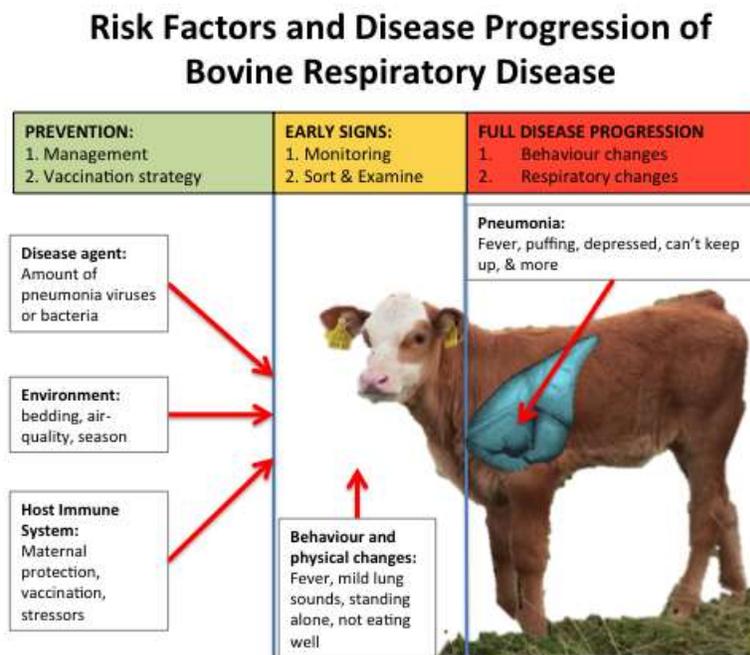


Figure 1: Risk factors and disease progression of BRD as an example of disease preventative strategies

I have covered an example of things to consider in a pneumonia prevention strategy. It was done as an exercise but the technique can be applied to any area in which you would like to improve, such as calf scours, lameness, reproductive losses, parasite control and more. My examples were non-specific since I was not targeting a particular production type or farm. If you are going through this exercise yourself, I suggest making it explicit and specifically tailored to your operation. Often this will include creating a timeline of cattle movements or events on your farm and adding preventative strategy checkpoints.

If you take nothing else from this article, remember that preventative strategies include both a medicine and management component, and that creating a preventative strategy can help you reduce the time, productivity and money costs of treating sick cattle. I'll finish up by saying that, if you are not doing so already, you should consider implementing a record keeping plan (calendar, notebook, spreadsheet, management software) and review it periodically. No matter what action you take to make improvements in your operation; it will be very hard to see if it's working if you don't have good records. It will take time to see the result of a change on the farm, talk to your veterinarian about setting a reasonable timeline to determine if you are happy with a new protocol. Remember, an ounce of prevention is worth a pound of cure!