



From the desk of Dr. Stephanie Roggenbuck
October 1st, 2015

During the last few weeks, I have had several questions about pneumonia especially in younger calves. Our top priority is prevention. These 4 items are critical in being successful at preventing respiratory disease in our young stock:

- Adequate good quality colostrum / Sound Nutrition through stressful events
- Proper vaccination
- Adequate ventilation
- Biosecurity

So let's expand a little on these. A calf's energy requirements increase dramatically when the immune system is exposed to bacterial/ viral challenges. Feeding an inadequate amount/quality of colostrum is going to create difficulties when facing these challenges due to what we call failure of passive transfer (FPT). If you have concerns about FPT leading to your calves' pneumonia, there's an inexpensive blood test that can tell us if you're calves are receiving/absorbing enough colostrum. Blood samples can be collected at 3-4 days of age and we can run these at clinic. Results of 5.5 gm/dl or less lead to increased incidence of respiratory and other diseases. A good goal is to have at least 80% of tested calves over 5.5 gm/dl.

A huge factor I have seen lately is the quality of ventilation in the calf barns. When I first walk into any facility I like to watch and listen how the calves are breathing...

- Are they standing there comfortably or are their sides rapidly moving in and out?
- How does their positional stance look... Are they standing there chewing or are they standing there with their neck extended and mouth open?
- Next thing I like to look at is the type and density of the bedding. The main thing I cannot stress enough is having a DRY environment. The first thing that you should think when you come across any wet bedding is: whatever is growing in there will become airborne and come in contact with my calves' lungs.

Mixing wet bedding/environment and poor air movement/quality is the perfect recipe for a respiratory outbreak. Pay attention to how you feel after chores. Do you cough? Was it overly humid; maybe a little hard to breathe? Take a moment to recognize that your calves are living in this environment 24 /7.

A few things we can do to improve our current ventilation situation...

- Open the curtains, windows, or doors to allow air to move through the barn more easily. (natural ventilation)

- Clean the fans and tighten belts. This will not only reduce dust but may reduce your electricity bill as well.
- Install a tube ventilation system, in which fans are used to push fresh outside air into a tube and out through a distribution of holes along the sides of the tube throughout the length of the barn/pen. Our very own Dr. Chuck Roberts is well trained in these and can sit down with you and help design one for any barn.

Now let's discuss what to do when you've got a case of pneumonia. (too late for prevention) You have lost a calf. One calf is too many in my mind. I cannot stress enough the importance of having a necropsy done on that animal to find out the exact organism that caused the death. The lab can tell us which drugs are likely to work best in your case. This will save you time and money in the treatment of your calves, instead of trying several different antibiotics with variable results. In addition, this will also allow us to set up a vaccination program that will be specific to your facility.

Finally biosecurity needs to be discussed. Biosecurity is having management practices in place that prevent introduction of disease onto your premises. Actions we can take to maintain biosecurity include: monitoring human/vehicle traffic (clean your boots after going over to your neighbors/ spray down your tires if you drove through another farm's manure), quarantine (keep in separate pen for three weeks) and test new animals (for BVD and Johne's, for example), keep feedstuff and waterers clean, properly dispose of dead animals, and control rodents/pests/flies which can serve as vectors for many agents. Having excellent cleanliness of both equipment and ourselves will dramatically reduce the risk of respiratory and a multitude of diseases.

Herdsman & Calf Crew Meetings!

Meetings are starting again for fall of 2015 and winter 2016.

Herdsman 1st Wednesday of each month
Calf Personnel 3rd Wednesday of each month

October 7th—The Calving Process (part 1 of 2)
Signs and stages of calving.

When and how to help.

October 21st—Medications used for calves
What diseases.
How to handle.