

Implementing Lung Ultrasound can be Beneficial to your Youngstock Program



*By Dr. Mary Cody
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Recently my home dairy farm sold a group of heifers. This is the first time my father, a 60-cow dairy farmer, has ever sold a group of heifers.

The excess heifers came from improvement of our youngstock program and

increased completion rate on our heifers.

Completion rate is the percentage of heifers that are born alive and make it into lactation. As an industry right now, we are seeing unprecedented dairy heifer replacement prices. Since April of 2019 dairy heifer prices have climbed 164%. There has never been a better time to take a look at your heifer youngstock program and make improvements. As dairy heifer inventories continue to shrink it is important to make sure you are hitting the benchmarks on your completion rates on heifer calves.

One of the major disease challenges in raising calves is respiratory disease. Lung damage in calves has a lifetime effect on weight gain, reproduction and milk production. According to Dr. Mike Overton, of Zoetis, a singular case of respiratory disease in a calf less than 120 days of age, cost the producer about \$245. This is where a youngstock program including lung ultrasound can be implemented to help diagnose disease earlier and reduce the impact of respiratory disease.

Implementing lung ultrasound is relatively easy. I won't be out on your farm wrestling 4- or 5-month-old calves. The program is meant to be implemented early in the calf's life to diagnose and treat subclinical pneumonia and increase treatment success rates. The program works by diagnosing subclinical respiratory disease on a scale from 0-5 using the ultrasound.



Dr. Mary is pictured above ultrasounding the lungs of a 4-week-old calf. Scanning the lungs helps to identify respiratory problems. Many calves can live with subclinical pneumonia without showing clinical signs. Calves with subclinical pneumonia struggle to gain weight.

With the ultrasound we can see damage to the lungs before the calf becomes clinical. Essentially lung ultrasound allows us to begin fighting the disease before we can see it with our naked eye.

How is the program set up? On the first initial scan out on your farm we will scan all the calves and analyze the data to select a scan week age for calves. Once this scan week age is selected, we will come

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out weekly or biweekly to scan those calves. We also scan those calves two weeks later to assess treatment success rates.

For example, on some farms we scan at 4 weeks and a follow up scan at 6 weeks of age. Think of these scheduled scans as a “herd check” for your calves. During these scans the veterinarian will treat calves diagnosed with respiratory disease and enter the data into the farm’s record system. After each calf “herd check” the farm can expect back a report with information on pneumonia rates and trends, and treatment success rates. They can also expect back comments on any other observations made on sanitation, nutrition, and ventilation etc.

For more information about the program, please contact the clinic to set up a time for a more thorough presentation on how the program works, the benefits and how it can pay for itself.

Waupun Veterinary Services has several doctors who perform calf lung ultrasound programs.

Notes from the Milk Lab

If the milk lab is always growing bacteria and reporting results as positive, there is a problem with your sample collection technique.

Roughly 20% of your milk culture results should return as ‘no growth’. This is almost always because the cow’s immune response has cleared the bacteria from the udder.

So, if you are consistently getting bacterial results, you need to retrain on sample collection. Sometimes it’s just a simple little error causing contamination.

Lung Ultrasound Scoring System

Ultrasonography

US = 0
(No or few comet-tails, less than 1cm consolidation, Normal)



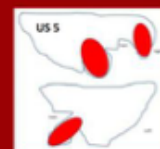
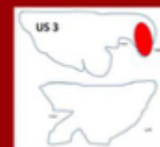
US = 1
(Severe diffuse comet-tailing only)



US = 2
(Patchy lesions totaling at least 1cm of consolidation, Lobular Pneumonia)



US = 3-5
(Lobar Pneumonia) 3 = 1 lobe, 4 = 2 lobes, 5 = 3 or more lobes consolidated



The lung ultrasound scoring system is pictured above and includes a scale of 0 to 5. When the veterinarian determines what score a calf is at, if a treatment is needed the doctor treats the calf immediately and enters the info in a data program.



Dr. Mary is pictured above entering data into a program that tracks each individual calf, the score it received on the scan, and if a treatment was needed and given. This information is shared with the producer.