## June 2019 NEWSLETTER



\*\*Please be aware that the Blood Lab will be CLOSED July 4 & 5. The cut off for samples to be run will be 12 p.m. on July 3. Please plan accordingly.\*\*

The fair season is fast approaching. Animals have been selected and, I hope, are getting halter broken. As school ends, kids will be spending more time at 4-H meetings and getting their animals ready.

## -Key Points:

- Make sure animals are vaccinated, especially cattle for BVD and IBR. Cattle should be given a nasal booster at least a couple weeks before the fair.
- If there is testing involved, like PRRS testing for pigs, start getting this done now. It takes time for the labs to give us results.
- Start planning for health papers.
- Start looking for external parasites, or better yet, treat for mange and lice.
- Pay attention to ringworm problems, especially in cattle under 2 years of age. Often people move calves at this time of year into box stalls and separate pens to allow more individual attention to the fair animals. Because ringworm spores stay in wood for years, the animal will actually contract ringworm from the new pen, especially if the animal has never had ringworm. Be aware!

## Johne's Vaccine Discontinued:

This is a success story for the dairy industry. Dairy producers have come to recognize the disease and understand the transmission to the point that not only is the disease of a limited threat, but so little vaccine is being used that it no longer pays to produce the vaccine. Congratulations to all our producers and their effort to control the disease and change their management to limit the threat of the disease. It is still important to realize the disease is a threat and it will be a threat 100 years from now.

\*\*\*\*\*Here comes the hot weather: Are your misters and fans in working order? The first really hot days can be tremendous production killers. More and more we learn that the environment of the dam affects the calf. Heat stress to pregnant cows results in a 5lb per day milk reduction for the entire life of any heifer calf born to the heat stress dam during the heat stressed pregnancy.

In 2011 a sick pig was examined at South Dakota State University with symptoms of pneumonia. A brandnew virus was identified, a type D Flu virus (there are type A, B, and C flu viruses). The virus was actively studied, and it was found that many cattle had antibodies in their systems to this virus indicating they had been exposed. More studies were done and it was determined that the virus was out in the cattle and swine population causing a mild pneumonia. It probably was an initiator in some pneumonia outbreaks but because labs didn't know it existed, no one looked for it. Most labs still don't. There is some concern in the research community that the virus could jump to people, which the influenza viruses like to do. There isn't a commercial vaccine yet, so you can't do much about it. For me, the take home is that there are probably lots of disease organisms out there lurking in animals and we are blissfully unaware that they are there, and someday.......

## Reproduction Notes:

Pregnancy rates in Holsteins 15 years ago were terrible. One of the reasons was high milk production. When we select for high milk production, we are selecting for the genetic ability for more blood to pass through the liver, which allows the milk components to be produced, but correspondingly increases the rate of progesterone metabolism. This creates cows that show heat for only 6 hours out of 24. Also, high producing cows' standing heats don't indicate when the cow should be bred because the cows ovulate late. The use of ovsync programs eliminate this problem by getting semen into cows that don't show a heat. It also induces cows to come into heat that are not cycling (the fancy term for these non-cycling cows is anovular).

For similar reasons, heat detection systems fail to get semen into cows that don't show heat due to high milk production. Heat detection systems also fail to get semen into the 30% of cows that are anovular. With improved genetic selection and double ovsync, pregancy rates have doubled, with herds getting 90% of their cows bred after 3 breedings. In fact, the Holstein breed will soon bypass the Jersey breed in fertility, with a higher daughter pregnancy rate.

For better or worse: The bulldog and other breeds with smashed in faces require C-sections to give birth. This becomes an ethical problem for breeders, and maybe humans in general. Similarly, domestic turkeys have so much breast meat that either the hen gets injured with conventional breeding or the Tom can't get the job done, so all domestic turkeys are bred artificially. Is the Holstein next? High producing dairy cows show poor heats, and their eggs are released so late in the cycle that the embryos aren't viable. This is due to the high liver blood flow (which the cows are bred for and needed to maintain for high milk production). Production averages will double again in 15 years just like they have since 1940. Ovsync programs are needed to maintain high reproductive efficiency and to get these cows bred. It will probably get worse. At the same time, competition for inexpensive milk drives the milk production, and in this day the high producing cow is considered more 'green'. Will the Holstein cow require Ovsync to become pregnant?

Contaminated bottles: Every couple years we run into a problem with multi-dose drug bottles contaminated with some weird bug and resulting in a terrible reaction at the injection site. This is more common with intramuscular injections and prostaglandin products like Estrumate or Lutalyse or similar products that limit blood flow to the injection site and thus the immune response.

- Multi-dose bottles are designed to pull lots of product out into multi-dose syringes. They are not meant to have producers stick a different needle through the stopper and pull out single doses. My rule of thumb is never more than 5 holes in a stopper.
- Store every product if opened in a refrigerator. Every drug that has had a needle puncture through the stopper has to be refrigerated so any organism introduced can't grow very fast.
- Limit storage of punctured bottles to one week. If you open the bottle this week on herd health and can't use by next week herd health, buy smaller bottles.
- Put a needle through the stopper and keep the needle there as you continue to pull out product for a single production run, say one shot day. Then remove the needle and discard. Every time a new needle punctures the stopper, more dirt and contamination enters the bottle
- Don't go through a stopper with a needle that has injected an animal. Only new needles go into drug bottles.

Good news for pricing. "The latest dairy product production for March compared to a year ago showed production down 3.9% for butter, 3.2% for cheddar cheese, 0.7% for total cheese, 8.0% for nonfat dry milk and 14.2% for dry whey" Brian Gould newsletter. Also, good news for dairy and beef is the African Swine Fever disease outbreak in China. The hog loss in China is equal in numbers to all the hogs in Canada, Mexico, and the United States combined. Wholesale pork is up 40% because of the effect in world pork demand, and this should benefit beef and milk protein products, especially cheese.