

## AUGUST 2021 NEWSLETTER



**Congratulations to the new parents!!** Drs. Kolby and Jackie McIntyre welcomed their baby boy, Thomas at the end of June. Several weeks later Dr. Matt Schaefer and his wife Beth welcomed their 4<sup>th</sup> child, a baby boy named Andrew.

Aflatoxin testing of bulk tank milk is now available in the Waupun Veterinary Service milk lab. The cost is \$15.00 after the discount. Our lab will run the test one day a week. The test will be set up at 11:00 AM on Wednesday mornings. We need about 20 mls of milk, or about half a plastic snap top milk culture tube. This is a screening test for your bulk tank and is not applicable for individual cows.

Background on Aflatoxin: Aflatoxin M1 is a toxic chemical produced by mold in corn as well as other agricultural commodities, especially peanuts. Aflatoxin can form mold on corn ears in the field, particularly in hot humid weather. This makes it a bigger problem in the southern part of the United States. It can also form on corn during storage. Milk has a maximum allowed tolerance level and baby formula has an even lower tolerance level.

A tanker load of milk with a level above the tolerance level must be destroyed. At least one prominent local milk plant is doing spot screening for Aflatoxin M1 in tanker loads. The producer's problem is that any positive loads must be immediately destroyed, even though the level arises from no negligence by the producer.

We are offering the test to allow producers to screen their bulk tank milk in advance of any milk plant testing. Test results are confidential between our lab and the producer only. We recommend testing once to establish a background level, and then when major corn sources change or if there is mold damage in harvested or stored corn.

## **Colorado and Oregon ballot initiatives**.

There are two ballot initiatives in Oregon and Colorado that have some wild anti-farming and anti-veterinary components. Artificial breeding and rectal pregnancy checking would be considered sexual exploitation of animals. For those of you that are older and male, maybe you should sue your medical doctor for sexual exploitation when doing a prostate exam? Also, animals would not be legally butchered until they are at least 25% of their expected life expectancy. In the case of cattle, this would mean no butchering of steers until they are 5 years old. Correction, no castration, so bulls would have to be in feed lots. To date, the ballot initiatives haven't made it to ballots because of wording issues that have caused courts to keep them off the ballots. This could get interesting. Two issues. First: people in the big cities have no idea of the process to provide them with good wholesome food. Second: there are more and more people in this country that believe a cow's life or their dog's life is equivalent to a human's life.

Please Note: The Bedding Lab will be closed 8/16-8/22

<u>Thinking about vaccines, drugs, and Covid</u>. My niece in Alaska and other people close to me have told me they are afraid of the Covid vaccine because it could make them sterile. I think this reluctance is based on the long-held fear of drug side effects and how rapid the Covid vaccine was developed. Also, there is a total distrust of government claims. I realize these two issues are preventing almost half of the people in the country from getting vaccinated, so I thought I would attempt to present the issue from the farm and veterinary perspective.

First, it is important to separate drugs (pharmaceuticals) from vaccines.

The pharmaceutical industry has a tarnished record from the early 60's when Thalidomide, a drug used to prevent morning sickness caused 10,000 birth defects. This was early in the evolution of the drug industry. Antibiotics had only been around for two decades and the technology to build a chemical for use in humans or animals was in its infancy. Morphine derived from poppies had long been used, but the base chemical was occurring in nature. Something like Fentanyl (which is a designed chemical) didn't yet exist. There were no testing protocols for long term side effects or even addiction. The idea that chemicals caused cancer had just been discovered.

The Vaccine industry is a different story. The first smallpox vaccine was discovered in 1798. The first rabies vaccine was used in 1885. Vaccines are the reason we aren't living in log cabins with the amenities of the 1800's. Without vaccines, every couple decades a large part of the population would be wiped out.

In agriculture the same is true. Without vaccines we would be milking 5 or 10 cows and there would be minimal contact between farms. Disease would sweep through the populations of animals every decade and farmers would start all over again. Early in my career I got to see IBR go through stanchion barns. Ten percent of the adult animals would die, and almost every pregnant animal would abort. No fresh cows for ten months.

Vaccines and pharmaceuticals are different. Pharmaceuticals are complex organic chemicals, and although they may be developed from chemicals found in nature, they are incredibly complex with the potential for multiple side effects which is why it takes over a decade to bring them to market. Animal models for toxicity and birth defects are required. Studies for carcinogenicity are required. Most pharmaceuticals have safety issues between the amount of drug that causes the desired response and the amount that causes toxicity. Tylenol will destroy your liver at high levels.

Vaccines are pieces of an organism that causes a disease which are administered to trick the immune system into thinking it has the disease, in order to confer some level of protection from the disease. Long term side effects are studied for months because all the products in the vaccine are found in nature. The complexity of the molecules used in a vaccine is entirely different then a pharmaceutical. The memory of a vaccine may be around for years, but the biochemical components are gone in days. Drugs have to be broken down in the liver or kidney and removing them from the body can be complicated. Vaccines are torn apart throughout the body by immune cells.

It is true that the mRNA vaccines are new, although they have been studied for 10 years. The ability to rapidly produce this vaccine seems to scare people. But there has not been a disease that kills so many people in 100 years. That alone sped up the process and brought the vaccine to production.

There is another parallel between Covid and the farm community that I would like to point out. Remember Brucellosis, the disease everyone vaccinated for 30 years ago? Orange ear tags? If you vaccinated your calves for Brucellosis, you could still get the disease, but it stayed on your farm. You would have to depopulate your herd and start over with government help, but you prevented the disease from spreading to your neighbor. We eliminated the disease in the United States except for Yellowstone Park (Indians, and courts keep it going) because farmers vaccinated and thus protected their neighbor.

As far as distrusting government claims, I ignore everything out of Washington. They might be right, and they might be wrong. In the case of Covid vaccines, I am a strong supporter. Not because of anything from Washington, but because of my medical training and knowledge.