

The videoconference meeting of the WeCAHN dairy network discussing Q2 (April—June) was held 2nd Sept., 2022.

Clinical Impressions Survey: Interesting or Unusual Findings:

- Calf pneumonia outbreak: with high mortality (45 calves /260 cow herd) occurred in late spring associated with snowstorm and crowding in calf sheds bedded with shredded straw.
- Yersinia pseudotuberculosis diarrhea and extreme dehydration in 2 year old bulls. Infection mat have been associated with a feed change.
- Salt toxicity in group of steers. Unusual feature of this case was that this was the result of getting access to and eating a salt concentrate not intended for animal consumption (as opposed to being deprived of water, which is a more common cause of salt poisoning).
- Blackleg outbreak in cow/calf herd which had stopped vaccinating.

Respiratory system: Respiratory disease was reported Commonly to Very frequently by network practitioners.

- The three most common forms of pneumonia were all rated Stable by network practitioners, relative to the same time period last year.
- Prairie Diagnostic Laboratories (PDS) showed a trend to increasing diagnosis of one type of pneumonia (interstitial) over the past few years. Bovine respiratory syncytial virus (BRSV) detections also show longer term increasing

Digestive system: Digestive disease was reported Rarely to Commonly to Very frequently by network practitioners.

- Diarrhea was reported Commonly to Very frequently, and seen associated with *E. coli*, Rotavirus, Coronavirus, and Cryptosporidia spp. All were rated Stable by network practitioners, relative to the same time period last year.
- Rotavirus detections at PDS and Manitoba VSDL both show a long-term increasing trend, driven at PDS by increased submissions, and at Manitoba VSDL by an increasing proportion of samples positive. Similarly, Bovine coronavirus detections, and Cryptosporidia demonstration, are also broadly trending up at both labs.

Reproductive system: Reproductive disease was reported Commonly to Very frequently by network practitioners. An increase in percentage of open cows was reported Never to Rarely.

- Generally bull breeding soundness exam (BSE) season was reported to have gone well, with no increase reported in bulls failing exams, despite "creative" feeding regimens (using less commonly employed feedstuffs) over the winter in areas affected by drought last year.
- **Un-diagnosed abortions** as a pathologic diagnosis at PDS remained stable.
- IBR PCR detections at PDS display trend upwards, apparently driven by increasing submissions, while Manitoba IBR detections appear stable.



Scan:

- Saskatchewan Agriculture: Anthrax reported in RM of Piapot #110 (Aug 23/2022).
- Alberta Veterinary Medical Association: Anthrax reported in northern Alberta (Aug 3/2022) in three beef cow herds
- **Promed:** Reports of ASF and Foot and Mouth Disease (FMD) detected in meat travelers were attempting to bring into Australia (July 20/2022) .



Meeting Take-aways:

1. Time trends in lab detections of some bovine pathogens:

BRSV detections are increasing at PDS, driven by an increase in samples submitted. Rotavirus and Cryptosporidia detections are increasing at both PDS and the Manitoba VSDL, driven by increasing samples submitted at PDS, and increasing proportion of samples testing positive in Manitoba.

To understand what this means for industry, we need to be able to distinguish between live virus and virus from recent modified live vaccine use, and identify which specific age groups of cattle, and broadly what locations, are most affected. Work is underway on both points! In the meantime, broad guidelines for cattle vaccination are offered by the American Association of Bovine Practitioners, which includes BRSV in its "core" vaccine program, and Rotavirus in its risk-based group, meaning its use is recommended in some situations based on individual herd risk. (There is no vaccine for Cryptosporidia). Practitioners can help producers set up a vaccination, biosecurity and hygiene program based on the herd's specific situation.

2. Given the ongoing drought in parts of the west, we can anticipate some cattle will be coming home or moving to feedlots deficient in some minerals (e.g. copper) and vitamins (e.g. vitamin A). It's important to assess their status and supplement appropriately. Last winter saw health problems like pneumonia associated with deficiencies in nutrients such as copper.

3. As more people resume air travel, recent experience in Australia (where border agents found African Swine Fever virus and Foot and Mouth Disease virus in meat people were trying to bring into the country) reminds us how easy it is to accidentally bring home something unintended. *It's important to restrict visits to farms when out of the country, and to not bring home prohibited food items.*