The American Milking Shorthorn Society is informing its breeders and members that Complex Vertebral Malformation (CVM) has been identified in our population. CVM has been known in the Holstein population for over 20 years, but this is the first confirmed test in the Milking Shorthorn population. CVM is an undesirable recessive and animals determined to be carriers will be identified with the code "CV" and those determined not to be carriers will be identified with the code "TV".

Additional information from the Holstein USA website:

The disorder causes a multitude of possible abnormalities. Most of the affected homozygous calves will be reabsorbed as embryos or aborted as fetuses prior to the 260th day of gestation. The remaining pregnancies result in a stillborn calf, typically 1-2 weeks prior to the expected calving date. The most noticeable characteristics of CVM-affected calves are malformed legs with flexed and rigid pasterns, a shortened neck and an abnormal curvature to the spine. A definitive diagnosis of CVM requires a veterinary diagnosis or a DNA test.

CVM is inherited through a single recessive gene. CVM-affected calves can only result when a carrier cow is mated to a carrier bull. When two carrier animals are mated, 75% of the calves will be normal, and 25% will be affected with CVM. Calves that have one defective gene will appear physically normal, and their performance will be unaffected, but they will be CVM carriers.

Many of the bulls that are carriers of CVM will also carry numerous other genes that are desirable for production and type. Absolute avoidance of CV bulls is not necessary but serious thought should be given when using them. Breeders should avoid mating CV bulls to cows whose sire and/or maternal grandsire are CVM carriers.

The gene responsible for CVM has been identified and a test is available. Forms and instructions for accomplishing the test can be requested from the AMSS. Following policy enacted in 2016 by the AMSS Board of Directors all bulls registered from a CVM carrier parent must be CVM tested prior to being registered. It is strongly suggested that females with CVM carrier parentage be tested.

If you have questions, please feel free to contact us at the AMSS office.