GENETIC CONDITIONS

TH

Tibial Hemimelia (TH) is a lethal genetic condition inherited when affected animals inherit two copies of a recessive gene. Calves are born with severe deformities including twisted rear legs with fused joints, large abdominal hernias and/or skull deformities. Should calves survive the birthing process, they cannot stand to nurse.

PHA

Pulmonary Hypoplasia with Anasarca (PHA) is a lethal recessive genetic mutation.PHA-affected calves are born dead with underdeveloped lungs (Pulmonary Hypoplasia) and swelling caused by excessive fluid retention (Anasarca).

DS

Digital Subluxation (DS) is not a lethal condition from a genetic inheritance standpoint. Animals known as homozygotes are cattle that carry two copies of the undesirable gene. Homozygotes of DS, referred to as “DSH” in the registry. Most cattle that are DSH will show some outward signs of the genetic condition. In this case, the condition is a malformation of the rear pastern or pasterns (ankle area) of the animal. The important aspect of DSH is to understand that ALL progeny of DS Homozygotes will be at least carriers of the condition. Carriers of the DS condition, known as DSC in the registry, also need to be handled differently when mating decisions are made. Though the original mutations happened in completely separate populations, the DS condition sits on the same chromosome as Pulmonary Hyperplasia with Anasarca (PHA). It appears that the presence of a PHA Carrier can impact the phenotype (physical appearance) of a DS Carrier. In other words, if you mate a PHAC to a DSC and the unfavorable copy of both genes is passed on, the resulting calf will likely have deformed rear limbs below the hock.