



Genetic Abnormality Screening Policy

The Canadian Hereford Association currently institutes a mandatory DNA testing policy for three (non-lethal) genetic abnormalities, being;

Diluter/Rat-tail - the dilution gene causes cattle with a black coat colour to be diluted to grey, and red to be diluted to yellow.

Rat-tailed calves are usually mouse grey, have short, curly and sometimes sparse hair and lack normal tail switch development.

Idiopathic Epilepsy – age of onset can be variable, ranging from birth to several months of age. Occurrence and persistence of seizures may be influenced by environmental stressors such as temperature extremes or increased physical activity. Upon initial onset of seizures, calves may appear to walk with a stiffened, irregular gait. During seizure episodes individuals will typically lie on their side with all limbs extended in a rigid state. Seizure episodes may last from several minutes to more than an hour.

Hypotrichosis – partial to almost complete lack of hair. Affected calves are often born with very short, fine kinky hair that may fall out leaving bare spots or areas susceptible to rubbing. The haircoat colour will sometimes appear frosted or silverish. The tail switch may be underdeveloped.

The policy involves **all animals submitted** for DNA testing, including AI sires, donor dams, and walking bulls. The Canadian Hereford Association will have the right to publish the results and the policy became effective in 2010.

This policy is consistent with a similar policy implemented by the American Hereford Association and is a joint North American surveillance program for the benefit of Hereford breeders and the cattle industry.

Policy Guidelines

1. All DNA samples submitted will automatically be tested for the three abnormalities.
2. There is **no additional cost** to the member for these new DNA abnormality tests. The cost will remain at \$40.00/sample, which includes normal parentage verification, or DNA profiles, and the screening for the genetic abnormalities.
3. If through the mandatory testing process, the laboratory determines an animal is a carrier of any of the three abnormalities, the Canadian Hereford Association will contact the owner and give the owner 30 days to dispute or contest the test results prior to making the information public.
4. The Canadian Herefords Association will **publish all known carriers** of the three abnormalities on the Canadian Hereford Association website.
5. The Canadian Hereford Association will not accept DNA test results for parentage, genetic profiling or genetic abnormalities from any other laboratory or company, other than the specific service provider to the Canadian Hereford Association.

Important Information