

7. OTHER REGISTRATION REQUIREMENTS DISQUALIFICATION FROM REGISTRATION OR RECORDATION

- a. Animals known to have or exhibit any of the following traits will not be eligible for registration or recordation in any of the four categories:
 1. **Cryptorchism** – Failure of testicle(s) to descend into the scrotum.
 2. **Double Muscling** – Unusually large, rounded rump with prominent creases between the varying muscles. Animals typically have minimal external fat and are fine boned.
 3. **Dwarfism (snorter, long-headed, buffalo)** – Abnormally small calf having short legs and short body which is often combined with a pot-belly. Dwarfs typically possess either a broad, bulging forehead, or a long, mature head.
 4. **Hydrocephalus** – Affected calves born with excessive fluid around and in the head. Bones of skull are not completely fused. Body and legs of affected calves appear normal.
 5. **Hypotrichosis (Hairlessness)** – 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 particularly susceptible to rubbing.
 6. **Osteopetrosis (marble-bone disease)** – Calves born dead prematurely (10-30 days premature). Typically, calves possess a short lower jaw and impacted molars. Bones of calf are fragile and can be broken with ease.
 7. **Pulmonary Hypoplasia with Anasarca (PHA)** – Calves born with extremely large amounts of fluid in the body cavity and between the body and skin. This results in abnormally large calves that require birthing assistance.
 8. **Syndactly (mulefoot)** – Toes of hoof are fused together. Can range from one hoof to all four calves that require birthing assistance.
 9. **Tibial Hemimelia (TH)** – Calves have excessively large abdominal hernias. Are unable to stand due to twisted rear legs combined with fused joints in the rear legs. May possess deformed head.

- b. **Reporting of Animals with Possible Genetic Defects**
RAAA members who become aware of a possible genetic defect (1.a.2-9 above) that has occurred in their herd have the responsibility to immediately notify the RAAA National Office. The reporting member will be supplied with documents that will assist in providing a detailed explanation of the abnormality. Additionally, instructions will be given on the proper techniques for collecting tissue/blood from the suspected abnormal animal and where the samples should be sent. Blood/tissue/semen samples from the sire and dam of the suspected animal with a genetic defect will also be required to verify parentage. If possible, RAAA recommends that the suspected abnormal animal be viewed and descriptions detailed by a licensed veterinarian.

When a direct DNA test is available to identify a carrier animal, a breeder is obligated to report animals positively tested for genetic defects even if no progeny exhibiting a genetic defect has been produced.

- c. **Failure to report** animals with a possible genetic defect and/or non-compliance with all instructions given by RAAA regarding the collection and submission of required material may subject the member to disciplinary action under provisions of Article IX, Discipline, Suspension, or Expulsion, of the RAAA By-Laws.

- d. **Determining if Abnormality is Genetic in Nature**
RAAA will have no part in determining if the abnormality is the result of a genetic defect. RAAA will only serve as the coordinator of information between the owner of the suspected animal and a genetic defect consultant. The appointed genetic consultant will determine if adequate evidence is present to establish a definite genetic cause of a particular abnormality. All cases of abnormal animals will be observed and determination made by a genetic defect consultant.

RAAA Board of Directors will be in charge of selecting a genetic consultant(s) who has the ability to determine if abnormal animals are the result of genetic defects.

- e. **Notification to Tested Animal Owner and RAAA Membership**
Once an animal registered in the RAAA (A) has produced at least 2 progeny which are positively diagnosed with a genetic defect through visual observation, OR (B) is a confirmed carrier in situations where DNA tests are available; the RAAA will notify, by certified mail, all owners of the confirmed carrier animal. This notification will contain evidence supporting the diagnosis of the genetic defect. Additionally, the owners will be notified of RAAA's plan to designate the carrier animal as a confirmed carrier of a genetic defect. The designation will become final 30 days after mailing of the certified letter.

Owner(s) or Breeder(s) of the confirmed carrier animal may contest the results of the genetic diagnosis by filing a complaint with the RAAA Executive Committee prior to the time the designation becomes final. Such contest will postpone the designation of the carrier animal until the completion of the RAAA Executive Committee's review of the particular diagnosis. In such cases the RAAA Executive Committee has the final say in the (non)designation of the carrier animal.

Animals designated as carriers of genetic defects will be placed on a confirmed carrier list. The confirmed carrier list will be printed annually in the ARA Magazine and/or RAAA Sire Summary, posted on the RAAA official website, and available to any member upon request.

f. Voluntary DNA Testing of Normal Appearing Animals

In the case of discovering that an animal is a carrier of a genetic defect, it is beneficial to determine if any normal appearing progeny of the carrier animal possesses one copy of the gene that causes a particular genetic defect. Due to the inheritance of genes that cause genetic defects, all progeny of carrier animals may not possess a copy of a genetic defect causing gene. For this reason, RAAA will provide methods of determining if normal appearing animals possess a genetic defect gene. Acceptable test for this determination will be limited to DNA tests. Therefore, this option is only available where DNA tests are available (Double Muscling), Pulmonary Hypoplasia with Anasarca, and Tibial Hemimelia) for the genetic defect of interest.

To perform such tests, producers must directly contact RAAA. Any attempt to bypass RAAA to obtain these tests may subject the member to disciplinary action under provisions of Article IX, Discipline, Suspension, or Expulsion, of the RAAA By-Laws. Members will be supplied forms for identifying which animals will be tested and instructions for collecting and submitting blood/tissue/semen samples.

Notification of test results will follow the protocol outlined below (Notification to Tested Animal Owner and RAAA Membership). Animals that are tested free of a genetic defect gene will be placed on a Tested Free list. The Tested Free List will be published in all areas that the Confirmed Carrier List is published. In cases where the DNA test proves that the animal possesses a genetic defect gene, the animal will be placed on the Confirmed Carrier list. **(Add 3-07)**