

# **American Maine-Anjou Association Abnormality Policy**

Genetic abnormalities are present in all breeds of cattle. The American Maine-Anjou Association has set forth the following policy and protocol in order to better monitor abnormalities in Maine-Anjou cattle.

## **Physical Abnormality Policy**

Beginning February 1, 2006, the Association will require AI sires, donor dams, and cloned animals to be tested for genetic defects, which may be either “lethal” (also called Class I) or “non-lethal” (or Class II). A lethal defect usually results in the death of an animal or in the production of an animal so significantly impaired as to affect its commercial profitability. Animals with non-lethal abnormalities may be commercially marketable but still compromised as a source of seedstock.

The AMAA’s initial focus will be on Pulmonary Hypoplasia with Anasarca (PHA) and Tibial Hemimelia (TH), but other defects may be addressed as testing becomes commercially feasible.

If an animal is found to be a carrier after the completion of all appeals, the animal will be listed in the next issue of the *Voice*, and will be added to a list kept by the AMAA to identify whether animals are “defect free” or “carriers.” The list will be available on the AMAA’s Web site and in hard copy upon request.

A sire or dam will be treated as a “carrier” after producing a second calf with a Class I or Class II genetic defect. After a commercial test for a genetic defect has been available for at least thirty (30) days, all progeny out of an untested donor dam must be tested prior to registration.

Two consultants will assist in the AMAA’s genetic testing program: Dr. David Steffen, Veterinary Diagnostic Center, University of Nebraska, Fair Street and East Campus Loop, Lincoln, NE 68583-0907, (402) 472-1434; and Dr. Jon Beever, University of Illinois, 1201 W. Gregory Drive, Room 220 EMRL, MC051, Urbana, IL 61801, (217) 333-4194. Either Dr. Beever or Dr. Steffen will be responsible for the final diagnosis of a defective calf.

## **Testing Protocol**

### *Reporting to the AMAA*

On the day a defective calf is born, or, if necessary, on the next business day, but always before the calf is destroyed, the breeder shall report the calf either to the AMAA (816-431-9950), or to Dr. Steffen.

## **REVISED TESTING PROCEDURE**

### *Testing Procedures for the Calf*

Calf: 1. Notch from ear of calf and purple top tube of blood from dam to:  
(Notch should be frozen and sent with a cold pack in a zip lock bag)

Dr. Jon Beever  
University of Illinois  
1201 W. Gregory Dr.  
Room 220, EMRL, MC051  
Urbana, IL 61801  
(217) 333-4194

2. For diagnosis, Dr. David Steffen would like the whole calf shipped, if this is not possible, please have attending veterinarian take pictures and send the heart, kidney and lungs to:  
(Needs to be sent frozen and reimbursement of charges is available through Dr. Steffen's office)

Dr. David Steffen  
Veterinary Diagnostic Center  
University of Nebraska  
Fair Street and East Campus Loop  
Lincoln, NE 68583  
(402) 472-1434

### *Testing Procedures for the Cow*

From the purple top tube of blood you sent to Dr. Beever, Dr. Beever's office will send on a sample to U.C. Davis in the case of needed genotype/parent verification to meet AMAA protocol.

### *Testing Procedures for the Sire*

If the AMAA does not already have on file DNA information for the sire (which owners are required to provide for AI sires), the AMAA shall notify the owner thereof by phone, confirmed in writing. Within fourteen (14) days after the date of the written notice, the owner shall send a semen or hair sample for the sire to the Veterinary Genetics Lab, accompanied by an AMAA Sire Sample Label (which will include the sire's registration name and number, and the breeder's name, address and telephone number). For a semen sample, send a straw thawed inside an empty plastic ink pen casing or in similar protection.

The AMAA will pay the cost of testing for herd sires. The cost of testing for an AI sire will be paid for by the owner. If the owner of an A-I Sire does not submit a semen or hair sample within the required 14 day period, the AMAA may test commercially available semen for parental verification. The semen, but not the cost of the testing, will be paid for by the AMAA.

## **Notice of Findings and Appeals**

If the AMAA finds that an animal has, or is a carrier of, a Class I or Class II genetic defect, the AMAA shall send notice thereof to the owner(s) of the animal and to the owner(s) of the animal's sire and dam describing the physical abnormality and enclosing copies of genetic tests, diagnostic reports, parental verifications and other supporting information. The owner(s) of the animal may contest the AMAA's findings by filing a complaint with the AMAA within thirty (30) days of receiving any such notice. The complaint must be in writing, signed by the animal's owner(s) of record, addressed to the CEO of the AMAA. If a timely complaint is not filed, the AMAA's determination shall be final and binding and the animal shall be identified and listed as a carrier in the manner provided in these rules. Upon receipt of a complaint, the executive committee shall schedule and hold a hearing on the matter in accordance with Article VIII, Sections 2 through 4 of the AMAA Bylaws.