



# AMERICAN SADDLEBRED REGISTRY, INC.

All breeding stallions must have DNA test results on file with the ASR. All mares producing horses for which an Application for Registration is submitted on or after January 1, 2003, must have DNA test results on file with the ASR. The foal of a stallion or mare not in compliance with this rule will not be eligible for registration.

## DNA AND BLOOD TYPING FREQUENTLY ASKED QUESTIONS

**Q: Is DNA better than blood typing?**

A: For parentage analysis, both techniques are equally valid.

**Q: Can DNA be used to determine what breed a horse is?**

A: No, DNA cannot determine a breed. DNA can be used to determine a species, i.e., horse, cow, dog, but it cannot distinguish a breed within a species.

**Q: Why are we changing to DNA?**

A: The change does not benefit the Registry in any way. However, there are several benefits to the foal owner. There will be no vet fees to draw blood. A hair sample can be extracted by the owner, is not as fragile as blood, and can be mailed by first class mail – there is no expensive overnight delivery.

**Q: Are a DNA record and a blood type interchangeable?**

A: No, current technology cannot cross match a DNA sample to a blood sample. In other words, a DNA sample and a blood sample taken from the same horse cannot be recognized as being from the same horse. To establish a bridge from the blood-typing program to a DNA program, DNA records will be established from frozen serum samples that were extracted from blood samples submitted since 1992, or from new blood samples that have been matched to those filed prior to 1992.

**Q: How do I know if my horse has frozen serum on file?**

A: All horses blood typed since 1992 should have frozen serum on file at the UK lab. You can look on the ASHA Web site, [www.saddlebred.com](http://www.saddlebred.com), to check the date your mare or stallion was blood typed. You may also call the Registry office at 859.259.2742.

**Q: Can I send hair samples from the sire and dam to obtain DNA records for them?**

A: No, all DNA records for parents must come from blood samples, i.e., either from new samples or from the conversion of frozen blood serum at the lab.

## HOW DO I CONVERT MY BREEDING PROGRAM FROM BLOOD TYPING TO DNA TESTING?

**For registered horses that were blood typed in or before 1991:**

If you own a stallion or mare that is part of your breeding program, and the stallion or mare was blood typed prior to 1992, you need to send \$50 to order a new blood-typing kit. Once the blood typing is completed at UK, the lab will verify that the new blood-typing results match the results previously filed, confirming that this is the same animal that has been tested. The blood will then be converted to DNA to compare to the foal's DNA to establish full parentage.

**For registered horses that were blood typed in or after 1992:**

If you own a stallion or mare that is part of your breeding program, and the stallion or mare was blood typed between 1992 and the present, you need to send \$30 to the Registry, identifying the stallion or mare by name and registration number. At our request, the lab will convert the frozen serum already on file to DNA.

If for any reason the lab is not able to convert the frozen serum, you will be sent a blood-typing kit for that horse. Once the blood typing is completed at UK, the lab will verify that the new blood-typing results match the results previously filed, confirming that this is the same animal that has been tested. The blood will then be converted to DNA to compare to the foal's DNA to establish full parentage.

**For registered horses that have never been blood typed:**

If you own a stallion or mare that is part of your breeding program, and the stallion or mare has never been blood typed, you need to send \$50 to order a blood-typing kit. Once the blood typing is completed at UK, the lab will convert the blood serum to DNA.

**For unregistered horses:**

You may DNA any foal for which DNA results of its sire and dam are on file at the lab. You need to send \$50 to order a DNA kit. DNA on the foal cannot be compared to blood typing on the sire and dam to establish full parentage on the foal – DNA results must be compared to DNA.

**Reminders:**

- DNA became mandatory as of January 1, 2003.
- Hairs should be pulled, not cut, from a foal's tail. Make sure there are at least 30-50 pulled hairs with a bulb or follicle at the end - this is where the DNA results are obtained.
- At the present time, if you have breeding stock that will be retired this year, you may blood type the foal and compare the results to those of its sire and dam. There is no need to DNA if you do not plan to continue using the stallion or mare for breeding; however, a written statement to that effect must be submitted to ASHA.

**Note: Effective October 1, 2007, a fee of \$25 may be charged if you need to order an additional DNA or Blood-Typing Kit for the same horse.**