

DNA Testing Can Be As Simple As Catching Your Sheep

“Pulling blood” has become a shorthand phrase for submitting material for DNA testing. But, the sample submitted does not have to be blood. An ear punch method can collect tissue that will produce accurate DNA results. The ear punch does not require needles, the ability to locate a vein, blood tubes or the possible visits of your veterinarian. The tissue is preserved in a sterile container with a drying agent that allows it to be stored at room temperature for an extended period of time.

There is nothing wrong with submitting blood tubes for DNA tests, but for the small producer with limited testing supplies, it is a task that is easy to postpone. A 3rd method of obtaining a DNA result is to use a small card that has a gauze like center. You would place several drops of blood on the card. It still requires the obtaining of blood, although a much smaller amount is needed for the card and it can be stored at room temperature.

All 3 types of collection methods are accurate for DNA testing. Inaccuracies in testing are almost always due to human error, not due to the collection method itself. However, the highest percentage of human errors are made when using the blood card method. The blood tube and ear punch/tissue method are the least prone to human error. Those that are skilled at drawing blood and are comfortable with the cost of mailing the blood tubes for testing can certainly continue following their past practice. However, for those that have to use veterinarian's or have not performed DNA tests in the past, the ear punch is a simple procedure that can be performed by anyone who can catch a sheep.

Below is a chart that lists the advantages and disadvantages of each of the 3 procedures. The Ear punch and tissue cups can be ordered from them at:
Gene Check, Inc.
1175 58th Ave.
Suite 100
Greeley, Colorado 80634

	Pros	Cons
Ear punch/ tissue collection	Very easy for the producer to collect a sample. Tissue can be stored at room temp for many years. Can be shipped via inexpensive regular mail.	If the 1st test doesn't work, a new sample must be resubmitted as the entire piece of tissue is used in the 1st round of testing (this is rare).
"Purple top" EDTA blood tube	If the 1st test doesn't work, there is more blood in the tube and the sample can be retested several times.	Requires a Veterinarian or, producer ability to draw blood. Shipping in hot months can be very expensive. Glass tubes must be packed carefully.
FTA Blood Card	Store at room temperature for several years. Ships inexpensively via regular mail. If 1st test doesn't work, there is generally more blood on the card that can be used to re-test.	Much more prone to sample contamination. Under or over collection of blood on card can ruin the sample. Highest percentage of inability to get a result comes from blood cards.