How to Collect Blood Samples from a Goat or Sheep

1. Clip the ewe/doe’s neck to see the jugular vein. Use electric shears to shave a patch approximately 4 inches wide by 8 inches long. Shaving an area allows for easier viewing of the vein and provides a clean area in order to minimize the chance of introducing dirt or bacteria into the vein with the needle.
   Note: Blood sampling can be done with assistance or alone; however, producers who are new at blood sampling will benefit from having assistance.

2. The assistant should turn the head of the ewe/doe to the side, at a 30-degree angle, by holding the animal under its jaw to allow for easy access to the vein. The animal’s body may also need to be restrained.

3. Another assistant or a blocking stand can help keep the ewe/doe from moving. Restraining an animal without assistance is better for those who have become proficient at drawing blood. The handler should straddle the animal, place his/her knees behind the animal’s shoulders, and back the ewe/doe into a corner or against a wall to help control her hindquarters.

4. The ewe/doe’s head should be turned opposite to the side of collection, once again at a 30-degree angle. Restraint of the head is accomplished by using the elbow and the upper arm to keep it held off to the side. This leaves both hands available for the blood collection. An unruly animal can be dangerous to the assistants, the person drawing the blood, and to itself. It is important to be gentle and patient when restraining the animal.

5. The easiest way to locate the vein is to draw an imaginary line from the middle of the ewe/doe’s eye down the side of her neck. The vein can be located by applying pressure with the thumb or fingers in the groove on either side of the trachea and below the half-way point of the shaved area. The pressure will cause the vein to pop up and be easy to see.

6. Once the vein has been located, the area needs to be properly cleaned to keep bacteria out of the needle insertion site. This is accomplished using surgical scrub on the area.

7. Apply a small amount of the surgical scrubs to a few pieces of gauze. Squeeze some of the excess scrub out of the gauze before applying it to the animal to make the process easier.

8. The area should be cleaned by starting in the center and working out toward the edge. Never go back over a place that has already been wiped, because bacteria could be carried back into the clean area.

9. Once the area has been cleaned and the vein has been located, the blood can be drawn. This can be done using a needle, needle holder and a blood collection tube.

10. The needle holder should be guided into place with the right hand while the left hand is used to apply pressure to the vein. The vein should be easy to see and feel. Try to aim for the center so you will have more of a chance of placing the needle within the vein.

11. Inserting the needle does not require great force. Apply just enough pressure to break through the skin and enter into the jugular vein.

Continued on reverse side
12. Once the needle is in place, apply pressure so that the blood collection tube is pushed onto the needle. If the needle is in the vein, blood will start to fill the container immediately. If this does not happen, gently withdraw the needle so that the tip comes to the outside of the wall of the vein and re-insert. Gentle prodding may be needed to achieve maximum blood flow.

13. Collect 2 cc or more of blood.

14. Before removing the needle, the handler should be sure to remove their left hand, to prevent blood from exiting through the insertion site. Also, be sure to remove the blood collection tube from the needle holder to prevent the loss of the vacuum in the blood collection tube. If the needle is removed from the skin first, the vacuum will be lost and a new blood collection tube will be needed.

15. After the needle has been removed from the skin, press fingertip over the area where the needle was inserted. A small red dot may appear on the ewe/doe’s neck from the needle insertion site. This is normal and is nothing about which to be concerned.

16. Label the sample vials sequentially with the ear tag or ID. Use a permanent marker on the vial LABEL. Labeling the tube correctly will assist the laboratory in sample organization and help speed results.

17. Unscrew the needle from the needle holder, discard the needle into a ‘sharps’ container and re-use the needle holder. A new needle must be used for each animal.

18. Place the tube in the refrigerator until shipment.

Additional step-by-step video for obtaining a jugular vein sample can be found at YouTube under ‘Obtaining a blood sample from your small ruminant’ by Purdue Extension.

Additional submission forms may be download from the NHVDL website at www.nhvdl.unh.edu.

If you should have questions, phone the NHVDL at 603-862-2726.