



Herd Health Diagnostics
1205 SE Pro Mall Blvd. Ste. 109
Pullman, WA 99163
Phone: 509.715.1131
Email: amber@herdhealthdiagnostics.com

Small Ruminant Jugular Vein Blood Collection Instructions

Recommended supplies

Restraint equipment	Needle holder/vacutainer needle setup or syringe
Waterproof permanent marker	Vacutainer tubes
Sharps container	Alcohol wipes

Preparing the blood collection supplies

Using a needle holder/vacutainer needle setup: Remove the cover of the vacutainer needle (the shorter of the two sides) and screw the needle onto the needle holder. For safety, keep the cover of the sharp end of the needle until ready to puncture the skin of the animal. Insert the vacutainer tube into the open end of the needle holder until the stopper touches but is not punctured by the back portion of the needle. *Using a syringe/needle setup:* Remove the cover of a single use needle and screw onto the syringe. Hold these assembled materials in one hand or keep them in an accessible location such as a loose-fitting pocket.

Safely and properly restrain the animal

Safely and properly restrain the animal in a manner consistent with good-management practices. If uncertain about how to properly restrain an animal, contact your veterinarian or a trusted source for assistance. Some tips for restraining the animal:

- Straddle the neck of the goat or sheep while keeping your knees ahead of the shoulders and then back the animal into a corner of a barn or corral. An experienced person can collect blood samples alone by holding the head under one forearm and elbow allowing sampling of blood from the jugular vein with the free hand. It may be helpful to clip the wool or hair at the area from which blood will be taken.
- If one is not experienced, a second person should draw the blood while the first restrains the animal. The person restraining the animal (as described above) should, additionally, hold the animal under the jaw, lift its head to a 45 degree angle and turn the head 30 degrees to the right or left to allow easy access to the jugular vein by the second person.

Tips for drawing blood using a needle holder/vacutainer needle setup

- 1.) From the front of the animal, locate the vein. The jugular veins are in the grooves on either side of the trachea.
- 2.) Apply pressure with a thumb in the groove that is opposite the direction the head is turned and below the site for bleeding to stop blood flow and the vein will expand with blood and become more visible under the skin.
- 3.) Clean, aseptically, the area from which blood is to be drawn.
- 4.) Collect a sample.
 - a. *Using a needle holder/vacutainer needle setup*
 - i. With enough pressure, insert the needle through the skin and into the vein. Blood will begin to flow through the needle.
 - ii. Once blood appears at the base of the needle, push the Vacutainer tube onto the back portion of the needle to puncture the stopper. Hold the needle in position while the tube fills with blood; if the needle moves, the blood source may be lost and the tube will not fill. If the blood source is lost, probe with the needle to find the vein again, but do not withdraw the needle from the skin since the vacuum in the tube will be lost. If you do lose the vacuum, repeat the procedure with a new tube.
 - iii. Collect 2 cc's or more of blood, withdraw the needle, and remove the tube from the holder.
 - b. *Using a syringe and needle setup*
 - i. With enough pressure, insert the needle through the skin and into the vein. Pull back slightly on the plunger of the syringe to see a flash of blood. If blood appears, slowly pull back on the plunger to obtain 2 cc's or more of blood.
 - ii. Immediately transfer the blood from the syringe into a red top tube by using the needle from the syringe to puncture the stopper of the red top tube.
- 5.) Apply pressure to the site of the skin puncture to stop any bleeding. Dispose of the needles into a sharps container. Clean and re-use the needle holder if using one.
- 6.) Label the blood tube with the animal ID and a tube sequence number using a waterproof, permanent marker.
- 7.) Store the samples near room temperature for 30-60 minutes and then store in the refrigerator until ready to ship.

Additional tips

- Blood may also be drawn using different techniques and supplies, but the blood should be transferred to a stoppered red top tube for processing.