

SOP No:	ATT 015
SUBJECT:	Venous Blood Sample Collection in Cattle
POLICY:	This procedure may only be performed by, or under the supervision of operators skilled in the technique.
PRECAUTIONS:	The animal should be in a confined area to limit movement, such as a crush or stanchion. The use of additional restraint aids such as halters and nose pliers is highly recommended for jugular bleeding. After sample collection, digital pressure should be applied to the puncture site to assist blood clotting and reduce the risk of haematoma formation.
EQUIPMENT:	18 gauge needles (or size appropriate for animal) 5mL syringes (or size appropriate for sample to be collected) 18 gauge Vacutainer needles (or size appropriate for animal) Vacutainer Holders Vacutinners (Sample Collection Tubes) Swabs Halter with lead Nose pliers
PROCEDURE:	<ol style="list-style-type: none">1. <u>Jugular venipuncture:</u> Using the halter, the head is elevated slightly, drawn to the side opposite the jugular vein to be sampled, and tied to a stationary surface. The vein is occluded by digital pressure in the jugular groove low in the neck. A Vacutainer needle, attached to a Vacutainer holder, is placed into the distended jugular vein at approximately a 45° angle (angle varies with depth of vein) cranial to the occluding digit. When positioned in the vein, a Vacutainer is inserted onto the needle and a blood sample collected. (The full Vacutainer may be replaced with others if multiple samples are required.) When the desired volume has been collected, the occluding pressure is removed. The tube is detached from the needle, the needle removed from the vein. A needle and syringe may be used to collect blood from this site.2. <u>Coccygeal venipuncture:</u> Blood collection from the coccygeal (tail) vein is performed with the animal restrained in a stanchion, race or crush. The tail is held in one hand such that the ventral surface is accessible. The ventral surface of the tail is cleaned with a swab to remove faecal material. A needle is then inserted perpendicular to the skin surface on the midline between (approximately) the third and fourth coccygeal vertebrae. When blood flows from the needle, the syringe is attached and the sample is collected. After sample collection is complete the tail is released. The syringe may be attached to the needle prior to insertion with gentle aspiration used to determine if the needle is in the correct location. The Vacutainer system may be used to collect blood from this site.

RECOMMENDATIONS:

DATE ISSUED: **24.06.2009**

REVISED:

REFERENCES

1. McCurnin D.M., Bassett J.M. 2006. *Clinical Textbook for Veterinary Technicians*. Elsevier Saunders; 119.
2. Hanie E.A. 2006. *Large Animal Clinical Procedures for Veterinary Technicians*. Elsevier Mosby. 337 - 339