



TITLE: Venipuncture Policy	Doc. #: 3801
Section: Kernel Root\Pathology and Laboratory Medicine\Shared Services\Blood Collection	Version: 1.0 CURRENT
Prepared by: Technical Specialist	Revision Date: 2009/08/06

Definitions

- **Cannula:** A temporary surgical connection between an artery and a vein used for dialysis and blood drawing by specially trained personnel only. Tubing extends to the outside surface of the arm and has a rubber diaphragm cap.
- **Fistula or shunt:** Created by surgical procedure, which connects a vein and artery permanently. It is used for dialysis and should not be used for drawing blood. Specimens should be drawn from the other arm.
- **Hematoma:** A mass of usually clotted blood that forms in a tissue, organ or body space as a result of a broken blood vessel.
- **Pre-Analytical Errors:** Factors that impact upon the quality of test results during the specimen collection, handling and transportation or storage process.
- **Specimen Integrity:** Specimens properly collected, labeled, handled, preserved, stored and transported to ensure quality laboratory results.
- **Standard precautions:** Guidelines that combine the major features of Universal precautions and body substance isolation practices. They cover the transmission of any pathogen and are more comprehensive than universal precautions. CLSI H3-A5 pg 1
- **Thrombosis:** Formation of a thrombus within the lumen of a blood vessel
- **Vascular Access Device:** also called an indwelling line, consists of tubing inserted into a main vein or artery (e.g., intravenous line, PICC line) It is primarily used for administration of fluids and medications, monitoring pressures and drawing blood by *specially trained personnel only*.
- **Hemostasis Strap :** A pressure device used after removal of cardiac catheterization or coronary angioplasty. The strap is applied in the catheterization lab and left in place for 2-3 hours.
- **PICC Line:** Peripherally inserted central catheter. Flexible tubing inserted into a peripheral vein and then advanced through increasingly larger veins until it rests close to the heart. It is generally used to administer medications or draw blood by nursing staff.
- **Saline Lock:** When saline is injected into a self sealing port that is connected to vascular access device to prevent clot formation at the injection site.



Purpose

This policy provides guidance to phlebotomists who perform blood specimen collection.

Policy

The Department shall ensure blood specimens are collected in accordance with regulatory and accreditation guidelines.

Supporting statements

- 1.0 Venipuncture for Blood Specimen Collection includes specimens for the purpose of:
 - 1.1 Diagnosis, monitoring and/or evaluation of patient responses to treatment,
 - 1.2 Blood culture analysis to confirm bacteremia and septicemia and identify causative organisms.
- 2.0 A physician, dentist or licensed nurse practitioner's written order is required.
- 3.0 All hollow bore needles used for the purpose of phlebotomy will be approved, safety engineered products.
- 4.0 One-time use needle holders shall be used and properly disposed of after each use.
- 5.0 The phlebotomist shall follow all Capital District Health Authority safety and infection control policies and guidelines.
- 6.0 Non-latex gloves must be worn on both hands during the phlebotomy procedure.
- 7.0 A non-latex rubber tourniquet shall be used. The phlebotomist shall use the supplied, *dedicated* non latex tourniquet on all inpatients.
- 8.0 All new phlebotomy staff shall participate in the mandatory training program. Competencies shall be re-evaluated on a yearly basis and records kept on the employees file according to the department's retention of records policy.
- 9.0 Venipuncture is an aseptic technique.
- 10.0 All human blood specimens are to be treated as infectious and handled according to "standard precautions".



Capital Health

TITLE: Venipuncture Policy	Version: 1.0 CURRENT
-----------------------------------	-----------------------------

11.0 Laboratory staff are **not** permitted to draw blood from any vascular access devices including, canulas, fistulas, shunts and PICC lines.



12.0 Venipuncture is **not to be performed** :

- 12.1 on an extremity with a shunt, cannula or PICC line
- 12.2 on an extremity with an active fistula; (See 13.1)
- 12.3 above an intravenous site;
- 12.4 below an active intravenous site; (See 13.2)
- 12.5 from a lower extremity of a diabetic patient;

Venipuncture on the lower extremities shall not be used for those patients who are diabetic or who suffer from thrombophlebitis, venous thrombosis or edema.

Venipuncture on the lower extremities, in particular the feet, is contraindicated in **most** situations because of the increased bacteria flora on the feet and the risks of possible infection and thrombosis. (See 13.3)

- 12.6 the same side as axillary lymph node surgery (e.g., post-mastectomy); (See 13.4)
- 12.7 from an area where a hematoma is present;
- 12.8 from an artery.
- 12.9 using a syringe that is not connected to a winged push button blood collection set.

13.0 In the absence of other acceptable sites, and **only when absolutely necessary**, venipuncture may be performed :

13.1 from the extremity of an inactive fistula if written permission is obtained from the patient's physician and the tourniquet can be placed 2-3 inches below the fistula site. Inpatient permission shall be from the attending physician on the Physician Authority to Draw Blood Under Special Circumstances form in the patient's chart. Outpatients must have the Physician Authority to Draw Blood Under Special Circumstances form completed by the attending physician and instructed to present the form at all blood collection visits.

13.2 from an intravenous site that has been inactivated by a nurse or physician for a minimum of 2 minutes and the tourniquet must be placed 2-3 inches below the IV site. Physician Authority to Draw Blood form is not required but it must be documented on the laboratory form or labels where the blood was obtained and what the intravenous fluid contained. This information will be entered into the LIS system as a chartable footnote.



13.3 from the foot of a patient who is **not** diabetic, if there is written permission from the physician. Outpatients must have the Physician Authority to Draw Blood form completed by the attending physician and instructed to present the form at all blood collection visits; a copy will be kept with the requisition. Inpatient permission shall be from the attending physician on the Physician Authority to Draw Blood Under Special Circumstances form to be placed in the patient's chart.

13.4 from the arm of a mastectomy if there is written permission. Outpatients must have the Physician Authority to Draw Blood form completed by the attending physician and instructed to present the form at all blood collection visits, a copy will be kept with the requisition. Inpatient permission shall be from the attending physician on the Physician Authority to Draw Blood form to be placed on the patients chart.

13.5 from an arm containing an inactive saline lock. Placement of the tourniquet can be 2-3 inches above or below.

13.6 from an arm of a patient in the cardiac catheterization laboratory containing a hemostasis strap if the collection is done in the ante-cubital area and if the tourniquet is put on lightly or not at all.

14.0 The **Order of Draw** for blood specimen collection is used to obtain samples in correct sequence to avoid pre-analytical error due to tube additives. The order of draw is as follows:

- Blood culture bottles, aerobic first then anaerobic
- Coagulation tubes (light blue top)
- Serum tubes, with or without clot activator, with or without gel (red or gold top)
- Heparin tube (green top)
- EDTA (lavender top)
- Glycolytic inhibitor (grey top)

15.0 Inpatients must have a proper armband for identification purposes attached to the wrist or ankle

16.0 Phlebotomists obtaining a blood specimen from an inpatient must confirm the identification of the patient, including checking of the armband, blood tube labels and requisitions. Outpatients will be asked to state their full name and date of birth which will be confirmed by the requisition and/or labels. Labeling of all blood specimens and completion of the requisitions is to take place at the bedside/ collection chair immediately following collection. Blood culture specimen information should also include the venipuncture site.



TITLE: Venipuncture Policy	Version: 1.0 CURRENT
-----------------------------------	-----------------------------

17.0 A phlebotomist is to assess the patient for any special considerations or contraindications, by checking for signage above the patient’s bed or foot of the bed{e.g. intravenous (IV) therapy, patient fasting etc}.

18.0 If the blood collection tube or blood culture bottle does not transfer the sample by vacuum, the tube/bottle must be considered faulty and a new one obtained. Blood samples **are not to be injected** into the tube/bottle or poured from one sample container to another as this may cause problems with specimen integrity. The only exception is when blood must be obtained by syringe for an adjusted citrated tube for elevated MCV (mean cell volume) in which case a winged push button blood collection set must be attached to the syringe.

19.0 Only **two attempts** at venipuncture on any one patient are permitted by a single phlebotomist

Responsibility

Laboratory Management	<ul style="list-style-type: none"> • Develop policies, processes and procedures related to phlebotomy • Train and educate staff • Conduct phlebotomy competencies • Retain appropriate documents and data
Phlebotomists	<ul style="list-style-type: none"> • Ensure proficiency and competency in phlebotomy skills are maintained • Follow all safety aspects of the procedure • Ensure the specimen is collected from the right service user by observing positive patient identification • Use the correct order of draw

Supporting Documents

- CC85-040 - Mislabeled Laboratory Specimens for Diagnostic Testing
- CC85-070 - Unlabeled Laboratory Specimens for Diagnostic Testing.
- BTS 410-102v3 Specimen Collection Policy
- CC 85-079 - Venipuncture for Blood Collection Specimen Collection
- CC 85-018 - Clinical Laboratory Tests, Authority to order
- CH 70-040 Patient Identification and Same Name Alert
- CC 10-065 Radial Artery Compression and Caring for the Patient Following a Transradial Cardiac Cath/Angioplasty.
- Specimen Acceptance and Rejection Policy
- IC 04-002 Routine Practices
- IC 04-004 Strict Isolation
- IC 04-008 Contact Measures



Capital Health

TITLE: Venipuncture Policy	Version: 1.0 CURRENT
-----------------------------------	-----------------------------

- IC 05-001 Antibiotic Resistant Organisms (Information for Staff)
- IC 04-009 Management of Patient with Diarrhea (Enteric Measures)
- IC 04-011 Droplet Precautions

References

1. Clinical and Laboratory Standards Institute. Procedures for the Collection and Diagnostic Blood Specimens by Venipuncture; Approved Standard H3-A5, 5th edition. Wayne, PA: NCCLS; 2003.
2. McCall, Ruth E. and Tankersley. *Phlebotomy Essentials*, J.B. Lippincott Company; 1993
3. College of American Pathologist. *So You're Going To Collect a Blood Specimen: An Introduction to Phlebotomy*, 8th ed. Northfield, Illinois: CAP; 1999
4. Potter, P.A. & Perry, A.G.(2001) Canadian Fundamentals of Nursing, 2nd Ed. Toronto: Mosby, Canada Ltd.
5. Bill NO.13 Nova Scotia, Safer Needles In Healthcare Workplaces Act