

TRAINING UPDATE

Lab Location: SGAH & WAH
Department:

Date Distributed: 8/29/13
Due Date: 9/30/13
Implementation: 10/1/13

DESCRIPTION OF PROCEDURE REVISION

Name of procedure:		
Venipuncture	SGAH.P09, WAH.P07	v001
Description of change(s):		
<p>Section 5:</p> <ul style="list-style-type: none">○ added steps if adverse reaction occurs,○ remove multiple tube collection table,○ add reference to order of draw chart,○ remove process for unobtainable specimen and add reference to SOP <p>Section 6: add order of draw chart and SOPs</p> <p>This revised SOP will be implemented on October 1, 2013</p>		

Document your compliance with this training update by taking the quiz in the MTS system.

Approved draft for training all sites (version 001)

Non-Technical SOP

Title	Venipuncture	
Prepared by	Samson Khandagale	Date: 5/15/2009
Owner	Samson Khandagale	Date: 5/15/2009

Laboratory Approval		
Print Name and Title	Signature	Date
<i>Refer to the electronic signature page for approval and approval dates.</i>		
Local Issue Date:		Local Effective Date:

Review:		
Print Name	Signature	Date

TABLE OF CONTENTS

1. PURPOSE.....	3
2. SCOPE.....	3
3. RESPONSIBILITY.....	3
4. DEFINITIONS.....	3
5. PROCEDURE.....	4
6. RELATED DOCUMENTS	8
7. REFERENCES	8
8. REVISION HISTORY.....	8
9. ADDENDA AND APPENDICES.....	8

1. PURPOSE

To describe the equipment, sites and the steps needed to perform a successful venipuncture by BD Vacutainer Blood collection method.

2. SCOPE

This procedure applies to all phlebotomists working directly for or collecting specimens on behalf of Quest Diagnostics.

3. RESPONSIBILITY

All staff performing phlebotomy procedures must demonstrate competency in proper venipuncture technique.
The Field Operations Supervisor is responsible for the content and annual review of the procedure.

4. DEFINITIONS

None

5. PROCEDURE

Equipment & Supplies:

- Latex free gloves
- Alcohol prep (70% alcohol)
- 2x2 sterile gauze
- Safety needle (Eclipse) 21 or 22 Gauge
- Single use holder (clear)
- Latex free tourniquet
- Band-Aid or tape
- Collection tubes
- Biohazard sharps container
- LIS Collection list and labels/ Lab Requisition

Venipuncture by Evacuated tube method: (BD Vacutainer multiple tube collections)

1. Positively identify the patient according to the 'Patient Identification' procedure for inpatients and outpatients. Patient information on un-received collection list/ LIS labels must match patient ID bracelet and demographics before any procedure is performed. Each test ordered in LIS on a specific patient will generate an LIS bar code label. Tests with similar tube collections will be consolidated on one or more labels. Based on Specimen volume requirements multiple labels will be generated to ensure specimen quantity is adequate to perform testing.

The printed LIS bar code label will have the following information on it:

- Patient's full name
 - Patient Medical Record Number
 - Lab accession number
 - Date of order/collection
 - Time of collection
 - Patient age or date of birth
 - Gender
 - Patient location (inpatient room number or outpatient location, for example 4101-1 or LAB)
 - Test(s) to be collected
 - Type of collection tube
 - Handling requirements, *example:* Gray tube on ice
2. Introduce yourself to the patient by stating first and last name.
 3. Wash hands and wear latex free gloves before proceeding.
 4. Collect equipment and correct collection tubes.
 5. Explain procedure to the patient. If a fasting specimen is required, ask patient when he/she last ate.

6. After patient has given consent to draw blood by extending his/her arm for venipuncture, proceed by examining patient arm for previous venipunctures, scars, IV lines, wounds etc. Select proper site for venipuncture. Select proper needle type and appropriate gauge.

Example: use a winged set to draw from dorsal side of palm attached to single use holder or use 21/22 gauge eclipse needle attached to single use holder to draw from a vein in antecubital area.

7. Assemble equipment and break needle seal in presence of the patient.
8. Apply tourniquet about midway between the elbow and the shoulder (3-4 inches above the venipuncture site). Patient must not be allowed to pump the hand. Place the patient's arm in a downward position to prevent reflux or 'backflow' of blood from tube into the venous system. Ask patient to close hand gently.
9. Palpate/feel for vein, noting the location and direction of the vein though the vein might be visible.
10. Clean the area for venipuncture with 70% alcohol pad, in **concentric circles**. If a second scrub is required do it in the similar manner.
11. Allow the area to air-dry completely as presence of alcohol can lead to hemolysis of red blood cells.
12. Activate eclipse needle by moving the safety shield upwards, exposing needle. With the bevel up, align the needle with the vein while holding the skin taut. Insert the needle at a 15-30 degree angle with the skin. Remove your hand from drawing the skin taut. Grasp the flange of the single use holder and push the proper tube ([refer to Order of Draw Blood Chart](#)) forward until the butt end of the needle punctures the stopper.
 - Do **not** change hands while performing venipunctures.
 - Your dominant hand must be used to hold the needle assembly while performing the venipuncture throughout the procedure.
 - Your other hand must be used in changing, inserting and mixing additional tubes.
13. Collect the required amounts of blood allowing vacutainer tubes to fill automatically. All Evacuated tubes contain vacuum and the collection is performed by replacing the vacuum with blood from the patient's vein guided by the needle into to the tube.
14. Release tourniquet. Ask patient to open hand.
15. Place gauze above puncture site and remove needle while simultaneously applying pressure on the puncture site. Firmly activate needle safety shield, a click must be heard to ensure that the safety shield is secure. **DISCARD NEEDLE and HOLDER ASSEMBLY** into the sharps container immediately. Apply pressure to site for 3-5

minutes and in some cases until bleeding completely stops. Patient may assist if able to do so.

16. Apply gauze and tape or Band-Aid on venipuncture site after bleeding has stopped.
17. Label all tubes with patient's labels (LIS/SMS) at the patient's bedside or in presence of the patient. The Phlebotomist must write his/her tech code, date, and the time of collection on each label. Similar accession numbers must be rubber banded together.

Note: Recheck the collected and labeled tubes with patient's identification bracelet.
18. Clean work area. All used materials are discarded in the regular trash cans. All blood stained non-sharp materials are discarded in Biohazard medical waste containers lined with Red Biohazard bags.
19. Place specimens in Biohazard zip-lock bag. Bag must be closed properly to prevent leakage into transport containers or into Pneumatic Tube System.
20. Thank patient and wish them a good day.
21. Wash hands and proceed to next assignment.
22. Deliver specimens to Specimen Processing via Pneumatic tube system for inpatient specimens. If it is required to hand carry specimens or if you are returning to the Lab, specimens may be hand delivered to the Specimen Processing area.

Notes:

If an inpatient has an adverse reaction during the Venipuncture process, then follow the steps below. (For outpatients refer to SOP, 'Outpatient Emergency Assistance')

- Discontinue the procedure, remove the needle and activate safety shield on the needle
- Remove the tourniquet
- Discard the needle and apply bandage to the site.
- Press the nurse call button and speak with the nurse explaining that the patient is having an adverse reaction to the procedure.
- Do not leave the patient's room until nurse arrives.
- Answer any questions nurse may have, step aside and assist nurse as needed.
- Ask nurse the time when you can return to complete the procedure. Write down the nurse's name.
- Reschedule the draw in LIS using reason code NOTP (Test Not Performed) and insert name of RN in LIS.
- Return back to the unit, check with nurse and obtain permission before entering the patient's room. Once permission is granted approach patient for performing the venipuncture procedure.

In the case of an unsuccessful venipuncture, refer to SOP 'Unobtainable Specimens'

Safety Notes:

A Phlebotomist must NEVER ...

- Place equipment or phlebotomy caddies on the patient's bed.
- Attempt a venipuncture on a patient that is standing or walking.
- Draw a patient in a wheel chair without locking the wheels.
- Mix bloods from one tube into another tube.
- Perform Phlebotomy procedure on a patient that is asleep.
- Use same needle to re-insert for additional venipuncture.
- Leave Phlebotomy caddies in the hall way or patient room unattended.
- Attempt venipunctures more than two times on the same patient.
- Label or write nurse name on collected tubes on behalf of Nurse/ Technician.
- Send unlabelled tubes to the Laboratory.
- Have unlabelled specimens in their possession.
- Use Lab coat -pockets to store or carry blood samples.
- Wear gloves in the hall ways or elevators.
- Use other than Bio-hazard Pneumatic tubes to send blood samples in sealed bags to the Lab.
- Hand Lab-collected specimens to Transporters to deliver to the Lab unless authorized by Supervisor/Lead staff.
- Discuss reports or results with any patient.
- Perform Arterial punctures.
- Use any Phlebotomy equipment that is not supplied by Laboratory on patients.
- Attempt to remove any material from a sharps container.
- Tamper with or discard already collected and/or stored tubes.
- Use 25 gauge winged set/ butterfly needle for Venipuncture on adults.
- Touch patient in an inappropriate manner or attempt venipuncture on sites other than dorsal side of hands, fore arms, feet (permission required from Physician/ patient's Nurse) or antecubital area.
- Transfer blood from syringe into tubes without use of 'Blood Transfer Device.'
- Accept blood specimens from Nurses in syringes with needle exposed/attached. (request nurse to detach needle and discard before syringe is handed over)
- Use broken or expired tubes for blood collections.
- Use pencil to write Hollister arm bands or write on HIS/LIS labels.
- Use side of mastectomy, volar site of wrist, areas of scars, Dialysis devices, edematous arms, arms in casts for blood draws.
- Use latex gloves or tourniquets on patients. (use latex-free products only)

DOWNTIME: During downtime, Nurses and Unit clerks will legibly write orders on Downtime requisitions and provide the following information on the forms, to perform positive patient identification and to ensure timely collection:

- Full name of patient
- Medical Record Number
- Date and time of collection
- Specimen priority: STAT, Timed, routine, next day or AM
- Location
- Tests
- Account / Billing number (acceptable if Medical record number is not provided)

6. RELATED DOCUMENTS

- Phlebotomy procedures
 - Patient Identification
 - [Outpatient Emergency Assistance](#)
 - [Rescheduling Draws](#)
 - [Unobtainable Specimens](#)
- [Order of Blood Draw Chart, AG.F218 \(see Attachment Tab of Infocard\)](#)

7. REFERENCES

CLSI (NCCLS) Document H3-A5, Vol.23, No. 32, Procedures for the collection of Diagnostic Blood Specimens by Venipuncture Approved Standards 5th Edition

8. REVISION HISTORY

Version	Date	Reason for Revision	Revised By	Approved By
		Supersedes SOP P002.001		
000	8/14/2013	Section 5: added steps if adverse reaction occurs, remove multiple tube collection table, add reference to order of draw chart, remove process for unobtainable specimen and add reference to SOP Section 6: add order of draw chart and SOPs	SKhandagale	SKhandagale

9. ADDENDA AND APPENDICES

None



ORDER OF BLOOD DRAW

Adventist Hospitals



Blood Cultures: Adult 8-10 ml,
Pediatric 3 ml
**DO NOT draw from central lines
unless ordered by a physician**

**Invert Tube
X8**



Lt. Blue (Na Citrate) 2.7 ml: *
PT, PTT, Fibrinogen

**Invert Tube
X5**



Plain Red 6 ml:
Therapeutic Drug Levels / Toxicology,
(HIV rapid test, Alcohol, Gentamycin,
Vancomycin, Digoxin, Salicylate, etc.)

**Invert Tube
X5**



SST Tiger:
Mono, Lyme Disease, Iron, Qualitative
HCG, Hepatitis Panel (Red 3 tests,
yellow 2 tests)

**Invert Tube
X8**



PST Lt Green (Li Heparin) 4.5 ml:
Basic Metabolic Panel, Liver Panel, CRP,
Quantitative HCG, Thyroid Tests, Cardiac
Enzyme, Troponin, Lipid Panel, Magnesium,
HIV, LDH, Amylase, Ammonia (on ice)

**Invert Tube
X8**



Green (Na Heparin) 10 ml:
Genetic and Chromosome Analysis

**Invert Tube
X8**



Lavender (EDTA) 10 ml:
Type and Screen and ABO/Rh
**Type & Screen requires blood bank labeling
system be used.**

**Invert Tube
X8**



Lavender (EDTA) 4 ml:
CBC, Retic Count, HbA1C, CEA, H&H,
Sed Rate, KBT, ABO confirmation, DAT
(Direct Coombs), Fetal Cell Screen /
RhoGam Evaluation

**Invert Tube
X8**



Gray (NaF) 6 ml:
Lactic Acid (on ice) Glucose Tolerance

**Invert Tube
X8**

NOTE:

* When using a winged set for venipuncture and a coagulation (Light Blue Top) tube is the first specimen tube to be drawn, a discard tube should be drawn first. The discard tube must be used to fill the blood collection set tubing's 'dead space' with blood but does not need to be completely filled. This important step will ensure maintenance of the proper blood-to-additive ratio of the blood specimen. The discard tube should be a citrate (light/sky blue) coagulation tube.

(Reflects change in NCCLS recommended Order of draw: NCCLS H3-A5, Vol 23, No 32, 8.10.02)