



## **SPECIMEN PROCUREMENT AND HANDLING**

### **I. BLOOD SPECIMEN COLLECTION**

#### **A. Orders for Laboratory Inpatient Phlebotomy Team**

Hospital Phlebotomy Services perform daily collection rotations every 2 hours between the hours of 6am (0600) and 10pm (2200), (the last blood collection rotation takes place between 10pm & midnight), 7 days per week including holidays

1. Phlebotomy Services collection rotations DO NOT include patients in the following units: EMSV (except EWARD patients), L&D, NICU, PICU, 5E Sickle Cell, NSICU, MSICU, 7W Organ Transplant (except OT step-down rms. 761 & 763), 8W BMT, UIHO or UNKO (location unknown). Blood collections in these locations are the responsibility of the RNs & MDs.
2. Phlebotomy Services collection rotations DO NOT include patients in the following units: EMSV (except EWARD patients), L&D, NICU, PICU, 5E Sickle Cell, NSICU, MSICU, 7W Organ Transplant (except OT step-down rms. 761 & 763), 8W BMT, UIHO or UNKO (location unknown). Blood collections in these locations are the responsibility of the RNs & MDs.
3. RNs/MDs are responsible for all STAT, TIMED & BLOOD GAS collections in addition to non-blood specimens.
4. Patient orders for 6am (0600) draw must be entered in the system before 4am (0400) to ensure 6am rotation. Orders entered between 4am (0400) and 7:45am (0745) will default to the 8am (0800) rotation.

5. Patient orders for all 8am, 10am, 12 pm, 2pm, 4pm, 6pm, 8pm & 10pm rotations must be entered in system no later than 155 minutes prior to the desired rotation time or will default to next scheduled rotation collection time.

6. Lab orders to be collected by Phlebotomy must be ordered in the system using the order sentence shown below:

a) *[Routine Phlebotomy, Lab to Draw, Collected-“No”, MD/RN to Draw-“No”].*

b) *NOTE: Modifying any of these order details will prevent the order from appearing on the desired Phlebotomy collection list and may result in a patient being missed by Phlebotomy.*

7. All Phlebotomy lab orders must be placed on the current Inpatient admission. Lab orders placed against an old patient admission / account number may result in patient being missed by Phlebotomy.

8. When patients are transferred from one unit to another, the new unit's Physician Service Team is responsible for re-ordering any tests that may have been cancelled during the patient's transfer process.

## **B. Outpatient Phlebotomy**

Clinic patients may have blood drawn in the Outpatient Care Center (OCC) Phlebotomy Station located in suite 4B, Monday, Tuesday, Wednesday, and Friday 0730-1800; Thursday 0730-1900; Saturday 0900-1300. Appointments are necessary for special procedures only. One additional station serves oncology patients located in the Oncology Center in suite 1E.

### C. How to Use the Vacutainer® System

1. Put on personal protective equipment.
2. Attach needle to Vacutainer® holder.
3. Insert test tube to line on the holder.
4. Apply tourniquet, palpate vein, cleanse area, insert needle.
5. Push test tube to the top of the holder, blood will flow into tube by vacuum. To fill more than one tube, leave needle in the vein while changing tubes.
6. All tube types are Hemoguard (Becton Dickinson) and sterile. A 10 mL plain yellow (non-Hemoguard) tube is available for transport of routine urinalysis specimens. A 13x100 mm red top tube is used for random urine collection transport and aliquots of selected timed urine collections for Clinical Chemistry testing.

**Note:** To avoid anticoagulant/additive contamination when drawing multiple sample types, the following "Order of Draw" must be followed. Tube types within a grouping may be drawn in any order:

Stopper Color	Contents	Specimen	Amount/Tube
<b>Vacutainer® System - BLOOD</b>			
Blood culture	Polyanethol sulfonate SPS	Whole blood	
Light blue	Sodium citrate	Plasma	2.7 and 1.8 mL
Yellow	ACD solution	Whole blood	10 mL
Gold (SST™)	Gel/no anticoagulant	Serum	6 mL
Red	No anticoagulant	Serum	6 and 2 mL
Royal blue with red band (trace elements)	No anticoagulant	Serum	6 mL
Light green (PST™)	Gel/lithium heparin	Plasma	3 mL
Dark green	Sodium heparin	Plasma	6 and 3 mL
Tan (lead determination)	Heparin/lead-free	Plasma	6 mL
Lavender	EDTA	Whole blood	6 and 3 mL
Gray	Sodium fluoride	Plasma	3 mL

<b>Vacutainer® System - URINE</b>			
Yellow (urinalysis)	No anticoagulant	Urine	10 mL
Red (urine chemistries)	No anticoagulant	Urine	6 mL
Gray (urine culture & sensitivities)	Boric acid	Urine	4 ml

## **II. SPECIMEN HANDLING**

HIS transmittals must accompany inpatient samples drawn by MD/RN. Manual requisitions should only be used with inpatient specimens if the HIS system is down, and for tests not listed in the HIS system.

### **A. Specimen Container Labeling**

1. Each tube of blood or specimen container must have a legible addressograph label, P.A.M. label and/or Sunquest LIS label attached to the container. Labels should not be placed on the lid of the container or on the biohazard transport bag. Please ensure that the patient's name and number on the specimen label correspond to the patient's name and number on the requisition.
2. A discrepancy in patient and specimen identification will cause a delay in specimen processing and will require a new specimen to be submitted.

## **III. TRANSPORT OF SPECIMENS TO THE LABORATORY**

The University of Illinois Hospital & Health Sciences System has implemented the CDC guidelines for “General Blood and Body Fluid Precautions.” Therefore, all specimens should be treated with the same precautions. Since the safety of laboratory personnel is a major concern, this policy must be strictly followed at all times. All specimens must be submitted in biohazard bags. Place requisition in the outer pocket. Do not staple requisitions to bag. Do not place the requisition in the bag with specimen. Each bag must be securely sealed to prevent specimen leakage.

## **A. Translogic (Pneumatic Tube) Specimen Transport**

1. All laboratory specimens are acceptable in the pneumatic tube system if appropriately labeled and packed. This includes blood, urine, stool, other fluids, and blood culture bottles. If the specimen cannot be contained in a sealed biohazard bag it may not be sent via the pneumatic tube. Transport personnel will have to hand deliver to the appropriate laboratory.
2. Every labeled specimen must have an appropriate requisition; HIS electronic requisition, or manual laboratory requisition. The requisition is placed in the outside pocket of the biohazard bag — not inside the bag with the sample and not stapled to the bag.
3. Unlabeled/mislabeled specimens are not acceptable. The actual specimen tube or container must be labeled at a minimum with the patient's name and birth date. Labels should not be placed on the lid of the container or on the biohazard transport bag.
4. Specimens that have leaked in transit will be rejected by the laboratory and a new specimen and requisition will need to be submitted.
5. Body fluids should be sent in sterile specimen cups securely sealed or sterile collection tubes. Any syringe containing body fluid received in the laboratory with the needle attached will be rejected. If the specimen is deemed an irretrievable sample, the unit may come to the laboratory to remove the needle. The laboratory will not remove needles nor return the specimen to the unit.
6. Blood gas samples must be sent in a securely capped heparinized syringe with the needle removed or capillary tube. If a blood gas is received in the laboratory with the needle attached it will be rejected.
7. Urine specimens are to be sent in securely stoppered yellow top Vacutainer® tubes for routine UA, gray top Culture and Sensitivity Preservative Tube for urine cultures or in 13x100 mm red top tubes for urine chemistry testing. If the test is on a 24-hour specimen, the volume of the collection should be written on the tube and the requisition. Note: That some timed urine collections require that the entire collection be submitted. Refer to individual test listings for instructions.
8. Blood culture bottles must be packaged separately from routine laboratory blood work. Do not combine all specimens in one biohazard bag.

9. Stool specimens should be sent in plastic stool collection containers securely sealed, double bagged.