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**CMH REGIONAL HEALTH SYSTEM Wilmington, OH**

**Policy and Procedure**

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| **TITLE: Phlebotomy &** **Blood Specimen Collection Standards**  | **POLICY NO: LAB-SC.010** |
| **DEPARTMENT: Laboratory** | **PAGE: 1 of 7** |
| **APPROVED BY: Walter W. Timperman, Jr., M.D.**Laboratory Medical Director | **ORIGINATION DATE: 8/93****REVIEWED DATE: 9/6/16 MM****REVISED DATE: 7/17/14 MM** |
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| **COLLABORATORS:**  |

**PURPOSE:**

To provide a consistent procedure for patient identification, specimen collection and labeling.

**POLICY:**

**Phlebotomy Technique:**

* 1. All venipunctures are to be performed using acceptable aseptic technique and Universal Blood and Body Fluid precautions. This includes thorough hand washing before and after each phlebotomy and the changing of gloves between each patient.
	2. A Phlebotomist or Technologist **is not** to attempt more than two venipunctures on the same patient for a lab order. If unsuccessful, another Phlebotomist or Technologist is to be called to draw the blood. If this second person is unsuccessful, and a capillary specimen cannot fulfill the requirements for the testing ordered, the nurse in charge of the patient is to be asked to inform the patient’s physician of the inability to obtain the blood required for the testing. The physician will then determine if the testing will be cancelled or whether the patient’s physician or a Ambulatory Care staff should be contacted to perform a femoral puncture in order to obtain the blood specimen.
	3. In the event a blood specimen (for ordered lab work) cannot be obtained from an outpatient, the ordering physician’s office will be notified of the problem and asked whether the testing should be cancelled or how to proceed.
	4. Venipunctures **may not be performed above IV sites** when patients are receiving solutions, medications, blood, etc. When blood is drawn from patients receiving IVs, etc., a notation should be made in comment field of the LIS system as to where the specimen was drawn, e.g., "Drawn below IV in Rt hand." Verifying the site of venipuncture is extremely important for valid test results.
	5. Every attempt will be made by the phlebotomist to collect the smallest amount of blood required for the testing ordered.
	6. Venipunctures will only be performed on the arm or hand. Phlebotomies on the lower extremities must be approved by the physician. A written order is to be obtained before performing this type of venipuncture.
1. **Patient Identification:**
	1. Because of the serious consequences that can result from drawing blood from a wrong patient or an

inappropriate site, all patients must be identified prior to specimen collection and before leaving the room with the specimen.

* + 1. Upon entering the room or cubicle have the patient state their name and date of birth. Compare this information to the lab labels
			1. If the patient cannot speak then comparing the lab label to the arm band is appropriate.
			2. Pediatric patient the parent or legal guardian can state the name and date of birth.
		2. Draw the blood or obtain the specimen
		3. Label the specimen tube/tubes or container
		4. Before leaving the room and with specimen in hand re-verify the patients name and date of birth
		5. Perform a Final Check
			1. Compare the specimen label to the arm band and state out loud with each labeled specimen the last 3 digits of the patient’s account number.
	1. **Blood Bank Specimens:**
		1. The patient **must be banded with the "Hollister" band at the time** **of specimen collection**.
		2. The specimen tube must have the special "Hollister" label on it in addition to the chart labels provided after registration and or admission.
		3. Refer to the "**Hollister Iden-A-Blood System for Potential Blood Recipients"** procedure or the Blood Bank Tech on duty if there is any question regarding the collection of Blood Bank specimens.
		4. **Specimens improperly labeled (for Blood Bank tests) are never allowed to be re-labeled. The patient blood specimen must be re-collected.**
1. **SPECIMEN LABELLING:**

3.1 All specimens to be processed by the laboratory must have a lab label or a chart label/ written label which will be converted to a lab label. The information must include:

* + 1. Patient's Full Name
		2. Medical Record Number – MRN
		3. Unit, Room and Bed #
		4. Date and time of the collection
		5. Identity of the individual obtaining the specimen
	1. All specimens that require serial venipunctures (tolerances, etc.) must be clearly labeled or marked

with all the information of the regular specimen with the addition of the serial specimen identification number, e.g., ½Hr., 1 Hr., 2Hr., etc.

* 1. Twenty-four (24) hour urine collections must have indicated on the specimen label the date and time the collection began and ended.

4.0 Specimen Collection Errors:

4.1 Mislabeling of specimen

* 1. Incorrect patient identification and draw of specimen
	2. Hemolysis (lysis of red blood cells) of the specimen
	3. Incorrect specimen collection:
		1. collected with improper anticoagulant or in incorrect specimen tube
		2. collected at incorrect collection time,
		3. collected above an IV site
	4. **It is laboratory policy to have the specimen re-collected if the integrity/validity of the specimen is in question**. Exceptions to re-collection do occur.
		1. These exceptions include:
			1. a life-threatening situation where test results are needed immediately
			2. a difficult collection – pediatric or newborn patient
			3. a non-blood specimen – Cerebrospinal Fluid, Biopsy specimen, etc.
			4. the patient being treated before the specimen recollection can occur
		2. In the above exceptions, improperly labeled specimens will be accepted by the laboratory if:
			1. positive identification of the specimen is made by the individual who collected it, and
			2. the individual who collected the specimen must acknowledge this responsibility by

completing and/or correcting the specimen label.

4.6 Refer to the LIS Manual for details on all specimen labeling issues.

5.0 PRIORITY OF SPECIMEN COLLECTION:

* 1. **STAT** Orders/Requests:
		1. Specimens for STAT collection are obtained as soon as possible after the order/request is received.
		2. In the event that several STAT orders are received in close proximity to each other, the phlebotomist will give preference always to priority nursing units. Priority is given as follows:
			1. Emergency department
			2. Intensive Care Unit
			3. Inpatient Surgery
			4. Mother/Baby Care Unit
			5. Outpatient Surgery
			6. Other Units of the Hospital
			7. Physician Office Referral
	2. **ASAP**  Orders:

ASAP orders are collected and processed as soon as possible. ASAP priority is just under "Stat" classification.

* 1. **Timed** Orders:
		1. Specimens for timed orders are collected as close as possible to the time requested. Timed orders include:
			1. Specimens to be obtained after medication has been given, e.g., peak drug levels
			2. Specimens to be obtained just prior to medication administration, e.g., trough drug levels
			3. Specimen to be obtained after the patient has eaten a meal, e.g., Post Prandial Glucose
			4. Specimens that are collected at timed intervals, e.g., Cardiac Enzymes, Glucose Tolerances, etc.
	2. **Routine** Orders:

Specimens ordered "Routine" are batched to ensure adequate planning of the phlebotomist's time.

* 1. **Phlebotomy Rounds** within the hospital:
		1. Morning phlebotomy rounds for specimen collection are from 0315 – 0600 hrs. This is done so that the physicians have laboratory reports on their patients ready when they make their rounds in the hospital.
		2. Phlebotomists make rounds to each hospital unit as seen on the order monitor using the LIS system, to collect specimens and pick up non blood specimens as needed. There is not a specific order to which the units are visited as the order monitor lets the phlebotomist know which area is in need of testing.

**6.0 unavailable patients:**

There are times when the phlebotomist arrives in the hospital unit only to find the patient unavailable. The patient may be busy with the physician, in X-ray, physical therapy, the operating room, etc.

6.1 If the patient is with their physician and the order is routine, respect their privacy and return later to draw the specimen. If the specimen is a Stat, ASAP or Timed order; politely explain the urgency to the physician and request to proceed with the venipuncture.

* 1. If the patient is not in their room, check with the nursing staff to locate the patient. If the order is routine, the phlebotomist may return later to draw the specimen.
	2. If the sample is Stat, ASAP or Timed, the phlebotomist must find out where the patient has been taken and follow the appropriate procedure and obtain the specimen if possible.

**7.0 PATIENTS Who REFUSE TO BE DRAWN:**

The patient has the right to considerate and respectful care. The patient also has the right to be informed of the medical consequences of any procedure and the right to refuse procedures or treatment.

* 1. If a patient refuses to have their blood drawn, the phlebotomist should gently encourage the patient to allow the specimen to be drawn. When speaking to the patient, place emphasis on the fact that the physician has ordered the laboratory test(s) needs the results of this/these test(s) to help treat them.

Do not get into a discussion about what the test is or what will be learned from it. This responsibility belongs to the physician.

* 1. If persuasion does not change the attitude of the patient, report the problem to the nurse in charge. The nurse or physician may be able to persuade the patient to cooperate. If the patient is not drawn, the nurse in charge will make the determination as to whether the lab work will be drawn later (change collection time) or whether to inform the physician and perhaps cancel the order.

**8.0 LOST SPECIMENS:**

1. Lost specimens are of serious concern because the patient may suffer consequences for delay in testing due to the recollection of the specimen and confidence in the laboratory may be lost.
	1. Because of serious problems resulting from the loss of a patient specimen, an investigation must be conducted by the Lead Tech of the department where the specimen is pending for work. Where carelessness or negligence is demonstrated, corrective action will be taken.
	2. Since the loss of some specimens is irreparable, e.g. CSF or other body fluids, surgical specimens for microscopic exam, more system checks have been initiated. Loss of such specimens, like drawing the wrong patient, will result in strong corrective counseling, including possible employee discharge.
2. **REASONS FOR SPECIMEN REJECTION:**

**The quality of the laboratory test result** **begins with the quality of the specimen**. In order to properly

test specimens, the specimens must be properly collected. The following conditions are reasons for specimen rejection.

9.1 **Hemolysis:**

Hemolysis isthe lysing or mechanical destruction of the red blood cells. **Hemolysis must be avoided** because it affects many laboratory tests. When RBC's are destroyed, they release their constituents into the plasma or serum that will interfere with many laboratory tests. Hemolysis may be cause for specimen rejection.

To prevent hemolysis of the specimen:

* + 1. Avoid forcing blood from a syringe through a small needle.
		2. Avoid mixing the specimen tube too vigorously. **Invert tubes gently**.
		3. Avoid drawing blood from a site where a hematoma is located.
		4. Avoid drawing the plunger of a syringe back too forcefully.
		5. Avoid frothing of blood by making sure the needle hub is securely fitted to a syringe.
		6. Make sure the venipuncture site is dry. Alcohol on the site will lyse red cells.
* refer to individual procedures for analyte interferences (ex. Hemolysis is unsuitable for

Potassium testing).

9.2 **Clots:**

When a clot forms in an anticoagulant tube, the specimen will be rejected.

To prevent clots from forming:

* + 1. Do not over-fill tubes.
		2. Make sure specimen tubes are not expired/ outdated.
		3. Transfer blood from a syringe to tubes as quickly as possible.
		4. Use proper technique when performing capillary draws.

9.3 **Short Draws:**

Every effort must be made to properly collect specimens. This saves time and money and saves patients from the inconvenience and pain of being re-dawned.

To prevent short draws:

* + 1. Tubes should be completely filled, whenever possible. If necessary, a smaller tube may be used for most specimen collections.
		2. Blue-top tubes (Sodium Citrate) must always be completely filled or they will be rejected.

9.4 **Clerical Discrepancies:**

**Identification of the patient and the specimen are of the utmost importance.**

To prevent specimen identification problems:

* + 1. Positively identify the patient and match the ID bracelet to the ID on the specimen label(s).
		2. Carefully look at the ID's and match all items listed in 4.1 of "Specimen Labeling" in this procedure.
		3. If there is any item that does not match, do not draw the patient. Clarify the issue with the nurse in charge of the unit, a Lead Tech in the laboratory or with laboratory management prior to drawing the patient.

9.5 **IV Contamination**:

The laboratory will reject a sample that is contaminated or diluted.