

114825.208 Specimen Collection Instructions

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Approval and Periodic Review Signatures

Type	Description	Date	Version	Performed By	Notes
Approval	FM Manager	6/24/2023	2.1	Rebecca Hunter	
Periodic review	Designated Reviewer	6/23/2023	2.0	Alexander Pederson MD	
Approval	WB Manager	6/19/2023	2.1	Karen Hill	
Approval	Lab Director	6/23/2021	2.0	Alexander Pederson	
Approval	Administrative Director	6/22/2021	2.0	Natalie Sailors	

Signatures from prior revisions are not listed.

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Laboratory Policies & Procedures

Great River Health

Number 114825.208

Applies to:	<input checked="" type="checkbox"/> Southeast Iowa Regional Medical Center
<input type="checkbox"/> Henry County Health Center Laboratory	<input checked="" type="checkbox"/> West Burlington Campus Hospital Laboratory
<input type="checkbox"/> Clinics	<input checked="" type="checkbox"/> Fort Madison Campus Hospital Laboratory
<input type="checkbox"/> Rural Health Clinics	<input type="checkbox"/> Hospital-Based Clinics
	<input type="checkbox"/> Klein Center
	<input type="checkbox"/> Hospice

Specimen Collection Instructions

Purpose

Southeast Iowa Regional Medical Center Laboratory is a hospital-based laboratory with specific standards of excellence. To best serve our patients, all specimens will be collected according to the guidelines in this policy to ensure accurate patient results.

Policy

I. Venipuncture:

1. The patient's identity must be verified prior to specimen collection, by using at least two identifiers. Laboratory staff will verify the patient's name and date of birth and compare the information given by the patient with the requisition, orders, armband or routing slip prior to specimen collection.
2. Assemble the supplies (gauze, alcohol pad, needle, tube holder, evacuated blood collection tubes).
3. Ask the patient to close his/her hand.
 - a. The veins become more prominent and easier to enter when the patient forms a fist.
 - b. Vigorous pumping should be avoided.
4. Selection of the vein site is important.
 - a. The preferred venipuncture site is the antecubital fossa. When antecubital veins are not acceptable or unavailable, veins on the back of the hand are also acceptable for venipuncture. Veins on the palmar surface of the wrist and lateral wrist above the thumb to mid-forearm must not be used.
 - b. Draws must not be attempted on the ankles or any part of the lower extremities or on the same side on which a mastectomy has been performed.
5. Procedure for vein selection.
 - a. Palpate the vein.
 - b. Asking the patient to form a fist may assist with vein palpation.
 - c. The fist should be released as soon as blood is flowing into the collection device.
 - d. Patients must not be instructed or permitted to vigorously open and close their hand as this can cause significant elevations in potassium concentrations leading to patient mismanagement.
 - b. Unlike veins, arteries pulsate, are more elastic, and have a thick wall.
 - c. Arteries should not be used for venipuncture.
 - e. You may also consider the veins in the opposite arm.
6. Apply the tourniquet.
 - a. Use a tourniquet to increase the venous filling, which makes the veins more prominent and easier to enter.

- b. PRECAUTIONS when using a tourniquet. Never leave a tourniquet on a patient's arm longer than one minute. To do so may result in hemoconcentration or a variation in blood values.
 - c. Apply the tourniquet around the arm 2-3 inches above the venipuncture site.
 - d. Cleanse venipuncture site with alcohol and allow to air dry. This will reduce pain and possible hemolysis. Once the area has been cleansed, DO NOT contaminate by retouching.
7. Inspection of the needle and equipment.
- a. Inspect all supplies for possible defects and applicable expiration dates.
8. Venipuncture procedure using evacuated tubes.
- a. Prepare needle and holder for use.
 - b. Ensure the patient's arm or the puncture site is in a downward position while maintaining a needle in the arm. This will prevent a back flow from the tube into the patient's arm.
 - c. Hold the patient's arm distal to the intended puncture site. Draw skin taut to anchor the vein 1 to 2 inches below the venipuncture site in a manner that does not impede needle insertion.
 - d. With the bevel up, puncture the vein with a steady forward motion in the direction of venous blood flow with the needle at a 30 degree angle. Once the needle is inserted, advance the first tube so the interior needle pierces the closure and blood flows freely into the tube.
9. The tourniquet should be removed as soon as the blood flow is established.
10. The tube should be filled until the vacuum is exhausted.
11. Remove the tube from the holder.
12. Another tube may be pushed onto the holder to obtain more blood from the patient.
13. Any tube containing additives (purple top, blue top, green top, etc.) should be mixed by gentle inversion **immediately**.
 Clot formation will interfere with test results. *Refer to Evacuated Blood Collection Tubes: Contents and Use procedure for a listing of evacuated blood collection tube additives and their amounts.*
14. Ask the patient to open his/her hand after enough blood has been collected.
15. Remove the needle from the arm.
16. Activate the safety shield on needle.
17. Apply mild pressure to site with gauze pad.
- a. Check that bleeding has ceased, observe for hematoma and apply an adhesive or gauze bandage over the site. Coban may be used instead of adhesive.
 - b. If bleeding persists apply pressure. After 5 minutes a nurse should be alerted and pressure continued until bleeding stops
18. Label all tubes with appropriate patient information (first name, last name, date and time of collection). ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable.***
19. Compare labeled tubes to the patient's armband or in the case of outpatients, show the tubes to the patient and ask them to confirm the tubes are labeled correctly with their name.
20. Dispose of the used needle and tube holder combination in a biohazard sharps container. ***DO NOT DISCONNECT THE NEEDLE FROM THE HOLDER PRIOR TO DISPOSAL.***

II. Fingerstick:

1. The patient's identity must be verified prior to specimen collection, by using at least two

identifiers. Laboratory staff will verify the patient's name and date of birth and compare the information given by the patient with the requisition, orders, armband or routing slip prior to specimen collection.

2. Assemble the supplies (gauze, alcohol pads, finger puncture device, and micro collection tube).
3. Put on gloves.
4. Select the site.
 - a. In infants less than one year old, heel puncture is generally performed. Fingers of newborns must not be used.
 - b. With older children and adults, use the palmar surface of the distal and not the side or tip of the finger.
 - c. The middle and ring finger are the preferred sites. The fifth finger must not be punctured.
5. Warm the finger, if needed. This increases blood flow.
6. Using prepared alcohol pad, cleanse the area and allow to air dry.
7. Puncture the skin. Using an approved automated fingerstick device, puncture the finger across the fingerprints, not parallel to them. Refer to Document Infection Control # 4025 Isolation and Standard Precautions.
8. **Wipe away first drop of blood** with a dry gauze pad.
9. Collect the specimen in the chosen container. Mix properly and label with the patient's first and last name and date/time of collection. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable.***
10. Compare labeled tubes to the patient's armband or in the case of outpatients, show the tubes to the patient and ask them to confirm the tubes are labeled correctly with their name.
11. Apply direct pressure to the site with a clean gauze pad. Apply adhesive over the site.
12. Dispose of used supplies in the proper biohazard container and wash hands.

III. Clean Catch Urine Specimen (Female):

1. Wash hands with soap and water. Rinse and dry.
2. With one hand "spread yourself" and continue to hold yourself spread during cleansing and collection of the urine sample.
3. **WASH.** Using one towelette at a time, begin to wash gently, wiping from front to back between the folds of your skin, then discard the towelette. Repeat this front-to-back process with the remaining towelette.
4. **VOID.** Void a small amount of urine into the toilet. Collect a portion of the remaining urine in the provided specimen container. Keep fingers away from the rim and inner surface of the container. When voiding is complete, replace the lid securely on container.
5. **LABEL.** Label the specimen with patient's first name and last name, and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid.***
6. **REFRIGERATE.** Refrigerate the specimen until it is brought to the Outpatient Testing or Registration area at Great River Medical Center. The specimen must be received within 12 hours of collection for urinalysis or 24 hours of collection for culture.

IV. Clean Catch Urine Specimen (Male):

1. Wash hands with soap and water. Rinse and dry.
2. **WASH.** Wash penis with towelette provided.
3. **VOID.** Void the first portion of urine into the toilet. Collect the remaining urine into the provided specimen container. When voiding is complete, replace the lid securely on specimen container.
4. **LABEL.** Label the specimen with patient's first and last name, and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid.***
5. **REFRIGERATE.** Refrigerate the specimen until it is brought to the Outpatient Testing or Registration area at Great River Medical Center. The specimen must be received within 12 hours of collection for urinalysis or 24 hours for culture.

V. First Catch Urine Specimen (GC/Chlamydia testing):

1. Confirm patient has not urinated for at least 1 hour prior to specimen collection.
2. Wash hands with soap and water. Rinse and dry.
3. Cleansing of the genital area **should not** be done prior to collecting the sample.
3. **VOID.** Collect 20-50mL of initial urine stream into the a urine cup free of any preservatives. When voiding is complete, replace the lid securely on specimen container.
4. **LABEL.** Label the specimen with patient's first and last name, and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid.***
5. **TRANSFER.** If Xpert CT/NG Urine Specimen Collection Kit is available, use the disposable pipette provided in kit to transfer urine (~7 mL) to the black dashed fill line indicated on the label of the Xpert CT/NG Urine Transport Reagent tube. Replace cap and invert the collection tube 3-4 times.
6. **LABEL.** Label the transport tube with patient's first and last name, date of birth and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid.***
7. **TRANSPORT.**
 - a. Refrigerate unpreserved specimen at 4° C until it is brought to the Outpatient Testing or Main Registration area at Great River Medical Center. Send specimen to the laboratory within 24 hours of collection.
 - b. Specimens transferred in the Xpert CT/NG Urine Transport Reagent tube are acceptable for up to 3 days if stored between 2° C to 30° C prior to testing.

VI. Timed Urine Collections:

Use the following procedure for correct specimen collection and preparation.

1. Warn patient of presence of potentially hazardous preservatives in collection container.
2. Instruct patient to discard **first-morning** specimen and to record time of voiding.
3. Patient should collect all subsequent voided urine for remainder of the day and night.

4. Collect **first-morning** specimen on day 2 at same time as noted on day 1.
5. Please mix well before aliquoting and provide total volume of 24-hour urine collection.
6. Refer to specific timed urine collection tests in the test catalog.
7. Label. Label the container with patient's first and last name, date of birth and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid***

VII. Urine for Culture Collection Kit:

1. This kit consists of a collection tube containing a preservative and a urine transfer device.
2. Collect the urine specimen using the appropriate clean catch or catheterized urine collection technique.
3. Submerge the tip of the transfer device to the bottom of the urine container.
4. Place the collection tube in the holder portion of the transfer device. Push the tube all the way into the holder.
5. Hold in position until the urine stops flowing into the tube. **A minimum of 4 mL of urine is required.**
6. Shake the tube vigorously.
7. Label. Label the container with patient's first and last name, date of birth and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid***

NOTE: A urinalysis can not be performed on urine collected in a Urine Culture collection kit. **Please submit a separate urine specimen if requesting a routine urinalysis**

VIII. Stool Specimen Collection Kit:

1. This kit consists of vials which may or may not have liquid in them. The liquids are ***poisonous***. Do not drink them. Keep them out of the reach of children.
2. The stool should be passed into a clean **DRY** container. Use a clean plastic container.
3. Open the vial containing the liquid. Using the collection spoon built into the lid of the tube, **place stool into the vial until the contents rise to the red line. DO NOT OVERFILL.**
4. Mix the contents of the vial with the spoon. Twist the cap tightly closed and shake the tube vigorously until the contents are well mixed. Repeat this for all vials containing liquid. **CHECK ALL CAPS TO BE CERTAIN THEY ARE TIGHTLY CLOSED.**
6. Label. Label the container with patient's first and last name, date of birth and collect date and time. ***ALL samples must be labeled at the patient's bedside or chair immediately after collection and within sight of the patient. Electronically generated labels are acceptable. Samples must be labeled on the part of the container which contains the sample. Not on the lid***
Also check the box on the label which describes the consistency of the specimen (formed, loose, soft, watery).
7. Vials with red lids should be refrigerated.
7. Return the collection kit to the Outpatient Testing or Registration areas within 24 hours of collection.

IX. Specimens for Culture:

Refer to the culture description in the test catalog.

X. Specimens for Cytology and Histology:

Refer to the test description in the test catalog.

References

CLSI GP41, 7th ed. April 2017, *Collection of Diagnostic Venous Blood Specimens*.

CLSI GP42-A6, H04-A6, Vol. 28 No. 25, *Procedures and Devices for the Collection of Diagnostic Capillary Blood Specimens; Approved Standard-Sixth Edition*.

SEIRMC Laboratory Policy, *Specimen and Labeling and Rejection Criteria*.

Cepheid Xpert[®] CT/NG Urine Specimen Collection Kit Product Insert. © 2018 Cepheid 301-6045, Rev., E March 2018.

Related Documents

Southeast Iowa Regional Medical Center Policy and Procedures: Patient Identification and Infection Control. Hand Hygiene, Isolation and Standard Precautions