# 114825.2145 GRH Specimen Collection Procedure

# Copy of version 1.0 (approved and current)

Last Approval or

Periodic Review Completed

6/03/2025

Controlled Copy ID 562315

Location

Will be uploaded to Lab Catalog Website:

https://cdos.halfpenny.com/labcorp/greatriverhealth

Organization Great River Health System

**Next Periodic Review Needed On or Before** 

6/03/2027

**Effective Date** 

6/03/2025

#### **Author**

Zendy Matheu

#### **Approval and Periodic Review Signatures**

| Туре     | Description          | Date      | Version | Performed By                  | Notes |
|----------|----------------------|-----------|---------|-------------------------------|-------|
| Approval | Lab Vice President   | 6/03/2025 | 1.0     | Sheila Erpelding (131695)     |       |
| Approval | Lab Director WB      | 6/02/2025 | 1.0     | Alexander Pederson MD         |       |
| Approval | Lab Director HC      | 5/30/2025 | 1.0     | Evangeline DeSagun MD         |       |
| Approval | HC Manager Review    | 5/29/2025 | 1.0     | Dawn Heald MT (ASCP) (400611) |       |
| Approval | FM Supervisor Review | 5/26/2025 | 1.0     | Maggie Silva MLS (204711)     |       |
| Approval | WB Manager Review    | 5/20/2025 | 1.0     | Theresa Abbott (12572)        |       |
| Approval | WB Supervisor Review | 5/18/2025 | 1.0     | Daniel Mallari (131070)       |       |

Signatures from prior revisions are not listed.

#### **Version History**

| Version | Status               | Туре            | Date Added | Date Effective | Date Retired |
|---------|----------------------|-----------------|------------|----------------|--------------|
| 1.0     | Approved and Current | Initial version | 4/15/2025  | 6/03/2025      | Indefinite   |

# Laboratory Policies & Procedures Great River Health

Number 114825.2145

| Applies to:                               | [X] Southeast Iowa Regional Medical Center     |
|---|--|
| [X] Henry County Health Center Laboratory | [X] West Burlington Campus Hospital Laboratory |
| [ ] Clinics                               | [X] Fort Madison Campus Hospital Laboratory    |
| [ ] Rural Health Clinics                  | [ ] Hospital-Based Clinics                     |
|   | [ ] Klein Center                               |
|   | [ ] Hospice                                    |

#### **GRH SPECIMEN COLLECTION PROCEDURE**

#### **PURPOSE:**

Great River Health Laboratories are 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.

#### PRINCIPLE:

To ensure accurate and reliable laboratory results, specimen collection adheres to specific principles, including using the correct collection method, proper identification of patient, aseptic technique, proper labeling, timely transport of specimens, and appropriate storage to maintain specimen integrity.

#### SCOPE:

This procedure applies to those who are trained in Phlebotomy.

#### **DEFINITIONS:**

PPE: Personal Protective Equipment

#### **EQUIPMENT/SUPPLY REQUIREMENTS:**

Blood collection tubes/Blood culture bottles/Capillary tubes

Needles/Single-use holders/Lancet

Sterile syringes/Syringe transfer devices (Butterfly and Vacutainers)

Tourniquets

Gloves

Antiseptics: Alcohol prep pads, ChloraPrep®One-Step Sepp® (blood culture), or

nonalcoholic-based cleanser (blood alcohol specimens).

Gauze pads, Tape, Adhesive bandages, or Coban

Heel warmer Sharps container

#### PROCEDURES:

#### I. Venipuncture Technique

#### Purpose:

This procedure provides instructions for the collection of diagnostic blood specimens by venipuncture.

| Step                                    | Additional Information   |  |
|---|--|--|
| 1. Obtain physician order               | <ul> <li>a. Orders must include the following:</li> <li>b. Patient's full name</li> <li>c. Date of birth</li> <li>d. Patient's Medical Record Number</li> <li>e. Accession Number</li> <li>f. Patient's location</li> <li>g. Physician's name</li> <li>h. Special comments</li> </ul>  |  |
| Identify yourself and explain procedure | Example: "I'm from the laboratory and I'm here to draw a blood sample for a test your physician ordered."  NOTE: Do Not perform a blood collection against the patient's or guardian's consent. Report any objection to their nurse or physician.  |  |
| 3. Identify the patient                 | The patient's identity must be verified prior to specimen collection by using at least two identifiers. Laboratory staff will ask the patient to state their name and Date of Birth prior to specimen collection.  If a patient is not able to participate in the identification process, a relative or friend of the patient or other healthcare professional may provide the patient's name and date of birth.  If the patient has a language barrier, Propio Interpretation Service can be utilized. Refer to <a href="GRH Language Access">GRH Language Access</a> <a href="Procedures">Procedures</a> for more information. |  |
| 4. Confirm Identity                     | Confirm that the identity given by the patient matches the information listed on the requisition, orders, routing slip and/or patient armband.   |  |
| 5. Gather necessary supplies            | Inspect for possible defects, check expiration dates.  |  |
| 6. Wash Hands                           | Hand hygiene must be performed prior to patient contact. Alcohol based hand rub may be used except for visibly soiled hands or patients with Clostridium difficile. In these cases, soap and water must be used.   |  |
| 7. Don Gloves                           | Other PPE may be required. Refer to the Isolation and Standard Precautions Policy for details.   |  |
| 8. Position patient                     | <ul> <li>a. Outpatients: Ask patient to be seated in phlebotomy chair with their arm on the slanting a rest and extend their arm to form a straight line fr the shoulder to the wrist. If necessary, have patient lie down in a comfortable position a extend their arm as described above. A pill placed under the arm can be used if addition support is needed.</li> <li>b. Inpatients: Gently position the arm to form strail line from the shoulder to the wrist.</li> </ul>  |  |

|                                       | T   |  |
|---------------------------------------|---|--|
| 9. Apply tourniquet                   | <ul> <li>a. Tourniquet use increases venous filling, making the veins more prominent and easier to enter.</li> <li>b. Place the tourniquet 3-4 inches above the venipuncture site.</li> <li>c. NEVER leave the tourniquet on longer than 1 minute, as hemoconcentration may occur resulting in erroneous test results. If necessary, remove and leave the tourniquet off for 2 minutes before reapplying.</li> <li>d. If the patient has a skin problem, the tourniquet should be applied over the patient's gown, or paper towel.</li> </ul>   |  |
| 10. Ask patient to close his/her hand | The veins become more prominent and easier to enter when the patient forms a fist.  Vigorous pumping must be avoided, as it can cause changes in the concentration of certain analytes in the blood.  |  |
| 11. Select Vein                       | Caution:  It is important to select the vein carefully for blood collection because the veins also provide entry for transfusion, infusion, and therapeutic agents. Because the brachial artery passes through the antecubital area, caution must be exercised to avoid the artery. If, during the procedure, arterial puncture is suspected, direct forceful pressure must be applied to the puncture site for a minimum of five minutes upon removal of the needle or until active bleeding has ceased. Notify the nursing staff and/or physician immediately.  Check for a pulse to make sure you don't select an artery in error. Never draw a specimen from an artery. Arterial punctures may only be performed by staff that have demonstrated competency.  Preferred Veins:  a. Median Cubital and Cephalic veins-closer to the skin surface, more stationary, less painful upon insertion, less likely to injure nerves.  b. Hand veins- Use veins on the back side of the hand only.  c. Veins on the underside of the wrist must not be used.  Alternate Sites:  a. Ankles or lower extremities must not be used without the permission of the physician.  b. Arterial punctures should not be considered as an alternative to venipuncture for difficult draws. If |  |

|                                  | this appears to be the only alternative, consult  |
|----------------------------------|---|
|                                  | with the physician.   |
|                                  | c. Any other location needs to be approved by the   |
|                                  | provider.   |
|                                  | Other Factors:  |
|                                  | d. Extensive scarring- Healed burn areas should be  |
|                                  | avoided.  |
|                                  | e. Mastectomy- Consult physician before drawing   |
|                                  | from the side on which a mastectomy was performed.  |
|                                  | f. Hematoma- Phlebotomy must not be performed on  |
|                                  | any size hematoma. If another vein site is not  |
|                                  | available, collect the specimen distal to the   |
|                                  | hematoma.   |
|                                  | g. Specimens should not be collected from an arm  |
|                                  | with an intravenous site.   |
|                                  | h. Cannula, Fistula, Vascular Graft- Use only after   |
|                                  | consulting the attending physician.   |
|                                  | Palpate and trace the path of the veins several times with the index finger. Unlike veins, arteries pulsate, are more       |
| 12. Locate Vein                  | elastic and have a thick wall. Thrombosed veins lack  |
|                                  | resilience, feel cord-like, roll easily and should not be used.   |
|                                  | Using a prepared alcohol pad, cleanse area with a circular  |
|                                  | motion from the center to the outside of the venipuncture   |
| 42 Classes site                  | site. See separate procedure for blood culture collection.  |
| 13. Cleanse site                 | Note: Do Not touch site after cleansing. Do Not use   |
|                                  | alcohol-based cleansers when drawing blood alcohol  |
|                                  | specimens.  |
|                                  | a. Assemble needle and tube holder if not already   |
|                                  | pre-assembled.  |
|                                  | <ul> <li>b. Make sure the patient's arm or the puncture site is<br/>in a downward position to prevent back flow.</li> </ul> |
| 14. Venipuncture using evacuated | c. Place the thumb 1-2 inches below the puncture site   |
| tubes                            | to draw the skin taut.  |
|                                  | d. Inform patient that the venipuncture is about to   |
|                                  | occur.  |
|                                  | e. With the bevel up, puncture the vein with the needle   |
|                                  | at an angle of insertion of 30 degrees or less.   |
|                                  | Keeping the needle as stable as possible and  |
|                                  | following the correct order of draw, push/connect   |
|                                  | the first tube into the needle.   |
|                                  | f. Release the tourniquet as soon as possible after   |
|                                  | blood begins to flow. During the collection, do not allow contents of the tube to contact the closure.                      |
|                                  | g. Use correct order of draw.   |
|                                  | h. Allow the tube to fill until the vacuum is exhausted,  |
|                                  | and blood flow ceases.  |
|                                  |   |

|  | <ul> <li>i. When the blood ceases to flow, remove the tube from the holder. The sleeve re-covers the needle point that pierces the tube closure stopping blood flow. To obtain additional specimens, insert the next tube onto the holder and repeat the collection procedure. Always remove the last tube from the holder prior to withdrawing the needle from the vein. This should be done when only one tube is being drawn.</li> <li>j. Gently invert each tube 5 to 10 times immediately after drawing.</li> <li>Note: Do not mix vigorously.</li> </ul>   |
|--|--|
| 15. Venipuncture using needle and syringe                  | <ul> <li>a. Assemble needle and syringe.</li> <li>b. Make sure the patient's arm or the puncture site is in a downward position to prevent back flow.</li> <li>c. Place the thumb 1-2 inches below the puncture site to draw the skin taut.</li> <li>d. Inform the patient that the venipuncture is about to occur.</li> <li>e. With the bevel up, puncture the vein with the needle at an angle of insertion of 30 degrees or less. Keeping the needle as stable as possible, slowly withdraw the desired amount of blood.</li> <li>f. Release the tourniquet as soon as possible after the blood begins to flow.</li> </ul>  |
| 16. Place the gauze pad lightly over the venipuncture site |  |
| 17. Remove the needle and                                  | Dispose of needle holder with needle attached with safety  |
| activate the safety mechanism                              | shield activated in a biohazard sharps container.  |
| 18. Bandage site   | <ul> <li>a. Apply mild pressure to the site with a gauze pad.</li> <li>b. Apply pressure for at least 2 minutes before checking for bleeding and covering the site with an adhesive bandage or gauze and tape. If bleeding persists, notify the nurse or physician. Additional pressure may be required if the patient is receiving anticoagulants.</li> <li>c. Do not have the patient bend their arm to hold pressure on the site – it increases the possibility of a hematoma developing.</li> <li>d. If a hematoma develops at any time during the procedure, release the tourniquet, remove the needle, and apply pressure.</li> <li>e. Check that bleeding has ceased, observe for hematoma and apply an adhesive or gauze bandage over the site. Where patients' skin is compromised, use coban.</li> </ul> |

|                                     | f. If bleeding persists, apply pressure. After 5              |  |  |
|-------------------------------------|---|--|--|
|                                     | minutes a nurse should be alerted and pressure                |  |  |
|                                     | continued until bleeding stops.                               |  |  |
|                                     | g. Tell the patient to leave the bandage on for at least      |  |  |
|                                     | 15 minutes.   |  |  |
|                                     | a. Use correct order of draw.                                 |  |  |
|                                     | b. To transfer blood from the syringe to an evacuated         |  |  |
|                                     | blood collection tube, remove and discard the                 |  |  |
| 19. Transfer blood from the syringe | needle or winged collection set, and apply safety             |  |  |
| to evacuated tubes                  | transfer device onto the syringe.                             |  |  |
| to evacuated tubes                  | c. Insert each tube into the safety transfer device to        |  |  |
|                                     | allow the tube to fill until flow ceases.                     |  |  |
|                                     | d. Gently invert tubes (do not mix vigorously) 5-10           |  |  |
|                                     | times   |  |  |
|                                     | <b>Before</b> leaving patient's bedside, label tubes with the |  |  |
|                                     | following:  |  |  |
|                                     | a. First and Last name  |  |  |
|                                     | b. Date of birth  |  |  |
| 20. Label tubes                     | c. Date and time drawn  |  |  |
|                                     | d. Collector's initials                                       |  |  |
|                                     | Note: 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.               |  |  |
|                                     | Compare labeled tubes to the patient's armband or in the      |  |  |
| 21. Confirm labeling                | case of outpatients, show the tubes to the patient and ask    |  |  |
|                                     | them to confirm the tubes are labeled correctly with their    |  |  |
| 22 Discord used supplies            | name.   |  |  |
| 22. Discard used supplies           |   |  |  |
| 23. Thank patient                   | Ask if there is anything else you can do for them.            |  |  |
| 24. Remove gloves and wash          |   |  |  |
| hands                               |   |  |  |

|                   | Order of Draw   |                  |                  |  |  |
|-------------------|---|------------------|------------------|--|--|
| The purpose is to | The purpose is to avoid possible test result errors due to cross contamination from tube additives. |                  |                  |  |  |
| Tube Cap Color    | Additive  | Inversions/Color | Notes/Exceptions |  |  |
|                   | Blood<br>Culture  | 8 to 10          |                  |  |  |

| Sodium<br>Citrate  | 3 to 4/Light Blue        | <ul> <li>Do not over or under fill light blue tubes: Fill to the clear blue line on the tube</li> <li>When drawing a single light blue top or using a butterfly use a light blue discard tube first</li> </ul> |
|--------------------|--------------------------|--|
| Clot<br>Activator  | 5 to 6/Red or Gold       |  |
| Lithium<br>Heparin | 8 to 10/Green            |  |
| EDTA               | 8 to 10/Pink or Lavender |  |
| Sodium<br>Fluoride | 8 to 10/Grey             |  |

# II. Capillary Blood Collection Procedure

This procedure provides instructions for collecting capillary blood specimens using finger and heel puncture techniques.

| Steps                                   | Additional Information  |  |
|---|---|--|
| 1. Obtain physician order               | a. Orders must include the following: b. Patient's full name c. Date of birth d. Patient's Medical Record Number e. Accession number f. Patient's location g. Physician's name h. Special comments  |  |
| Identify yourself and explain procedure | Example: "I'm from the laboratory and I'm here to draw a blood sample for a test your physician ordered."  NOTE: Do Not perform a blood collection against the patient's or guardian's consent. Report any objection to their nurse or physician. |  |
| 3. Identify Patient                     | The patient's identity must be verified prior to specimen collection by using at least two identifiers. Laboratory staff will ask the patient to state their name and Date of Birth prior to specimen collection.                                 |  |

| 4. Confirm Identity     | If a patient is not able to participate in the identification process, a relative or friend of the patient or other healthcare professional may provide the patient's name and date of birth.  If the patient has a language barrier, Propio Interpretation Service can be utilized. Refer to GRH Language Access Procedures for more information.  Confirm that the identity given by the patient matches the information listed on the requisition, orders, routing slip and/or patient armband.  |  |
|-------------------------|---|--|
| 5. Gather Supplies      | Inspect for possible defects, check expiration dates.   |  |
| 6. Wash Hands           | Hand hygiene must be performed prior to patient contact. Alcohol based hand rub may be used except for visibly soiled hands or patients with Clostridium Difficile. In these cases, soap and water must be used.  |  |
| 7. Don gloves           | Other PPE may be required. Refer to the Isolation and Standard Precautions Policy for details.  |  |
| 8. Position the patient | Outpatients should be seated in a chair suitable for capillary puncture. In some situations, the use of a bed, cot or reclining chair may be appropriate for positioning the patient.   |  |
| 9. Select site          | <ul> <li>a. In infants less than one year old, heel puncture is generally performed. Fingers of newborns must not be used.</li> <li>b. <u>Use:</u> Medial or Lateral portions of the flat surface of the heel.</li> <li>c. <u>Avoid:</u> The posterior curvature, arch area, swollen areas and previous puncture site.</li> <li>d. With older children and adults, use the palmar surface of the distal segment of the middle or ring finger. The side or tip of the finger should be avoided. The puncture should occur across the fingerprints not parallel to them.</li> <li>e. The middle and ring finger are the preferred sites. The fifth (pinky) finger must not be punctured.</li> <li>f. Do not attempt to use a swollen or previously punctured site.</li> </ul> |  |
| 10. Warm finger/heel    | Warming increases blood flow. Place heel warmer on infant's foot for 3 to 5 minutes.  |  |
| 11. Cleanse the site    | Using prepared alcohol pad, cleanse the area and allow to air dry.  |  |
| 12. Puncture skin       | <ul> <li>a. Hold the patient's finger/heel firmly to prevent movement.</li> <li>b. Using an approved finger/heel stick device, position the device on the patient's skin.</li> <li>c. Notify the patient of the imminent puncture.</li> </ul>   |  |

|                                       | d. Activate the device and puncture. For finger stick, puncture across the fingerprints and not parallel to them.   |
|---------------------------------------|---|
|                                       | e. For heel stick, support the infant's foot and leg securely. Hold the ankle gently but firmly with your non-dominant hand. Place your thumb on the top of the foot and your fingers around the heel, underneath it for support. Puncture the Medial or Lateral portions of the flat surface of the heel. Do not use the proper Posterior Curvature. Do not go deeper than 2.0mm or through any previous puncture site.  f. Discard the device.              |
| 13. Wipe away the first drop of blood | <ul><li>a. Use a clean dry pad.</li><li>b. The first drop of blood is most likely to contain excess tissue fluid.</li></ul>   |
| 14. Collect specimen                  | Using appropriate micro collection container and order of draw, touch the tip of the container to the drop of blood. Blood will flow into the container by capillary action. Blood flow from the puncture can be enhanced by holding the puncture site downward and gently applying intermittent pressure to the surrounding tissue.  A scooping motion and strong repetitive pressure must be avoided as hemolysis or tissue-fluid contamination may result. |
| 15.Cap the sample and mix properly    |   |
| 16. Apply pressure                    | Use a clean gauze pad to apply direct pressure to puncture site.  It is not recommended to apply adhesive bandages over skin punctures on children less than 2 years of age.  |
| 17. Label Specimen                    | Before leaving patient, label the specimen with the following:  a. First and last name b. Date of Birth c. Date and time drawn d. Collector's information  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.  |
| 18. Confirm labeling                  | Compare labeled samples to the patient's armband or in the case of outpatients, show the sample to the patient and ask them to confirm the samples are labeled correctly.   |
| 19. Dispose of used supplies          | Use proper biohazard container.   |

| 21. Thank patient          | Ask if there is anything else you can do for them. |
|----------------------------|--|
| 22. Remove gloves and wash |  |
| hands                      |  |

# III. Laboratory Blood Draws Performed Above an Intravenous Infusion Site

Collecting blood from an arm that is being infused with IV fluid carries a risk for erroneous and misleading test results. Blood must never be collected from the same arm or above the site in which there is an IV. If access to veins is limited and all other options have been exhausted, a nurse may be asked to turn off an IV for the purpose of collecting the blood sample.

Note: The IV should be turned off for a minimum of 2 minutes prior to venipuncture being performed.

| Steps                                      | Additional Information  |
|--|---|
| 1. Obtain physician order                  | <ul> <li>a. Orders must include the following:</li> <li>b. Patient's full name</li> <li>c. Date of birth</li> <li>d. Patient's Medical Record Number</li> <li>e. Accession number</li> <li>f. Patient's location</li> <li>g. Physician's name</li> <li>h. Special comments</li> </ul>   |
| 2. Identify yourself and explain procedure | Example: "I'm from the laboratory and I'm here to draw a blood sample for a test your physician ordered." <b>NOTE: Do Not</b> perform a blood collection against the patient's or guardian's consent. Report any objection to their nurse or physician.   |
| 3. Identify patient                        | The patient's identity must be verified prior to specimen collection by using at least two identifiers. Laboratory staff will ask the patient to state their name and Date of Birth prior to specimen collection.  If a patient is not able to participate in the identification process, a relative or friend of the patient or other healthcare professional may provide the patient's name and date of birth.  If the patient has a language barrier, Propio Interpretation Service can be utilized. Refer to GRH Language Access Procedures for more information. |
| 4. Confirm Identity                        | Confirm that the identity given by the patient matches the information listed on the requisition, orders, routing slip and/or patient armband.  |
| 5. Gather necessary supplies               | Inspect for possible defects, check expiration dates.   |

| 6. Wash hands.   | Hand hygiene must be performed prior to patient contact. Alcohol based hand rub may be used except for visibly soiled hands or patients with Clostridium Difficile. In these cases, soap and water must be used.  |
|--|---|
| 7. Don gloves.   | Other PPE may be required. Refer to SEIRMC Isolation and Standard Precautions Policy for details.   |
| 8. Make the decision that it is necessary to use the IV arm  | If fingerstick is not possible and no other veins are accessible.   |
| 9. Ask the Nurse to turn the IV off                          | Intravenous fluid is considered medication. Laboratory personnel <b>may not</b> turn off IV's.  |
| 10. Wait at least two minutes before applying the tourniquet |   |
| 11. Apply the tourniquet                                     | Apply the tourniquet between the IV site and the intended venipuncture site, but not so close that it will impede the procedure or constrict the catheter within the vein.  |
| 12. Select the venipuncture site                             | Draw blood below the IV site if possible.  Do not select the same vein in which the IV is infusing.   |
| 13. Perform the venipuncture                                 | Following Venipuncture Technique Procedure  |
| 14. Label the tubes  | Before leaving patient's bedside, label tubes with the following:  a. First and last name b. Date of birth c. Date and time drawn d. Collector's initials  Note: 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. |
| 15. Confirm labeling   | 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.  |
| 16. Discard used supplies                                    |   |
| 17. Thank patient  | Ask if there is anything else you can do for them.  |
| 18. Remove gloves and wash hands                             |   |
| 19. Notify the nurse to restart the IV                       | Laboratory personnel <b>should not</b> restart IV's.  |
| 20. Enter the appropriate comment in the Laboratory system   | Use appropriate comment to denote the type of draw performed (i.e. Drawn Above Shut off IV or Drawn Below IV Site).   |

# **Emergency Situations:**

Minor adverse reactions to specimen collection include hematomas, abrasions, and nausea. Serious reactions like vomiting, fainting, convulsions, or unresponsiveness must be documented appropriately, refer to <a href="https://great.org/great/base-nause-

# IV. Urine Specimen Collection

Refer to GRH Clean Catch Urine Collection Instructions

## V. Timed Urine Collections

Refer to GRH 24 Hour Urine Collection Instructions

## VI. Stool Specimen Collection

Refer to GRH Stool Collection Instructions

## VII. Specimens for Culture

Refer to the culture description in the test catalog.

## VIII. Specimen for Cytology and Histology

Refer to the test description in the test catalog and <u>GRH Surgical Pathology and Cytology</u> Specimen Handling Policy.

#### **REFERENCES:**

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

So, You're Going to Collect a Blood Specimen: An Introduction to Phlebotomy, College of American Pathologists, Current Edition, 2017

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

**GRH Patient Identification** 

GRH Isolation and Standard Precautions Plan

Hand Hygiene Guidelines

GRH Specimen Labeling and Rejection Procedure

GRH Medical Emergency Response.