Allen Parish
Community Healthcare
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Laboratory Client Manual

ALLEN PARISH HOSPITAL	Policy Number	LA-017-005
Departmental Policy Name: Blood/Urine Specimen Collection	**Effective Date**	**08/31/2018**
Authored by: Mona Wilkins, BS, MT(ASCP)HP	**Page**	**1 of 5**
Approved by Department Director: Mona Wilkins **Approved by Medical Director:** **Approved by Administration:** **Board of Commissioners:**	**Approved Date**	12/10/18
Revised/Reviewed by: Mona Wilkins, BS, MT(ASCP)HP	**Revision Dates**	**NEW**

PURPOSE:
To ensure accurate and precise laboratory data, which depends on properly performed phlebotomy to obtain high quality blood specimens. Blood collection processes, including accurate management of test tube collection order (Order of Draw), are well established to ensure the quality of blood samples.

QUALIFIED PERSONNEL:
Phlebotomist, RN, LPN, MT, MLT, MLA, Nurse Practitioner, PA, Physician

POLICY:
Patients and specimens must be positively and uniquely identified to minimize sample mix-ups, mislabeling, etc., by using two or more methods for identification before collecting a specimen. Approved patient identifiers at APH are the patient's full name, date of birth, and/or patient account number. An identifying label must be attached to the specimen container at the time of collection, and not deferred until a later time.

Age-specific care is essential for safety and for compassionately obtaining blood specimens from patients. Staff competency and proficiency should be demonstrated on the appropriate age groups of patients before performing venipuncture and/or skin puncture on those age groups. Considering the differences in patient age classification- newborns, pediatrics, adults, and geriatrics - modifications in specimen collection are necessary. It is crucial to the safety of the patient as well as to the success of the procedure that proper consideration is given to each procedural modification for each age group.

Phlebotomy practices should be thoughtfully selected in order to minimize unnecessarily large blood draw volumes. Blood losses from phlebotomy, particularly in pediatric patients and those with many venipunctures, may be a cause of iatrogenic anemia and increased transfusion needs. Adverse consequences of excess venipunctures include complications during collection for patients and health-care workers, hazards from subsequent transfusions, contending with increased amounts of hazardous waste, and greater cost.

Phlebotomists should remain aware and vigilant of possible adverse reactions during the blood collection process, included fainting, seizures, and injuries. In such an event, the phlebotomist should seek immediate assistance from other nearby clinical staff or by phoning the Emergency Department.

SAFETY:

I. All specimen collection procedures must be performed while wearing gloves, laboratory coat (medical scrubs), and, where appropriate, masks and/or goggles.
II. All specimen containers should be leak-proof and transported in a sealable Biohazard Bag.
III. Never transport syringes with needles to the laboratory. Instead transfer the contents to a sterile tube, or remove the needle (with a protective device), recap the syringe, and place the syringe in a sealable biohazard bag with the paperwork placed in the outside pocket.
IV. Do not transport leaking specimen containers to the laboratory or process them. They should be thrown into a red biohazard trash container and another specimen should be submitted.

PROCEDURE:

PATIENT MUST BE IDENTIFIED USING TWO IDENTIFIERS PRIOR TO INITIATION OF PROCEDURE.
HAND HYGIENE PROTOCOL MUST BE FOLLOWED BEFORE AND AFTER PROCEDURE.

General venipuncture procedure

NOTE: Do not label specimen tubes or place labels on tubes prior to venipuncture. Do not leave the room before labeling specimens or placing labels on specimen tubes. DO NOT USE ALCHOL PREPS TO CLEANSE VENIPUNCTURE SITE TO DRAW AN ALCOHOL LEVEL.

I. Seat patient in such a way that will allow them to rest their arm on something during venipuncture. The elbow should remain straight at all times.
II. Ask patient to state their name & date of birth (DOB); then check it against the labels. Check patient's armband and verify that name, patient account number and/or DOB match the name, patient account number and DOB on labels. If the patient does not have an armband, verification of full name and DOB is required.
III. Apply the tourniquet 3 to 4 inches above the elbow, tight enough that it feels slightly tight to the patient, but not so tight that arterial flow is restricted.
IV. Use the tip of the index finger to palpate (feel) the vein. Palpating will help to determine the size, depth, and direction of the vein. Select a vein that is large and well-anchored (does not move to the side or roll easily). A vein has a bounce or resilience to it. An artery will pulsate. To avoid accidentally puncturing an artery, do not select a vein that overlies or is close to an artery. If no suitable veins can be found in the antecubital area of one arm, check the other arm. If no suitable antecubital vein can be found in either arm, check for hand veins.

V. Cleanse the selected venipuncture site with an isopropyl alcohol pad (for blood culture collections use cleansing product provided in the blood culture kit). **NOTE: If a blood alcohol is needed, cleanse the selected venipuncture site with a non-alcohol containing disinfectant, i.e. povidone-Iodine.**

NOTE: If blood cultures are to be drawn outside the hospital, call the APH Laboratory at 337-738-9490 for collection supplies and collection instructions.

Apply sufficient pressure to remove surface dirt and debris. If the site is especially dirty, clean it again with a second alcohol pad. Allow the area to dry 30 seconds to 1 minute. The evaporation and drying process helps to destroy bacteria. Also clean the end of the gloved finger with alcohol if it is necessary to palpate the vein after it has been cleaned.

VI. Anchor the vein. Grasp the patient's arm with your non-dominant hand, using your thumb to pull the skin taut 1 to 2 inches below the intended venipuncture site. This anchors the vein and helps keep it from moving or rolling to the side upon needle entry. The fingers of the same hand can be used to support the back of the arm in the area of the elbow to help prevent the patient from pulling away as the needle enters the vein. For safety reasons, using the index finger and the thumb for anchoring the vein is no longer recommended.

VII. Insert the needle into the vein. Align the needle with the vein, with the bevel of the needle facing up and pointing in the same direction as the venous flow. Warn the patient before you stick. Insert the needle at a 15- to 30-degree angle, using one smooth motion to penetrate first the skin and then the vein. When the vein has been entered, you will see blood appear.

VIII. Vacutainer procedure:

A. Perform the venipuncture as described above, pushing the proper tubes into the vacutainer holder and onto the bottom part of the needle until the tube fills to the amount needed. Tubes should be collected in a specific order when using Vacutainers:

1. Blood Cultures

NOTE: If blood cultures are to be drawn outside the hospital, call the APH Laboratory at 337-738-9490 for collection supplies and collection instructions.

2. Blue top tube
3. Red top/ Tiger top tube/Yellow top tube
4. Green top tube
5. Purple top tube
6. Gray top tube

B. Mix all tubes by gentle inversion 8-10 times, immediately.

C. Label each specimen with the appropriate label. Be sure to document date and time of specimen collection and initials of the collector on the specimen. All labeling must occur in the presence of the patient.

IX. Collection Set (butterfly) procedure

A. If collecting blood from a smaller child or infant, the phlebotomist may use a "butterfly" so that it will be easier to hold the child's arm.

B. Attach the Vacutainer Collection Set to a vacutainer needle holder or syringe. Perform the venipuncture as described above, pushing the proper tubes into the vacutainer holder (if using such) and onto the bottom part of the needle until the tube fills to the amount needed. Tubes are drawn in the correct order when using vacutainers.

C. If using a syringe, carefully pull back on the syringe until the desired amount of blood is obtained. Once needle has been withdrawn from arm, proceed with the following:

1. Place a piece of clean, dry gauze over the venipuncture site. Hold slight pressure and place tape over the gauze.
2. Activate the safety device.
3. Disconnect the butterfly from the syringe and discard in "sharps" container (hard-walled biohazardous waste receptacle).
4. Attach a BD Vacutainer Blood Transfer Device to the syringe.
   Note: Blood samples must be put into tubes with 1 minute of collection.
5. Insert the tubes into the **Vacutainer Blood Transfer Device/syringe** assembly in the correct syringe order. Mix all tubes by gentle inversion 8-10 times immediately.
6. Discard the Vacutainer Blood Transfer Device/syringe assembly into a sharps container.
7. Label each specimen with appropriate specimen label. Be sure to document date, time of collection, and the collector's ID on label. All labeling must occur in the presence of the patient.

X. Syringe procedure

A. Attach the appropriate needle to the syringes. Carefully pull back on the syringe plunger until the desired amount of blood is obtained. Once the needle has been withdrawn from arm, proceed with the following:

1. Place a piece of gauze over the venipuncture site. Hold slight pressure and place tape over the gauze.
2. Activate the safety device.
3. Disconnect the needle from the syringe and discard in sharps container.
4. Attach a BD Vacutainer Blood Transfer Device to the syringe.
   NOTE: Blood samples must be put into tubes with 1 minute of collection.
   NOTE: If a syringe is used during a blood culture draw you must change needle before entering the blood culture bottle.
5. Insert the tubes into the Vacutainer Blood Transfer Device/syringe assembly in the correct syringe order. Mix all tubes by gentle inversion 8-10 times immediately.
6. Discard the Vacutainer Blood Transfer Device/syringe assembly into a sharps container.
7. Label each specimen with appropriate specimen label. Be sure to document date, time of collection, and the collector's ID on label. All labeling must occur in the presence of the patient.

XI. Fingersick/Heelstick procedure

A. Lancets must be used for a fingerstick/heelstick.

B. Select a finger/heel that is not cold, cyanotic (blue), or swollen. It may be necessary to massage the finger/heel several times to induce blood flow to the tip of finger/heel.

C. Cleanse the ball or pad of the finger/heel with an isopropyl alcohol pad.
D. Thoroughly dry the finger/heel with a piece of clean, dry cotton or gauze.
E. Remove a lancet from package.
F. Grasp the lancet with your dominate hand and the patient's finger/heel with your non-dominate hand. Position the lancet on the side of the ball of the finger/heel across the fingerprint/heel. The lancet should be held firmly against the finger. Do not press too far into the finger/heel.
G. Depress the top of the lancet with your forefinger while still holding it against the patient's finger/heel.
H. An incision should be made into the finger/heel at this time. The lancet blade will automatically retract.
I. If the blood flows freely, use a piece of dry cotton or gauze to wipe away the first drop. Wipe the area dry. If the blood does not flow freely, gently massage toward the finger/heel puncture to induce bleeding.
J. If blood does not flow freely after gently massaging the finger/heel, make another puncture.
K. Label each specimen with appropriate specimen label. Be sure to document date, time of collection, and the collector's ID on label. All labeling must occur in the presence of the patient.

XII. Urine Collection Procedure

Midstream urine samples are the preferred specimen of choice for urine analysis.

A. Cleanse the desired skin area with an antiseptic towelette.
B. After several mLs of urine have passed, collect midstream portion in a sterile container without stopping the flow of urine.
C. Label the specimen container with appropriate specimen label. Be sure to document date, time of collection, and the collector's ID on label. All labeling must occur in the presence of the patient.

ATTACHMENTS:

I. BLOOD DRAW ORDER QUICK GUIDE

BLOOD DRAW ORDER QUICK GUIDE

Blood Draw Order:

Blood Cultures

NOTE: If blood cultures are to be drawn outside the hospital, call the APH Laboratory at 337-738-9490 for collection supplies and collection instructions.

Blue Top Tube

Red Top Tube/ Tiger Top Tube/ Yellow Top Tube

Green Top Tube

Purple Top Tube

Gray Top Tube

ALLEN PARISH HOSPITAL	Policy Number	LA-017-006
Departmental Policy Name: Labeling, Processing, Receiving & Rejecting of Specimens	**Effective Date**	**08/31/2018**
Authored by: Mona Wilkins, BS, MT(ASCP)HP	**Page**	**1 of 5**
Approved by Department Director: Mona Wilkins **Approved by Medical Director:** **Approved by Administration:** **Board of Commissioners:**	**Approved Date**	12/10/18
Revised/Reviewed by: Mona Wilkins, BS, MT(ASCP)HP	**Revision Dates**	**NEW**

PURPOSE: To establish safe and effective protocols for the pre-analytic handling of clinical specimens, so that quality of testing is ensured throughout the pre-analytic phase of the overall testing process, including accurate management of prescribed test orders, applying specimen rejection criteria, and data entry into the laboratory LIS system.

POLICY AND PROCEDURE: All primary specimens shall be labeled with at least two of the four patient identifiers approved by our organization. The approved patient identifiers for our organization are patient's full name, date of birth, and/or patient's social security number/LIS identification number. Each specimen container must identify the patient uniquely, so that all primary collection containers and their aliquots have a unique label which one can audit back to full particulars of patient identification, collection date, and specimen type.

Specimens should be labeled with the appropriate LIS label, if applicable, date and time of collection and the ID of the person who collected the specimen. Print legibly. Labels should be affixed to the appropriate tubes/containers in the presence of the patient, with the label test aligned from top to bottom or bottom to top for tubes and side to side for other collection containers. Try to cover the label that is already affixed to the tube using a LIS generated label. The placement of labels on blood specimen tubes is important because automated instruments read the barcodes on labels, using them to determine which tests need to be performed on the specimen. Labels should not be placed on lids of urine or stool specimen cups, because when opened, the specimen is then separated from its label. Below is a list of precautions for labeling:

I. Without exception, all patients are identified using two approved identifiers. Without exception, all specimens shall be labeled with at least two of the four patient identifiers approved by this organization, patient's full name, date of birth, and/or patient's social security number/LIS identification number.
II. Specimens should be labeled with the appropriate LIS label, if applicable, date and time of collection, and the ID of the person who collected the specimen. Print legibly.
III. The label should be affixed to the appropriate tube in the presence of the patient, with the name running sideways from top to bottom or bottom to top. Try to cover the blank label that is already affixed to the tube. The placement of labels on blood specimen tubes is very important because instruments read barcodes on these labels to identify the patient and to determine the tests that need to be performed on specimens.

IV. Always complete the LIS labels in their entirety to include sources and or sites for blood cultures, other microbiology specimens or tests with other labeling requirements. An example of other pertinent information would be peak or trough drug levels.
V. Specimen labels should never be placed on the lid of a urine or stool cup.
VI. Fluids should never be sent to the laboratory in a syringe with the needle attached. Transfer these fluids to a sterile specimen cup or appropriate tube properly labeled.
VII. If the patient has not been registered into the LIS, specimens should be labeled in handwriting with the patient's first and last name, DOB, date and time of collection, and the ID of the collector. All labeling should be done in the presence of the patient.
VIII. Extra tubes should be labeled with one of the extra LIS labels. The time of collection and the ID of the collector should also be written on these labels.
IX. Use precautions to avoid cross-contamination of primary samples when possible. Collect separate tubes for reference laboratory tests to help prevent unnecessary transfer of samples and cross-contamination of specimens to be shared with the reference laboratory.

NOTE: If relabeling specimens when add-ons may be needed – leave original label on the tube with the patient's name visible – do not cover original name with the new label and initial the new label when relabeled.

laboratory personnel become aware of a potential error in the patient's identification or other information (e.g., phlebotomist initials, date/time of collection, etc.) on a specimen label, best practice is to recollect the specimen. However, there may be circumstances when recollection is not possible or practical. The laboratory will hold the specimen and contact the collecting individual to come to the laboratory to resolve the labeling discrepancy. This will be documented in the laboratory LIS by ordering a "Lab Exception Report" to communicate labeling discrepancies and sample rejections. Document in the Lab Exception report, the reason the sample was rejected, the test that was rejected and name of person contacted about the rejected specimen.
X. Requisitions for laboratory testing must include:
- A. The patient's last and first name
- B. The patient's date of birth or age
- C. The patient's sex
- D. The name of the physician or legally authorized person ordering the test.
- E. The ordering physician or legally authorized person ordering the test phone number, address, and fax number to send the report.
- F. The test(s) ordered
- G. The source of the specimen when appropriate (cultures, tissues)
- H. Time and date of specimen collection (date of service), collector initials
- I. Clinical information, when appropriate

XI. Transportation of Specimens to APH Laboratory
- A. In-house specimens to be transported to the laboratory must be placed in a leak-proof container, such as a plastic biohazard bag. Outside (Drop-off) specimen(s) to be transported to the laboratory must be placed in a leak-proof container, such as a plastic biohazard bag and into a specimen transportation

leak-proof container, such as a plastic biohazard bag and into a specimen transportation container with a frozen ice pack, **DO NOT PLACE BLUE TOP TUBES IN THE SPECIMEN TRANSPORTATION CONTAINER WITH THE ICE PACK.** All specimens must be received in the laboratory as soon as possible after obtaining specimen to permit test processing. Additionally, all specimens must meet manufacturer guidelines for specimen integrity.

NOTE: See Specimen Stability and Integrity Table for acceptable receipt times in the Laboratory

XII. Specimen Rejection

Pre-analytic variables must be closely controlled to maintain specimen integrity. These include specimen temperature, transport time, and the interval before separation of blood cells from serum/plasma. For coagulation tests, important considerations include proper filling of the collection tube, the use of waste tubes, and if the blood must be drawn through an indwelling line. For surgical pathology and cytopathology, specimens must be preserved by proper fixation or refrigeration. 24-hour urine specimens may require special preservatives for specific tests. Also, it may be necessary to collect specific patient information required by the testing laboratory. The laboratory must use specimen containers that have been evaluated for appropriateness, through some combination of direct testing by the laboratory, review of the clinical literature, and/or evaluation of information from manufacturers, to ensure that they do not contribute to analytic interference in the assays to be performed. The APH laboratory generally meets this requirement by using compatible specimen collection components from BD, according to manufacturer recommendations. Specimens received by the APH laboratory will be rejected and testing cancelled if:

A. Specimen is labeled with a wrong patient name.
B. Purple, green, or blue top tube is clotted.
C. Blue top tube is not filled adequately, within 90% of intended volume.
D. Specimen is grossly hemolyzed, for tests which this is a significant factor.
E. Wrong type of specimen collected for the requested test procedure.
F. Specimen for culture was not collected in a sterile container or by aseptic technique. Pedi-bags placed inside urine cups are not acceptable. Culture source not on label.
G. Specimen integrity has been compromised by leaking into biohazard bag.
H. Specimen is too old for testing.
I. Specimen label is placed on lid instead of on the container.
J. Time/date of collection and the ID of the specimen collector is not on label along with patient's full name and date of birth.
K. Quantity Not Sufficient (QNS) to perform ordered tests.
L. Specimen Integrity is not maintained

NOTE: Rejected specimens will not be tested unless recollection of the specimen is not practical (i.e., catheterized urine sample, body fluids, peritoneal fluid, or surgical tissue specimen) and patient care staff can confidently correct the situation. In such cases, the laboratory will hold the specimen and contact the collecting individual to come to the laboratory to resolve the discrepancy. Ordinary blood and urine specimens that are of questionable quality or identity must be recollected and identified correctly.

Rejected specimens must be documented in the LIS system. Order "Lab Exception Report". Document the collect and receive time of the original specimen. Document in the Lab Exception Report, the reason the sample was rejected, the test that was rejected, and the person contacted about the rejected specimen.

GENERAL POLICY FOR PATIENT PREPARATION AND HANDLING:

I. Out Patients and New Admissions

A. Orders along with patient demographic face sheets are to be provided by the admission/registration Department. Review orders to verify against face sheet.

B. Ensure the patient's name, DOB, and Hospital account number on the patient's armband matches the paperwork. Perform venipuncture on the properly identified patient. If the patient needs to bring a specimen back (ex., stool, 24 hour urine, etc.), place a patient label on the specimen container, and instruct the patient on the collection requirements including when the specimen needs to be returned and date and time of collection needs to be recorded on the container.

C. On the paper order, put your initials, time drawn, and date drawn. Enter order(s) into the LIS and highlight the order(s), on the order sheet, that you entered into the LIS with a yellow highlighter. Order(s) may be entered into the LIS in the draw station or in the laboratory. Collect and receive the specimen(s) (**NOTE: only collect and receive specimens that you have in hand.**), place the collected tubes/specimen(s) in the specimen processing area, if you are to spin down specimen(s) at this time, ensure you document the centrifuge time on the spin log for the analytes that have time limit requirements, (**NOTE: See Specimen Stability and Integrity Table**). Place completed order(s) in the Lab Order File by draw date.

II. ED/In Patients

A. The laboratory will be notified that order(s) have been generated for ED/In patients when the order(s) print out in the laboratory or when the ED calls the laboratory.

B. Remove the printed labels from the printer, if applicable and go to the patient location to perform the venipuncture. Ensure the patient's name, DOB, and Hospital account number on the patient's armband matches the patient identication information on your labels or the patient labels you have obtain from the ED.

C. Once you return to the laboratory, collect and receive the specimen(s), place the collected tubes/specimen(s) in the specimen processing area, if you are to spin down specimen(s) at this time, ensure you document the centrifuge time on the spin log for the analytes that have time limit requirements, (**NOTE: See Specimen Stability and Integrity Table**).

NOTE: All patients are processed using the *AIDET* protocol:

1. ***Acknowledge*** **the patient and family**
2. ***Introduce*** **yourself to the patient**
3. **Give *Duration* for the procedure**
4. ***Explain*** **the procedure**
5. ***Thank*** **the patient for allowing us to manage their care and ask them if they need anything else before you leave.**

DROP-OFF SPECIMENS:

The APH Laboratory must employ a documented system to monitor the quality of specimens received from remote sites and collection sites not under the control of the laboratory such as Home Health agencies. Documentation of receipt is recorded on the APH Laboratory Specimen Drop-Off Log. Specimen(s) received in the laboratory must have been transported in a specimen transport container with frozen ice packs. **DO NOT PLACE BLUE TOP TUBES IN THE SPECIMEN TRANSPORTATION CONTAINER WITH THE ICE PACK.** All specimens must be received in the laboratory as soon as possible after obtaining specimen to permit test processing.

NOTE: See Specimen Stability and Integrity Table for acceptable receipt times in the Laboratory

Once the order(s) and specimen(s) have been received in the laboratory, the specimen(s) must be reviewed for proper patient identifiers, date, time, and collector's initials on the specimen container, and specimen integrity. The requisition must also be reviewed for all required information. The admit/registration process may or may not have been started prior to specimen(s) receipt in the laboratory, check with the admit/registration department to verify that they have been notified. If the specimen(s) must be rejected, follow the Specimen Rejection process in section XII under Policy and Procedure in this SOP. **Always** process the specimen(s) appropriately before the paperwork is completed due to specimen stability and integrity requirements, **(NOTE: See Specimen Stability and Integrity Table)**. Once completed paperwork is received from the admit/registration department, collect, receive, and label the specimen(s). File completed paperwork in the Lab Order File by date.

ATTACHMENTS:

I. SPECIMEN STABILITY AND INTEGRITY TABLE

Allen Parish Hospital – Laboratory

Specimen Stability and Integrity Table

TEST	TUBE TYPE or SPECIMEN	SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY
Acetaminophen	Red or Green	8hrs@Room Temp 2wks @ 2-8°C 45 days @-20°C or colder
Acetone	Red or Green	8hrs@Room Temp 7 day @ 2-8°C 3 months @-70°C or colder
AHDL	Red or Green	8hrs@Room Temp 7 days @ 2-8 C Separate samples as soon as possible, within a maximum limit of **2 hrs** from time of Collection.
ALB	Red or Green	8hrs@Room Temp 2 days @ 2-8°C longer @-20°C or colder
ALPI	Red or Green	8hrs@Room Temp / 7 days @ 2-8 C Separate from the cells as soon as possible within a maximum limit of **2 hrs** from the time of collection
ALTI	Red or Green	8hrs@Room Temp / 7 days @ 2-8 C Serum or plasma should be separate for the cell as soon as possible with a maximum limit **of 2 hr** From the time of collection.
AMPH	Urine	<24hrs @ 2-8°C
AMYLASE	Red or Green	8hrs@Room Temp 6 months @ 2-8°C longer @-20°C or colder

Basic Metabolic Panel	Red or Green	Must be spun within 1 hour of collection 1wk @ 2-8°C
AST	Red or Green	3 days Room Temp 7 days @ 2-8°C 1 months @-20°C or colder
TEST	**TUBE TYPE or SPECIMEN**	**SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY**
BARB	Urine	<24hrs @ 2-8°C
BENZ	Urine	<24hrs @ 2-8°C
BUN	Red or Green	3-7 days Room Temp 7 days @ 4°C indefinitely @-20°C or colder
CA	Red or Green	8 hours Room Temp / 2 days @ 2 -8 C Serum should separate from the **cells and analyzed promptly.**
THC	Urine	<24hrs @ 2-8°C
CBC w/or wo/Diff/Platelet Count	Purple	24 hrs. @ Room Temp 48 hrs. @ 4°C
Comprehensive Metabolic Panel	Red or Green	Must be spun within 1 hour of collection 1wk @ 2-8°C
CRBM	Red or Green	8 hrs @ Room Temp 2 days @ 2-8°C Frozen @-20°C or colder for longer storage

CL	Red or Green	1 wk @ 2-8°C Separate samples from the cells within **1 hr** of maximum collection
CHOL	Red or Green	8 hrs. @ Room Temp 2 days @ 2-8°C Longer storage @ -20°C
TEST	**TUBE TYPE or SPECIMEN**	**SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY**
COC	Urine	<24hrs @ 2-8°C
CKI	Red or Green	7 days @ 2-8°C Longer storage @-20°C Serum or plasma should be separate from the cells as soon as possible with a maximum of **2 hr** From the time of collection.
LMMB	Red or Green	12 hrs. Room Temp 3 days @ 4°C 1 month @-20°C
CRE2	Red or Green	24 hrs. Room Temp / 7 days @ 2- 8 C Serum or plasma should be separated from the cells as soon as possible with a maximum limit of two hours from collection.
D-Dimer	Blue	15 to 25 °C 4 hours ***Testing should be performed <4hrs*** 2 to 8 °C 24 hours ≤ −18 °C 4 weeks••

		•• If frozen within 4 hours of blood collection. Do not refreeze.
DGNA	Red or Green	8 hrs. @ Room Temp 7 days @ 2-8°C 6 months @ -20°C
DBIL	Red or Green	8 hrs. @ Room Temp 7 days @ 2-8°C 6 months @ -20°C PROTECT FROM LIGHT IF >8HR STORAGE
ECO2	Red or Green	8 hrs. @ Room Temp / 2 days @ 2-8 C Serum and plasma should be analyzed as promptly as possible.
ESR (Sedimentation Rate)	Purple	4 HRS @ Room Temp 24 hrs @ 2-8°C
TEST	**TUBE TYPE or SPECIMEN**	**SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY**
ETOH	Red or Green *DO NOT USE ALCOHOL SWAB TO CLEANSE VENIPUNCTURE SITE*	2 days @ Room Temp 2 wks @ 2-8°C Indefinitely @ -20°C
FOLA	Red or Green	8 hrs. @ 2-8°C Longer storage >8hrs -20°C PROTECT FROM LIGHT
FT4L	Red or Green	24 hrs. @ Room Temp 14 days @ 2-8°C 3 months @ -20°C
GLUC	Red or Green	Must be spun within 1 hr of collection 8 hrs @ Room Temp 3 days @ 4°C
Hematocrit	Purple	24 hrs @ Room Temp 48 hrs @ 2-8°C
Hemoglobin	Purple	24 hrs @ Room Temp

		48 hrs @ 2-8°C
HBA1C	Purple only	3 days @ Room Temp 7 days @ 2-8°C 4 months @ -20°C
Hepatic Panel Liver Function Test	Red or Green	8 hrs @ Room Temp 2 days @ 2-8°C 6 months @ -20°C
Lactic Acid	Gray only – on ice In-house specimens only	Must be spun within 15 minutes of collection
Lipid Panel	Red or Green	8 hrs @ Room Temp 2 days @ 2-8°C
LIP	Red or Green	24 hrs @ Room Temp 7 days @ 2-8°C 12 months @ -20°C
LI	Red or Green (Na Heparin Only)	24 hrs @ Room Temp 7 days @ 4 C 6 MONTH @ -18 C+
TEST	**TUBE TYPE or SPECIMEN**	**SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY**
MG	Red or Green	7 days @ Room Temp 7days @ 2-8°C 12 months @ -20°C
METH	Urine	<24hrs @ 2-8°C
LNTP	Red or Green	3 days @ Room Temp / 3 days @ 2-8C Serum or plasma should be separated from cells as soon as possible with a maximum limit **of 2 hr** from The time collection

TEST	TUBE TYPE or SPECIMEN	SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY
OPI	Urine	<24hrs @ 2-8°C
PCP	Urine	<24hrs @ 2-8°C
PT/INR	Blue	15 to 25 °C 4 hours **Testing should be performed <4hrs**
PTT	Blue	15 to 25 °C 4 hours **Testing should be performed <4hrs**
PTN	Red (no gel) or Green	24 hrs @ Room Temp 2 days @ 2-8°C 5 months @ -20°C
PHOS	Red or Green	**Must be spun within 1 hour of collection** ≤8hrs @ Room Temp ≤7days @ 2-8°C ≤3 months @ -20°C
K+	Red or Green	**Must be spun within 1 hour of collection** 1 wk @ Room Temp 1 wk @ 2-8°C
Renal Panel	Red or Green	**Must be spun within 1 hour of collection** 1 wk @ 2-8°C

SAL	Red or Green	7 days @ Room Temp 14 days @ 2-8°C 6 months @ -20°C or colder
NA	Red or Green	1 wk @ Room Temp 1 wk @ 2-8°C Sample must be separated within **1 hr** within collection
TBI	Red or Green	8 hrs @ Room Temp / 7 days @ 2-8 C Serum and plasma specimen should be separated From the cells **within 2 hr** after collection PROTECT FROM LIGHT IF >8HR STORAGE
TGL	Red or Green	8 hrs @ Room Temp 2 days @ 2-8 C
TNIH	Green (Li Heparin)	8 hrs @ Room Temp 24 hrs @ 2-8°C 40 days @-20°C non-frost-free freezer
TP	Red or Green	8 hrs @ Room Temp 72 hrs @ 2-8°C 6 months @-20°C
TEST	**TUBE TYPE or SPECIMEN**	**SEPARATED SPECIMEN STABILITY or SPECIMEN STABILITY**
TSHL	Red or Green	24 hrs @ ambient Temp 7 days @ 2-8°C
TPSA	Red or Green	8 hrs @ Room Temp Longer storage @ -20°C Extended storage 4 months @ -80°C

Urinalysis	Urine	2 hr @ Room Temp 2 days @ 2-8°C
URCA	Red or Green	1 day @ Room Temp 3-5 days @ 2-8°C 6 months @ -20°C or colder
VALP	Red or Green	8 hrs @ Room Temp 2 days @ 2-8°C Longer storage @ -20°C
VANC	Red or Green	8 hrs @ Room Temp 2 days @ 2-8°C Longer storage @ -20°C
VB12	Red or Green	24 hrs @ Room Temp 48 hrs @ 2-8°C Longer storage @ -20°C or colder PROTECT FROM LIGHT
VITD	Red or Green	24 hrs Room Temp 7 days @ 2-8°C 3 months @ -20°C

Tube Type: Red Top or Tiger Top; Green Top (LI Heparin or NA Heparin); Purple Top (EDTA); Blue Top (Na Citrate)

NOTE: For the tests not listed in this guide please call the laboratory (337-738-9490) for specimen (s) collection requirements.

Approved by _____ **Date** _____