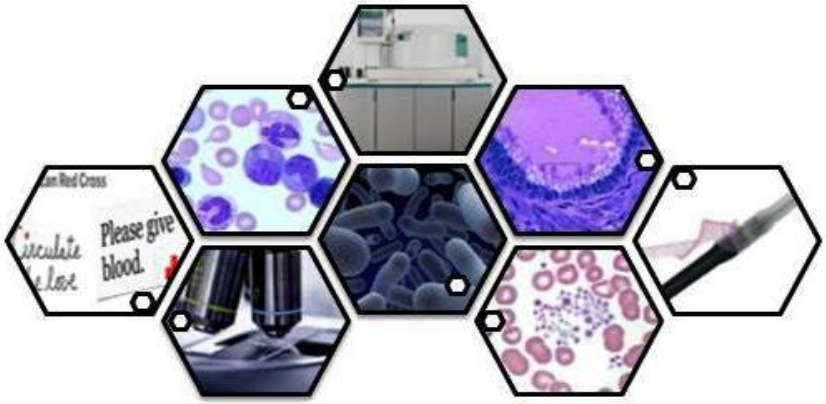
ALBANY MED Health System

SARATOGA HOSPITAL

Laboratory Specimen Reference Guide



- General Specimen Requirements
- General Requisition Requirements
- Blood Collection Guide for Adults
- Blood Collection Guide for Pediatrics
- Blood Collection Tube Types
- Urine
- Stool
- Blood Cultures
- Microbiology and Virology
- Joint and Body Fluids
- Blood Bank
- Pathology
- Cytology
- Specimen Transport
- Information about Lab Policies & Procedures

SPECIMEN REQUIREMENTS

PATIENT IDENTIFICATION:

- Verify patient name and date of birth prior to specimen collection.
- Specimens must be labeled in the presence of the patient.

LABELING:

- Patient name (last & first)
- Date of Birth (DOB)
- Initials of phlebotomists-must be legible
- Date and Time of collection

ORDER OF DRAW GUIDELINES (CLSI):

NOTE: THE GOAL IS TO PREVENT CROSS CONTAMINATION OF TUBE ADDITIVES.
NEVER TRANSFER BLOOD FROM ONE COLLECTION TUBE TO ANOTHER COLLECTION TUBE.

- Blood Culture
- Coagulation tubes (blue top)
- Serum tubes (with or without clot activator)
- Heparin (green top tubes, with or without plasma separator)
- EDTA (lavender top tubes)
- Glycolytic inhibitor tubes (gray top tubes)

NOTES:

- Submit a sufficient number of tubes for all tests ordered.
- Check expiration dates on all collection devices. DO NOT USE IF EXPIRED.
- REFER TO SERVICE DIRECTORY on how to store specimens regarding refrigerated, room temp, & frozen samples.

REQUISITIONS

Submit all information:

- Name *
- DOB*
- SSN
- Address & Phone
- Insurance Info
- Providers Signature (NO STAMPS) *
- Printed Providers name
- Clinical Diagnosis or ICD10 code*
- Date ordered*
- CLEARLY mark or write specific tests requested

Make sure to specify (QUAL, QUANT, Ab, Ag, Differential or w/ REFLEX) for the appropriate tests

* **REQUIRED** General Requisition information

Blood Specimen Collection

Adult Venipuncture

Materials Needed

- Test requisition and/or labels
- Tourniquet, gloves, marking pen
- Disposable needle holder with Eclipse needle
- Alcohol prep pad or alternate antiseptic wipe
- 2x2 inch dry gauze sponge
- Surgical adhesive tape or band-aid
- Appropriate blood collection tubes
- Approved biohazard sharps container

Greet the Patient

- Begin by letting the patient know who you are.
- Inform the patient that you will be drawing his or her blood
- Ask the patient to tell you his or her name and date of birth.
- Identify the patient using a minimum of 2 unique identifiers for non-transfusion specimens

Note: This is a Regulatory Requirement

Assemble the Supplies

See **Service Directory** for testing requirements

- Choose appropriate tubes for the tests ordered. Example: Protime- Light Blue Sodium Citrate Tube

Position Patient

- Position patient in bed or chair
- Keep the arm outstretched and supported

Infection Control

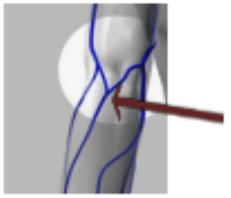
Note: Gloves must stay intact for the duration of the procedure

Tourniquet

- Apply tourniquet 3-4 inches above venipuncture site
- Tourniquet should remain in place no longer than ONE minute

Select Site

- Have the patient make a fist (avoid pumping)
- Search for venipuncture site



Note: The preferable site is the mid-antecubital fossa

Avoid

- Keep in mind where nerves are found.
- Avoid these areas:

- *Healed Burns, Extensive Scaring, or Hematoma.*
- *Drawing from an arm on the same side as a mastectomy without physician approval.*
- *Drawing from an arm having a Cannula, Fistula, or Vascular access device.*

The lime green area is the Medial Nerve. Make a note of where it lies in relation to the veins in the arm.

Perform Phlebotomy

1. Thread Eclipse Needle into disposable adaptor.
2. Prep the site by rubbing it with an alcohol prep pad working in concentric circles from the inside out. Allow the site to air dry.
3. Holding the needle assembly in your dominant hand, remove the protective sheath from the needle. Hold the assembly with the bevel facing up.
4. Stabilize the vein (with your non-dominant hand), using the thumb to draw the skin taut distal to the puncture site.
5. Insert the needle, bevel up, at no more than a 30 degree angle.
6. Engage collection tube(s) following guidelines with respect to order of draw.
    - □ Blood Culture Bottles
    - □ Coagulation Tubes (blue top)
    - □ Serum Tubes (with or without clot activator)
    - □ Heparin Tubes (green top with or without plasma separator
    - □ EDTA tubes (lavender top)
    - □ Glycolytic Inhibitor Tube (gray top)
7. Remove tourniquet within 1 minute.
8. After the last tube has been disengaged, remove the needle from the vein, and immediately apply pressure to the site.
9. Engage the safety device to the eclipse needle, and discard the whole needle assembly.

Post Venipuncture

- While patient applies pressure to wound, mix specimens 5-10 times by gentle inversion.

Note: Unmixed specimens will produce inaccurate test results.

- Label all specimens in the presence of the patient

Note: Must be labeled with patient's full name, DOB, time, date, & Initials of person who collected the specimen

- Apply bandage to wound after verifying the patient has stopped bleeding. ***Note: Instruct patient to leave bandage on for at least 15 minutes.***

Inspect Area

- Use the Rule of Four for dispose of supplies: tourniquet, tubes, garbage, and needle
- Inspect patient area to be sure **all** venipuncture supplies have been removed

  Note: Supplies such as caps can be choking hazards.
- Wash Hands

Instructions for Winged Collection Set

- Peel back package at arrow
- Remove from package
- Insert end into hub/Screw into place
- Using technique described above perform the following

o Place Tourniquet

o Select Site

o Prep Site

- Remove cap
- Choose handling technique

- Once the needle is inserted in the vein, a flash will appear.
- Fill specimen tubes according to correct order of draw.
- Activate push button while in-vein.
- Follow Post Venipuncture instructions stated previously.

Blood Specimen Collection Pediatric

SKIN PUNCTURE BLOOD COLLECTION

Choose puncture site:

Adult and child > 1 yr old

Palmar surface of the middle or ring finger's distal phalanx

Neonates and infants

Lateral or medial plantar surface of heel

If necessary, warm site using heel warmer

SKIN PUNCTURE BLOOD COLLECTION

- Cleanse site w/70% isopropyl alcohol, allow to dry
- Puncture heel/finger across the print grain
- Wipe away first drop of blood
- Hold puncture site downward applying intermittent pressure to surrounding tissue; avoid repetitive “milking”
- Fill micro tube via capillary action

Order of Draw:
(Different than venipuncture)
- EDTA
-Other additive TUBES
-Specimen requiring serum
EDTA & anticoagulated samples should be capped & gently inverted immediately

Tubes

HEMOLYSIS

Definition: breakage of red blood cells causing the release of internal components into the surrounding fluid.

Avoid submitting HEMOLYZED specimens for testing. Results will be inaccurate if tested on hemolyzed specimens.

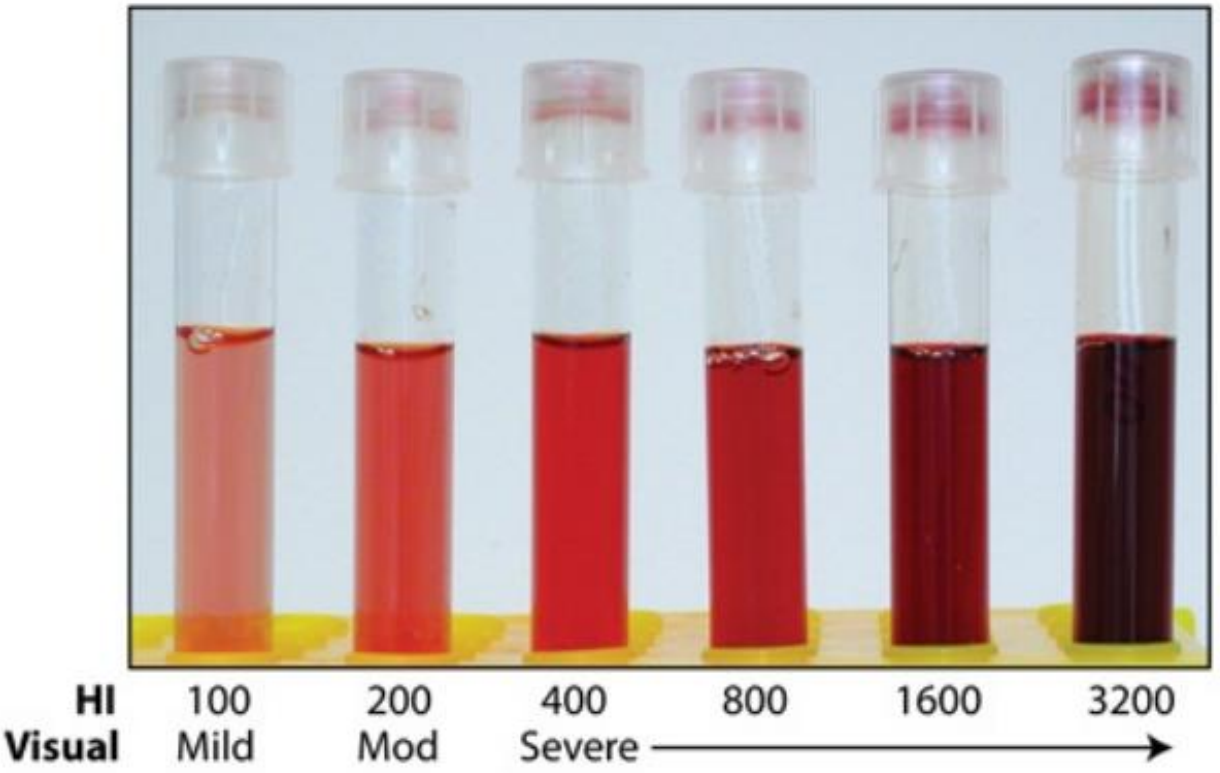
Cause

- Prolonged tourniquet time
- Failure to allow complete drying of alcohol at prep site
- Slow draw
- Too small or too large needle
- Pulling back too forcefully on syringe plunger
- Vigorous mixing or shaking of specimens
- Exposure to excessive heat or cold

Effect

- Slight hemolysis has little effect on most test values
- Common test results increased by hemolysis:
  K+, LD, AST, ALT, CK, IRON, PHOS, Total Protein, Albumin,
  Mg+, Calcium and ALP
- Common tests decreased by hemolysis:
  T4, Haptoglobin, Troponin T

HEMOLYSIS INDEX



LIGHT BLUE TUBES (CITRATE)

- *Always mix by gentle inversion after collection.*
- A discard tube **MUST** be used if specimen is to be drawn using a winged blood collection devise to ensure proper blood volume is obtained in the tube.
- Specimens **MUST** be filled to the arrow to ensure appropriate blood to anticoagulation ratio. **DO NOT** overfill.
- Label tube with patient name, DOB, date, time.
- If aliquoting plasma into transfer tube, **DO NOT** disturb buffy coat.
- For special coagulation test refer to service directory for specific testing requirements

LIGHT BLUE TUBES- Continued

Test	Storage Requirements
Protime/INR	• Room temperature storage: Testing must be performed within 24 hours of specimen collection **OR** • Centrifuge specimen within one hour and freeze plasma.
APTT	• Room temperature storage: Testing must be performed within 4 hour hours of collection **OR** • Centrifuge specimen within one hour and freeze plasma.
D-Dimer	• Room temperature storage: Testing must be performed within 4 hour hours of collection **OR** • Centrifuge specimen within one hour and freeze plasma. Testing must be performed within 4 hours of collection.

SERUM SEPARATOR TUBES

- SST tubes provide serum for testing analysis-
  - Chemistry
  - Special Chemistry
  - Serology/Immunology
- Refer to service directory for specific testing requirements
- Follow specific testing recommendations in regards to handling (room Temp/refrigerated/frozen)
- Allow specimen to clot **completely** before centrifuging specimen. To Spin BD gel vacutainer tubes:
  - Non-gel- spin 10 minutes < or = 1300 RCF per minute
  - Gel tubes- spin 1000-1300 RCF/min for 10 minutes with swinging Buckets and 15 for fixed buckets.
  - Gel tubes must be spun within 2 hrs
- Serum or plasma should be separated from the cells as soon as Possible. Maximum time limit is two hours from the time of collection.
- Specimen should be free of particulate matter.

LITHIUM HEPARIN TUBES

- *Always mix by gentle inversion after collection.*
- Used for routine chemistry tests.
- Certain exceptions apply. Examples of tests that cannot be drawn in lithium heparin tubes include:
  - Therapeutic Drug Levels
  - Hepatitis testing
  - Cancer antigens
  - RF, RPR and infectious mono tests
- Refer to specimen directory for specific requirements.

LAVENDER TUBES

Always mix by gentle inversion 8-10 times after collection.

Test	Requirements
CBC	• Must be run within 24 hours of collection. • Store at room temperature. • Minimum- one ml of blood required. • **NOTE: A differential (manual or auto) is NOT performed unless it is specified on the requisition.**
ESR	• Stable for 12 hours if refrigerated. • Tube must be at least half full.
Hg A1C	• Stable for 7 days if refrigerated.
BNP	• Stable at room temperature for 24 hours.
iPTH	• Spin and separate ASAP- stable for 8 hours at room temperature.
SPECIMENS WILL BE REJECTED IF THE SPECIMEN IS: • Clotted, • Not properly stored, • Not properly labeled with the patient's full name and DOB, • Too old.	

Urine

URINE COLLECTION

URINALYSIS

- Label specimen with patient name, DOB, date and time.
- Screw cap tightly to prevent leaking.
- Specimen is kept refrigerated.
- If refrigerated, test must be run within 24 hrs of collection.
- If left at room temperature, analysis must be performed within 2 hrs of collection.
- Always label the specimen CUP, not the lid
- Specify on requisition if the provider wants a “reflex to micro” or a urine microscopic along with the chemical analysis.

IF NOT SPECIFIED ON THE REQUISITION, ONLY A CHEMICAL URINALYSIS WILL BE PERFORMED.

A “clean catch” should be obtained if there is a possibility of adding a URINE CULTURE to the specimen.

URINE COLLECTION

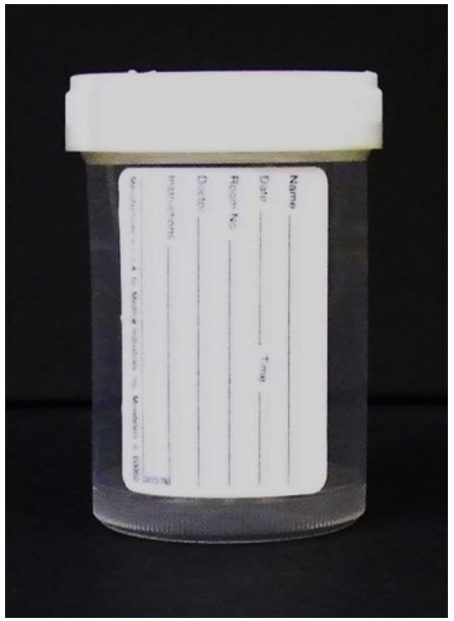
URINE CULTURE

- Have patient wash with provided towlettes prior to giving a “clean catch” sample.
- Label specimen with patient name, DOB, date and time.
- Sample must be refrigerated and sent to the main lab ASAP (within 24 hrs of collection).

URINE COLLECTION

Random Urine

- Specific handling may be needed depending on the requested test; refer to specimen directory.



URINE COLLECTION

See special requirements on the next page for the following tests: Aminolevulinic acid, Calcium, Catecholamines, Glucose, Magesium, Oxalate, Porphobilinogen, and Uric Acid

24 Hour Urine Collection

(with or without preservative)

- Follow provider's directions regarding food, drink or drugs during collection process.
- ***Remember to record start time and date, patient name, DOB, and provider on the container!***
- Discard the FIRST morning sample

(only one concentrated sample collected).

- Keep refrigerated and return to the lab ASAP.

24 HR URINE TESTS THAT REQUIRE PRESERVATIVE DURING COLLECTION

TEST	PRESERVATIVE
Aminolevulinic acid(ALA)	30 mL 30% Glacial acetic acid
Calcium	30 mL 6N Hydrochloric acid (HCl)
Catecholamines	30 mL 6N Hydrochloric acid (HCl)
Glucose	Boric acid tablet
Magnesium	10 mL 6N Hydrochloric acid (HCl)
Oxalate	30 mL 6N Hydrochloric acid (HCl)
Porphobilinogen	30 mL 30% Glacial acetic acid *PROTECT FROM LIGHT*
Uric Acid	10mL 5% NaOH

See container for specific safety hazards.

CHLAMYDIA/GONOCOCCUS, NAA

MALE and FEMALE URINE

Aptima Multitest Swab Specimen Collection Kit.

- Patient should not urinate 1 hr prior to this collection.
- Collect the first 20-30 ml of voided urine (NOT A CLEAN CATCH).
- **<15 or >30 ml maximum** or **specimen will be rejected.** ***Excessive urine will cause a false negative result!***
- Transfer 2 mL of urine into the specimen transport tube. The correct volume has been added when the fluid level is between the black lines on the urine transport tube label.
- Tightly cap specimen.
- Label specimen with patient name, DOB, date and time.

Stool

STOOL SPECIMEN CONTAINERS

CARY-BLAIR TRANSPORT VIAL (orange cap)

- Cultures for enteric pathogens:
  - Salmonella
  - Shigella
  - Campylobacter
- Enterohemorrhagic E-Coli
- Yersinia
- Specimens kept at room temperature.
- Label with patient name, DOB, time and date.

STOOL SPECIMEN CONTAINERS

PVA & FORMALIN 2 VIAL SYSTEM

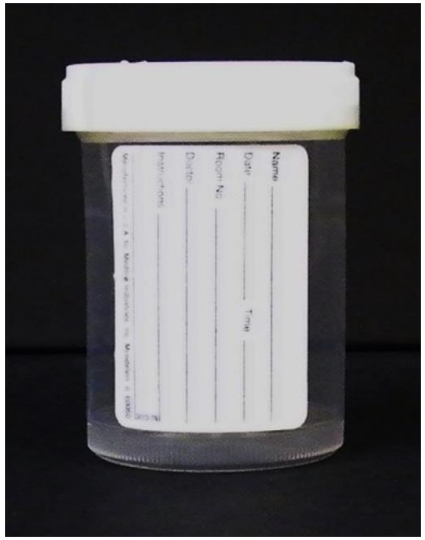
(pink & gray caps)

- Ova & Parasites
- Giardia Antigen
- Cryptosporidium
- Stool for WBC
- Specimens kept at room temperature.
- Label with patient name, DOB, time and date.

STOOL SPECIMEN CONTAINERS

- Sterile cup
- Label with patient name, DOB, time and date.
- Return to Laboratory ASAP (within 24 hours of collection).

Storage and Transport Requirements	
Refrigerate	**Room Temperature**
Calprotectin	Elastase
C Diff A/B *	
H. Pylori Ag	
Stool for Fat	
Lactoferrin	



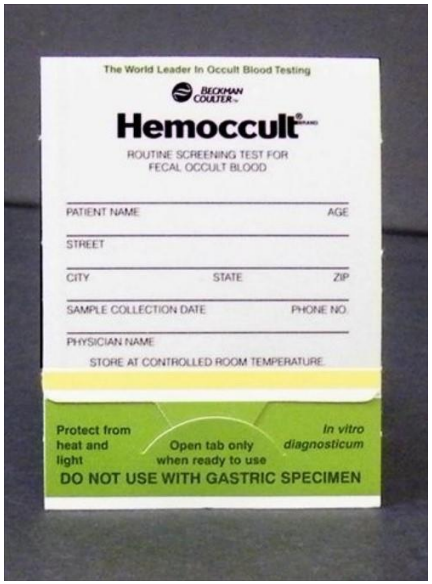
***Specimen must be liquid for C diff.**

STOOL SPECIMEN CONTAINERS

HEMOCCULT CARDS

Fecal occult blood

- Follow directions on test cards.
- Verify cards **are not expired!**
- Cards kept at room temperature.
- Label with patient name, DOB, date and time.
- Return to lab ASAP (within 14 days of collection).



Blood Cultures

BLOOD CULTURE SUPPLIES- ADULT

Aerobic and Anaerobic

Bac/T Alert

BLOOD CULTURE SUPPLIES- PEDIATRIC

Pediatric

Bac/T Alert

Materials Needed

- Test Requisition and/or labels
- Tourniquet, gloves, marking pen
- Disposable needle holder with Butterfly needle
- Chloraprep (Use alcohol prep pad for patients Under 2 months of age)
- 2 x 2 inch dry gauze sponge
- Surgical adhesive tape or band-aid
- Blood Culture Bottle
- Approved biohazard sharps container

Greet the Patient

- Begin by letting the patient know who you are.
- Inform the patient that you will be drawing his or her blood.
- Identify the patient using a minimum of 2 identifiers.
  Note: This is a Joint Commission Requirement

Prepare Supplies

- Remove metal stoppers
- Clean each rubber stopper with an alcohol prep pad
- Place a new alcohol prep pad on top of the bottle- do not remove until just prior to collection

Position the patient

- Position patient in bed or chair
- Keep the arm outstretched and supported

Infection Control

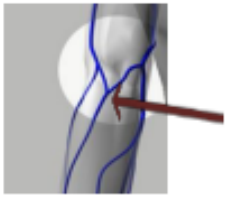
Note: Gloves must stay intact for the duration of the procedure

Tourniquet

- Apply tourniquet 3-4 inches above venipuncture site
- Tourniquet should remain in place no longer than ONE minute

Select Site

- Have the patient make a fist (avoid pumping)
- Search for venipuncture site



Note: The preferable site is the mid-antecubital fossa

Avoid

- Keep in mind where nerves are found.
- Avoid these areas:

- *Healed Burns, Extensive Scaring, or Hematoma.*
- *Drawing from an arm on the same side as a mastectomy without physician approval.*
- *Drawing from an arm having a Cannula, Fistula, or Vascular access device.*

The lime green area is the Medial Nerve. Make a note of where it lies in relation to the veins in the arm.

Perform Phlebotomy

- Thread Butterfly into disposable adaptor.
- Prepare site for venipuncture using the following steps.

Age: Birth – 2 Months

Note: Alcohol prep pads are used on this age group to push bacteria away from the venipuncture site. Using Chloraprep could cause irritation or chemical burns.

- Open alcohol prep pad, and place directly on the venipuncture site.
- Move the alcohol prep pad in concentric circles away from the venipuncture site.
- Allow area to dry for approximately 30 seconds. Do not blot or wipe away.

Age: Greater Than 2 Months

Note: ChloraPrep is used on this age group to disinfect the venipuncture site. The maximum treatment area for one applicator is 2.5 inches by 2.5 inches.

- Tear ChloraPrep applicator pouch at side notch to reveal applicator handle. Do not touch foam applicator tip. Place foam flat side down on the venipuncture area.
- Completely wet the venipuncture area.
- Gently use repeated back and forth strokes of the applicator for approximately 30 seconds. Allow area to dry for approximately 30 seconds. Do not blot or wipe away.
- Discard applicator after single use.

Perform Phlebotomy

- Holding the needle assembly in your dominant hand, remove the protective sheath from the needle. Hold the assembly with the bevel facing up.
- Stabilize the vein (with your non-dominant hand), using the thumb to draw the skin taut distal to the puncture site.
- Insert the needle, bevel up, at no more than a 30 degree angle.
- Using non-dominant hand, sequentially engage each BacT/Alert bottle into collection adaptor cap. See below for correct order of draw.
- Collect blood culture bottles in the following order.
    A. **Aer**obic Blood Culture Bottle / **Ped**iatric Blood Culture Bottle
    B. **Ana**erobic Blood Culture Bottle / **Ped**iatric Blood Culture Bottle

Note: The following are the optimal volumes.***Do not overfill the bottle******** 10 mL from adult patients into each Aerobic / Anaerobic bottle. 4 mL from pediatric patients into each Pediatric bottle.***

- Disengage last bottle. If additional blood is required for other testing, place the adaptor insert in to the adaptor cap and snap into place. Sequentially insert vacuum collection tubes as required using the following order of draw.
    A. Coagulation Tubes (**blue** top)
    B. Serum Tubes (with or without clot activator)
    C. Heparin Tubes (**green** top, with or without plasma separator)
    D. EDTA Tubes (**lavender** top)
    E. Glycolytic Inhibitor Tube (**gray** top)
- Disengage the last tube from the adapter assembly.

Microbiology

Rapid Testing

MRSA Screen

MRSA screening by PCR is available for Pre admission (PAT) and inpatients only. Please contact microbiology for instructions and swabs. Use Cepheid Collection Device.

NOTE:

MRSA screen is used to detect carriers of MRSA in a health care setting for purposes of isolation. For all other requests, please submit e-swab for culture.

RAPID TESTING

Rapid Strep A

- Collect specimen with provided sterile swab from the tonsils and/or the back of the throat avoiding the teeth, gums, tongue, or cheek surfaces and place in a tightly secured plastic transport container
- **Do not** use swabs with cotton tips, wooden shafts or calcium alginate swabs
- **Do not** use a collection system that contains charcoal or semisolid transport media
- Process swab as soon as possible after collection; if testing is delayed, the swabs can be stored up to 48 hrs at room temperature

Note:

✓ **If requesting a Throat Culture or patient is less than 18 years old–submit a second swab or an e-swab.**

RAPID TESTING

Rapid Trichomonas

- Collect specimens from the vaginal cavity with a provided sterile rayon swab and place in a clean transfer tube.
- **Do not** use cotton tip or wooden shaft swabs.
- Process the swab as soon as possible; if testing is delayed, specimens may be held at room temperature up to 24 hrs and up to 36 hrs refrigerated or frozen.

Note:

✓ **If requesting a culture, submit an e-swab**

RAPID TESTING

RSV by Direct Antigen Detection

(NOT Performed by PCR Method)

- Collect nasopharyngeal specimens using the provided flocked swab with flexible shaft.
- Kits for rapid viral testing contain **1** ml of viral transport media.
- Place swab in vial containing the viral transport media.
- Refrigerate specimen and transport to laboratory ASAP.

Notes:

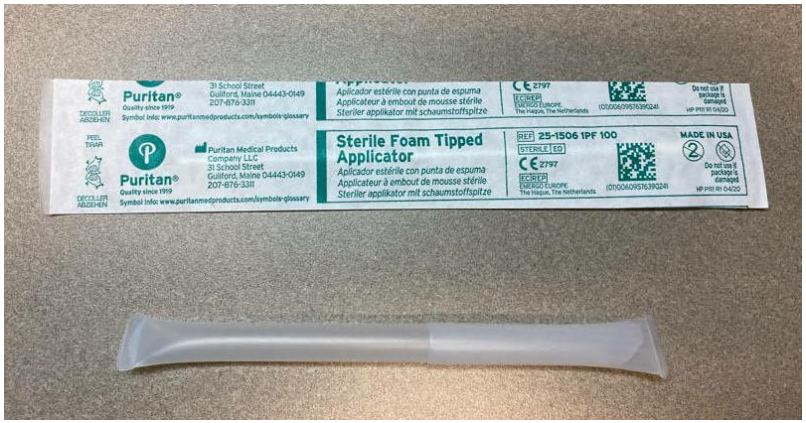
✓ **For testing by PCR, refer to PCR collection instructions.**

*****Testing performed at ancillary sites/off-site locations only*****

RAPID TESTING

Influenza Ag and/or COVID-19 Ag

- Collect nasal specimen using sterile nasal swab.
- Place swab in plastic transport sleeve
- Transport to laboratory ASAP.



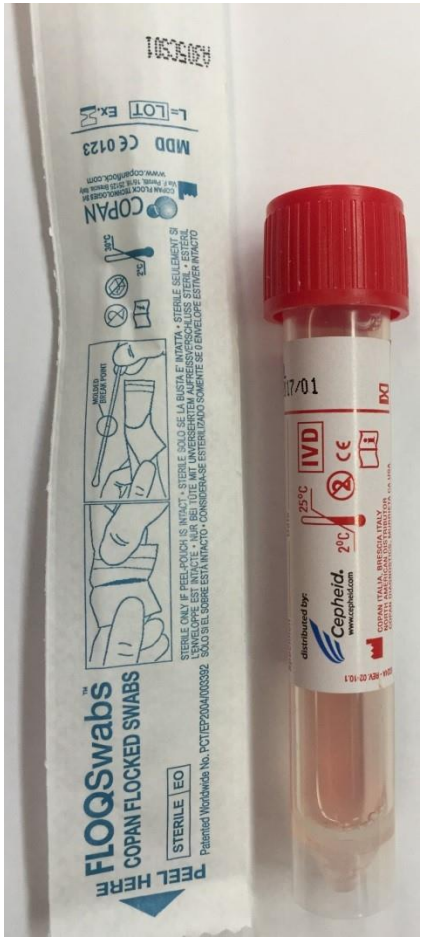
Notes:

✓ **For testing by PCR, refer to PCR collection instructions.**

*****Testing performed at ancillary sites/off-site locations only*****

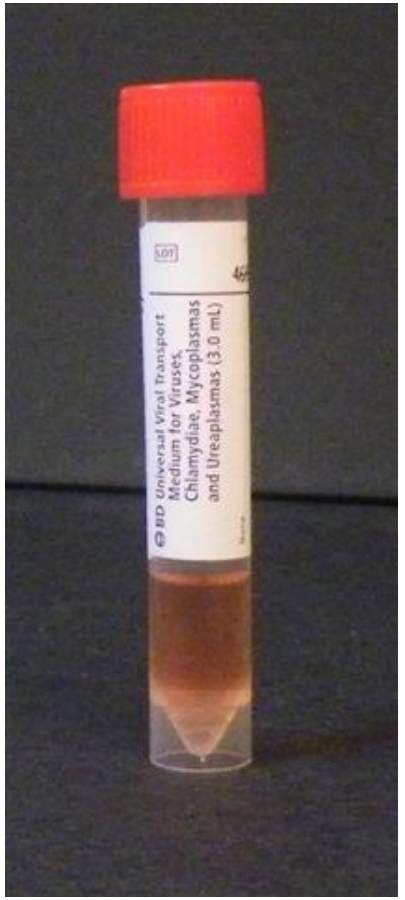
Rapid Influenza and RSV or Covid-19 by PCR Method

- Testing by PCR is available for inpatient and ED patients only.
- Specimens must be collected using the Cepheid collection kit.
- Collect nasopharyngeal specimens using the provided flocked swab with flexible shaft.
- Kits for Cepheid PCR testing contain **3** mL of viral transport media.
- Place swab in vial containing the viral transport media.
- Refrigerate specimen and transport to laboratory ASAP.



VIRAL CULTURE COLLECTION

- Chlamydia Culture
- Pertussis
- Herpes
- Influenza Culture/DNA
- Mycoplasmas
- Ureaplasmas
- Misc. Viral Culture



Notes:

- ✓ **Refrigerate specimen and transport to laboratory ASAP.**
- ✓ **General Viral Transport Media contains 3 ml of fluid. It may be used for rapid antigen testing if 2 ml of fluid is removed.**
- ✓ **Cap color may vary depending on manufacturer.**

Chlamydia / Gonococcus, NAA

Aptima Multitest Swab Specimen Collection Kit.

Vaginal Swab Specimen Collection and Handling: Remove the collection swab from the package. Do not let collection swab touch anything. Do not hold swab below the score line. Carefully insert swab into vagina 2 inches past the introits and gently rotate for 10-30 seconds. Withdraw swab without touching the skin. Unscrew cap, immediately place swab into transport tube keeping the score line at the top of the tube. Break swab shaft at score line, tightly screw top onto swab.

Penile Meatal Swab Specimen Collection and Handling: Remove the collection swab from the package. Do not let collection swab touch anything. Do not hold swab below the score line. Roll the swab at the tip or outside opening of the penis. It is not necessary to insert the swab. Unscrew cap, immediately place swab into transport tube keeping the score line at the top of the tube. Break swab shaft at score line, tightly screw top onto swab.

GC & CHLAMYDIA Cultures

- GC Culture-requires Eswab collection and transport system.

- Viral transport media is required for chlamydia culture.

MICROBIOLOGY CULTURE SPECIMENS

e-SWABS (Regular): Anaerobic & Aerobic

Preferred for aerobic and anaerobic culture types:

- Genital Strep Screen
- Throat
- Body Fluids

MICROBIOLOGY CULTURE SPECIMENS

Wound Culture With/Without Anaerobe to AMC

- Swabs- eSwab

MICROBIOLOGY CULTURE SPECIMENS

Aspirate Culture With/Without Anaerobe to AMC

- Fluid for Anaerobe- Anaerobic Transport Container (ATC)
  - Drainage
  - Puss
  - Abscess
  - Aspirates

Note- When collecting a specimen into an ATC, do not disturb the gel at the bottom of the container. Place the specimen atop the gel without inserting or pushing into the gel

MICROBIOLOGY CULTURE SPECIMENS

e-Swabs (mini tip w/ flexible shaft)

Anaerobic & Aerobic

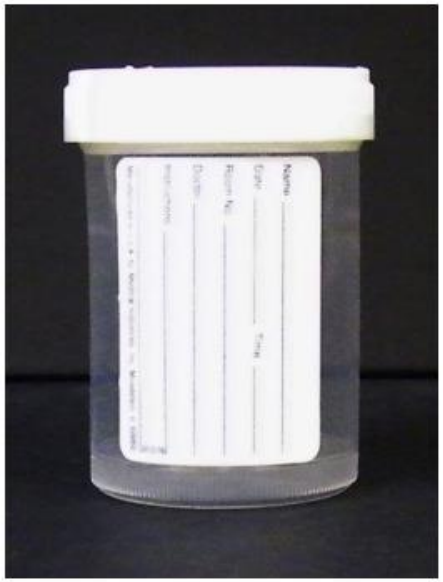
Preferred for Aerobic and Anaerobic culture types:

- Eyes
- Ears
- Nasal passages
- Throat
- Urogenital tracts
- Nasopharynx
- Pediatric Samples

DO NOT USE FOR TISSUE SPECIMENS

MICROBIOLOGY CULTURE SPECIMENS

Tissue Cultures



Sterile cup with enough saline to prevent

drying of the tissue

JOINT FLUID

Test	Container
Cell count -Specify with or without differential.	Lavender Tube
Crystal analysis	Lavender Tube
Lyme by PCR	Sterile Cup
Uric Acid	Sterile Tube

Lavender

Sterile Cup

Sterile Tube

STERILE BODY FLUID CULTURES

Joint - Peritoneal - Pleural - Pericardial - Ascites

- Blood Culture Bottles

Preferred

(refer to Blood Culture Collection)

Submit a sterile cup for Gram Stain

OR

- Sterile Cup

OR

- e-Swab

Least preferred

✓ Use as a transport media

✓ Discard Swab

✓ Do not discard liquid

Blood Bank

BLOOD BANK

Lavender Tube (EDTA)

- Type and Screen
- Type and Crossmatch-see special instructions for requesting outpatient transfusions.

- Direct Coombs

✓ Label specimen with patient name, DOB, date, time, initials of collector.

BLOOD BANK

Instructions for Requesting Outpatient Transfusions

- Contact the hospital Admitting department to schedule outpatient transfusions.
- Patients are normally scheduled for transfusion two days after the specimen is collected for the type and crossmatch. This allows enough time to complete required testing.
- Performing the crossmatch on day of transfusion is discouraged:
  - ✓Additional wait time for patient- 2 hours
  - ✓Risk cancellation if patient has antibodies or product is not available
- Notify blood bank *in advance* for:
  - ✓Plateletpheresis
  - ✓Irradiated products
  - ✓Patients with known antibodies
  - ✓Patients with recent Anti-CD38 administration (daratumumab or isatuximab)

BLOOD BANK

Specimen Labeling for Transfusion Specimens

- Patients who will be receiving transfusions on an outpatient basis

MUST receive an armband at the time of collection with 3 identifiers:

- ✓Patients full name
- ✓Date of Birth
- ✓Hospital Medical Record number or TYPENEX unique identifier

- Patients who are drawn at Saratoga Hospital for their type and crossmatch will receive a hospital armband (preferred method).
- Patients drawn off-site must use the Typenex armband system.

Contact the blood bank for additional information.

NOTE: THE CROSSMATCH SPECIMEN MUST BE RECOLLECTED IF:

- ***The armband is not applied at the time of collection.***
- ***The specimen is not labeled with the required three identifiers***
- ***The armband is removed prior to transfusion.***

BLOOD BANK

TYPENEX Armband

- A Typenex armband is required for all outpatient transfusion patients whose specimens are not collected at Saratoga Hospital.
- The TYPENEX armband includes a unique identifier in an easy to read alphanumeric format.
- Computer generated labels are attached to the Typenex armband. This is preferred over a handwritten label.
- Labels must include the complete name, DOB, date/time and initials of the collector.
- Red "DO NOT REMOVE" tag serves as a reminder to patients not to remove the armband.
- Contact blood bank to obtained detailed instructions for use of the Typenex system.

Antibody Titration

- Three Tall Lavender Tubes (EDTA), and One Red Top (No Gel Barrier)
- For sending serial antibody titrations for maternal alloantibodies known to cause Hemolytic Disease of the Fetus and Newborn.
- Orders can be placed in EPIC using LAB123720.
- Completed reports will be scanned into EPIC.

RHD Genotyping

- Two Tall Lavender Tubes (EDTA)
- For determination of allo-anti-D risk, transfusion, and RhIg indications when a patient is recognized as a Rh (D) variant.
- Orders can be placed in EPIC using LAB123707.
- Completed reports will be scanned into EPIC.

Pathology

ANATOMIC PATHOLOGY SPECIMENS

Submit ALL REQUIRED information on Outpatient CYTOLOGY/ PATHOLOGY Requisitions:

- Patient's full name
- Date of birth
- Address & phone number
- Insurance information
- Providers signature
- Providers name (print)
- Date of service
- Test
- Anatomic location and/or type of tissue
- Clinical Diagnosis or ICD-10 codes
- Copy to information (first & last name)

PATHOLOGY/HISTOLOGY TISSUE SPECIMENS

Specimen Labeling

- Patient's full name
- Date of birth
- Date of service
- Specimen source

Specimen Collection

Tissue biopsy

Placed in 10% formalin container
(supplied by laboratory upon request)

Bone Marrow

Core biopsy and aspirate –B-Plus Fixative (supplied by laboratory upon request) Additional aspirate:

(1) lavender tube (smear preparation)

(2) green top (flow cytometry and cytogenetic testing)

Flow Cytometry (on tissue specimens, FNA, body fluid samples)

- Specimen (tissue, FNA, body fluids) collected fresh (no fixative added) and placed in RPMI transport media. (RPMI supplied by histology laboratory upon request ext. 2581)
- Specimen must be kept refrigerated at all times.
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.
- See Bone Marrow collection instructions for flow cytometry on bone marrow aspirate.

POC Specimens for Karyotyping

- Specimen collected and placed in miscarriage testing send out kit. (miscarriage testing kits supplied by histology laboratory upon request ext. 2581)
- Follow collection instructions that come with the kit and fill out requisition. Must have signature from patient on kit test requisition in order to perform testing.
- Specimen must be kept fresh. Do not add fixative.
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.

Skin Biopsy for Nerve Fiber Density Testing

- Specimen collected and placed in Therapath Nerve Fiber Density Kit (supplied by histology laboratory upon request ext. 2581)
- Specimen is only viable for 24 hours after collection.
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.

Muscle Biopsy

- Specimen collected and placed in Therapath Muscle Biopsy Kit (supplied by histology laboratory upon request ext. 2581)
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.

Liver Biopsy for Copper and/or Iron Testing

- Specimen collected fresh (do not add fixative)
- Place fresh liver biopsy in special metal free container (supplied by histology laboratory upon request ext. 2581)
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.

Breast Tissue

All breast tissue specimens must include:

- Time placed in Formalin fixation.
- Time of excision.

Kidney Biopsy

- Specimen collected fresh (do not add fixative) in sterile container.
- Deliver immediately to Pathology for Direct Glomerular Visualization for specimen adequacy.
- Pertinent clinical history must be provided along with specimen.

Tissue for Intraoperative Consultation (Frozen section)

- Specimen collected fresh (do not add fixative) in sterile container.
- Deliver immediately to Pathology.

- Surgical requisition must specify “Frozen Section” and provide the OR extension for call back.
- Frozen Sections may be scheduled and are indicated on the daily OR schedule.
- For a non-scheduled Frozen Section during normal business hours (7:00 AM - 4:00 PM Monday-Friday) please contact the Pathology Department (ext. 8442, 8445, 8752, or 2581) in advance to alert pathology staff.
- Frozen section requests after 4:00 PM Monday-Friday, Holidays and on weekends will require a 45-minute advance notice to the pathologist on call. The Pathologist on call contact information is located in Saratoga Hospital QGenda.

CYTOLOGY NON-GYN SPECIMENS

Requisition

- Urine Cytology

Voided or catheter much be checked

- Clinical Diagnosis and/or ICD-10 code required

Specimen Labeling

- Patient's full name
- Date of birth
- Date of service
- Specimen source
- Time specimen placed in container

Specimen Collection

Thyroglobulin Lymph Node Aspirate Testing (TG washout)

- Lymph node Fine Needle Aspirate Fluid Collected and placed directly into Lymph Node Aspirate Collection Kit (supplied by histology laboratory upon request ext. 2581).
- Specimen must be kept refrigerated at all times.
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.
- Specimen collected in conjunction with Fine Needle Aspirate cytology specimen.

Thyroid Fine Needle Aspirate:

- For optimal test results please send: 2 air dry slides, 4 slides in 95% alcohol fixative, remaining fluid in cytolyt.
- Send to Cytology Laboratory for processing.

Afirma Testing:

- Specimen collected in conjunction with Thyroid Fine Needle Aspirate cytology specimen.

- Specimen collected in Afirma Collection Kit(supplied by histology laboratory upon request ext. 2581).
- Specimen must be kept refrigerated at all times.
- Call courier for STAT transport to Pathology Lab. Must be received same day as collection.

Parotid Fine Needle Aspirate:

- For optimal test results please send: 2 air dry slides, 4 slides in 95% alcohol fixative, remaining fluid in cytolyt.
- Send to Cytology Laboratory for processing.

Urine Cytology:

- 50% alcohol or Cytolyt fixative

Sputum Cytology:

- 50% alcohol or Cytolyt fixative

Spinal Fluid (CSF):

- NO FIXATIVE ADDED.
- Deliver Immediately to Cytology Lab
- (refrigerate if there is a delay in processing)

Anal Pap with HPV Testing:

- Specimen collected using a Dacron swab; Placed in PreservCyt Solution (THINPREP vial) (supplied by histology laboratory upon request ext. 2581)

Indicate on order for **HPV** testing: High –risk (Cobas) with HPV 16 and 18, Rectal source.

Specimens for possible molecular or predictive marker testing (e.g., PD-L1, EGFR, ALK, NGS, FoundationOneCDx, ER, and HER2neu…) must be collected as follows and cold Ischemic time (time removed from body and time placed into the container) must be provided:

All Other Aspirations:

- Place one pass in a Cytolyt container.
- Remainder of passes in Formalin container (specimens for jar 2 may be collected in a sterile container and 10% formalin added to specimen during collection).

Body Fluids & Lavages:

- Collect Fresh (Monday-Friday prior to 4pm): must be delivered to cytology within 30 minutes of collection!!

Specimens collected after hours (after 4pm Monday-Friday or weekends):

- Place one pass in a Cytolyt container.
- Remainder of passes in Formalin container (specimens for jar 2 may be collected in a sterile container and 10% formalin added to specimen during collection).

Cytology Brushings:

- Place one brush tip in a Cytolyt container.
- Place additional brush tips in Formalin container (specimens for jar 2 may be collected in a sterile container and 10% formalin added to specimen during collection).

Interpace Testing

- Testing performed on pancreatic cyst or duct fluid, ERCP brush heads.
- Specimen collected and placed in Interpace Cyst Fluid Collection Kit. (Supplied by histology laboratory upon request ext. 2581).
- Complete Kit Test Requisition.
- Send all available relevant clinical reports. Send to Cytology Laboratory for processing.

CYTOLOGY GYN (PAP SMEAR) SPECIMENS

Requisition

- Choose Screening or Diagnostic Pap Smear
- Indicate Specimen source (required) (cervical, vaginal and/or endocervical)
- LMP (required)
- Clinical Diagnosis and/or ICD-10 codes (required)

Specimen Labeling

- Patient's full name
- Date of birth
- Date of service

Specimen Collection

● Cytology GYN

Pap smears are collected by provider; Placed in PreservCyt Solution (THINPREP vial)

● HPV

If ordered in addition to PAP Smear specify:

HPVHR Aptima RFX16/18,45

Reflex HPV; High Risk 16/18;45 if ASCUS

Specimen Transport

SPECIMEN TRANSPORT

Prepping Specimens for Transport:

- Process specimens according to their requirements.
- Ensure all aliquot tubes contain the description of their contents (plasma, serum).
- Store specimens until the time of transport according to their requirements.
- Place specimens in a biohazard specimen bag with the lab requisition in the outer sleeve.
- Label the outside of the biohazard specimen bag for all priority and stat specimens.

SPECIMEN TRANSPORT

Transporting Specimens

- All Saratoga Hospital staff transporting laboratory specimens between facilities must participate in courier transport training.
- Laboratory specimens are packaged and transported according to the Code of Federal Regulations 49 CFR 171-173.
- Patient specimens from physicians' offices are considered Category B.
- Combination packaging must be used, consisting of an inner and an outer packaging.
- A courier log must accompany the specimens containing the following.
  - Arrival time at customer.
  - What is dropped off.
  - What is picked up.
  - Number of specimen bags picked up.
- Laboratory staff will verify the number of bags dropped off.

Saratoga Hospital Laboratory Specimen Reference Guide

The information included in the *Specimen Reference Guide* was obtained using current policies and procedures approved by Saratoga Hospital Laboratory. Review of laboratory policies and procedures is available upon request.