Trinity Health

LABORATORY USER AND SPECIMEN COLLECTION MANUAL

TRINITY HEALTH MICHIGAN-OAKLAND

July 2025

Trinity Health Oakland
44405 Woodward Avenue
Pontiac, Michigan 48341
Phone 248-858-3000

The Laboratories of Trinity Health Michigan are CLIA-certified and accredited by the College of American Pathologists.

This manual was reviewed and approved by:

Sherwin Imlay, M.D., Laboratory Director

Sherwin Imlay, M.D., Laboratory Director

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1. GENERAL INFORMATION

Mission, Core Values and Vision

Our Mission
We, Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.

Our Core Values
Reverence
We honor the sacredness and dignity of every person.

Commitment to Those Experiencing Poverty
We stand with and serve those who are experiencing poverty, especially those most vulnerable.

Justice
We foster the right relationships to promote the common good, including sustainability of the Earth.

Stewardship
We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.

Integrity
We are faithful to who we say we are.

Safety
We embrace a culture that prevents harm and nurtures a healing, safe environment for all.

Vision
As a mission-driven regional health ministry, we will become the recognized leader in improving the health of our communities and each person we serve. We will be known as the most trusted health partner for life.

The Laboratories of Trinity Health Michigan strive to provide high quality and efficient medical diagnostic laboratory services to providers and their patients. Our mission is to improve the overall health of our community, while stewarding the health care resources entrusted to us.

LABORATORY LOCATIONS

There are several convenient laboratory locations, with flexible hours to meet our patient's needs. Hours vary by location.

Clarkston Satellite Laboratory
7210 Ortonville Road, Suite 100
Clarkston, MI 48346
Phone: (248) 620-2940
Fax: 248 - 620 – 0468
Hours: Mon through Fri: 7:30 am to 5 pm
Saturday Hours: 8 am to 1pm

Dixie Clarkston (IOP)
6770 Dixie Hwy, Suite 303
Clarkston, MI 48346
Phone: 248-625-5472
Fax: 248-625-0031
Hours: Mon through Fri: 8:30 am to 5 pm
(Closed 1 pm to 2 pm for lunch)

Lake Orion Satellite Laboratory
1375 S. Lapeer Road, Suite 210 (Located within Mercy Medical Group)
Lake Orion, MI 48360
Phone: (248) 814-7310
Fax: 248-814-9978
Hours: Mon through Fri: 8:30 am to 5 pm
(Closed 1 to 2 pm for lunch)

Lexus Satellite Lab
44200 Woodward Ave., Suite 105
Pontiac, MI 48341
Phone: (248) 334-7195
Fax: (248) 332-3747
Hours: Mon through Fri: 8:30 am to 5 pm

Medical Office Building Laboratory
44555 Woodward Avenue, Suite 040
Pontiac, MI 48341
Phone: (248) 858-3258
Fax: (248) - 858 - 3688
Hours: Mon through Fri: 7 am to 5 pm
Saturday Hours: 7:30 am to 11:30 am

Rochester Hills (IOP)
1854 West Auburn Rd., Suite 100A
Rochester Hills, MI 48307
Phone: 248-248-7659
Fax: 248-287-7658
Hours: Mon through Fri: 8:30 am to 5 pm
(Closed 12 p.m. to p.m. for lunch)

Union Lake Satellite Laboratory
2630 Union Lake Road, Suite 200
Commerce Township, MI 48382
Phone: (248) 366-0612
Fax: (248) 360 - 5226
Hours: Mon through Fri: 8 am to 5 pm
(Closed 12:15 to 1:15 pm for lunch)

Waterford Medical Complex
4400 Highland Rd
Waterford, MI 48328
Phone: (248)618-6008
Fax: (248)618-6009
Hours: Mon through Fri: 7:30 am to 5pm

LABORATORY TELEPHONE NUMBERS AND KEY PERSONNEL

PATHOLOGY DEPARTMENT	248-858-3190
Medical Director, Clinical Laboratory	Dr. Sherwin Imlay
Medical Director, Blood Bank	Dr. Sherwin Imlay
Medical Director, Chemistry	Dr. Brian Edelman
Medical Director, Hematology	Dr. Vinushree Swamy
Medical Director, Microbiology	Dr. Rabei Bedeir

MAIN LABORATORY TELEPHONE MAIN LABORATORY FAX		248-858-3600 248-858-6675
Director of Laboratory Services		248-858-3198
Client Service Representatives		248-858-3189
Laboratory Information Systems		248-858-3196
Laboratory Quality Manager		248-858-3449
LABORATORY DEPARTMENTS		
Anatomic Pathology/Cytology		248-858-6883
Anatomic Pathology/Cytology Supervisor		248-858-6231
Blood Bank		248-858-3062
Blood Bank Manager		248-858-6062
Chemistry		248-857-6706
Chemistry and Hematology Manager		248-858-6980
Coagulation and Urinalysis		248-858-6728
Mercy Lab and Phlebotomy Manager		248-858-3961
Microbiology		248-858-6256
Microbiology Manager		248-858-6187
PM Shift Manager		248-858-3296

HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT OF 1996 (HIPAA)

Trinity Health Michigan Laboratories are committed to safeguarding the privacy and confidentiality of our patients' health information (PHI) in accordance with the Health Insurance Portability and Accountability Act (HIPAA) of 1996. Adherence to all privacy, security and electronic transaction guidelines ensures the protection of PHI and contributes to a high standard of care.

2. TEST REQUESTS

ORDERING LABORATORY TESTS

INPATIENT ORDERS

Inpatient orders are placed electronically though the EPIC hospital information system. During epic- downtimes, a manual downtime requisition is used. contact the laboratory to obtain downtime requisitions.

OUTPATIENT ORDERS

Outpatient orders may be placed electronically or may be marked on a laboratory requisition form.

Every laboratory request must include the following:

- Patient's name (first and last)
- Date of birth
- Sex
- Tests requested.
- Date and time of collection
- Source of specimen (if pathology & microbiology sample)
- Requesting physician name.

In addition, outpatient requisitions must include the following:

- Diagnosis code
- Billing information
- Physician/provider signature

Written Authorization: Federal regulations require written authorization for every laboratory test performed within 30 days of a verbal request. You will be asked to forward a signed order via fax or mail for all verbal requests.

Specimen Retention/Test Additions

Most specimens are retained for several days. To add tests or request retesting contact the Laboratory. Some add on test orders may be placed in EPIC. Completion of add-on test or repeat testing will depend on specimen stability and remaining sample volume.

Reflex Testing

Reflex testing occurs when initial test results are positive or outside normal parameters and indicates that a second related test is medically appropriate. Tests for which this reflexive follow-up is done will be noted in this manual. The hospital Medical Executive Committee has approved these tests.

For outpatient orders see APPENDIX B for information on ICD-10 codes, Standing Orders and ABNs.

OUTPATIENT REQUISITIONS See APPENDIX B

General Laboratory Requisition

Cytology/Pathology Requisition

APPROVED INPATIENT STAT LIST

Albumin	Glucose, serum, or CSF	Drug Screen – serum • Ethanol (quantitative) • Acetaminophen (quantitative) • Salicylates (quantitative) • Tricyclics (qualitative) .
Alkaline Phosphatase	Gram Stain (CSF)	
Ammonia	Group B Strep Antigen (CSF)	
Amylase (serum)	HCG – serum and urine (qualitative)	
Bilirubin, Total and Direct	Influenza Ag Testing	• Drug Screen – urine. • Opiates (qualitative) • Cocaine (qualitative) • Benzodiazepine (qualitative) • Amphetamines (qualitative) • Barbiturates (qualitative)
BNP	Iron	
BUN	Lactic Acid	
Calcium	Lithium	
Ca++ (ionized)	Magnesium	
Carbon Monoxide	Methemoglobin	
CBC w/auto differential	Osmolality	
Cell count (CSF)	Partial Thromboplastin Time (PTT)	
CK, Total	Potassium, serum	
Chloride, serum, or CSF	Prothrombin Time (PT)	
Creatinine, serum	RSV	
Digoxin	Salicylates	
Dilantin®	Sodium, serum	
D Dimer	Strep Screen	
Electrolytes	Theophylline	
Ethanol	Troponin I	
FFN- Fetal Fibronectin	Urinalysis	
Fibrinogen	Valproic acid	
	Vancomycin	

APPROVED OUTPATIENT STAT LIST

Albumin	CK	Phenytoin
Alkaline Phosphatase	Chloride	Phosphorus
Amylase	***Comprehensive***	Potassium
Basic Metabolic Panel	Creatinine	Protein, Total
Bilirubin, Total/Direct	GOT (SGOT/AST)	PT
BNP	GPT (SGPT/ALT)	PTT
BUN	HCG serum and urine	***Renal Panel***
Calcium	Lithium	RSV
Carbamazepine (Tegretol)	***Liver Function Panel***	
CBC with Platelet	Magnesium	
CBC with auto differential	Phenobarbital	

3. SPECIMEN COLLECTION

LABELING OF SPECIMENS

To ensure the proper specimen identification it is essential that each tube or container be legibly labeled with the following information

- Patient's first and last name
- Date of birth Date and time of collection
- Initials/NAME of person collecting specimens
- Site and type of specimen (For Microbiology specimens, tissue biopsies, excisions, and cytology)
- Cytology slide specimens require that the site and source be noted on the slide(s) in pencil.
-

The College of American Pathologits (CAP) and the Joint Commision for Accreditation of Hospitals require that **TWO PATIENT IDENTIFIERS BE PRESENT ON ALL SPECiMENS.**

NOTE:Blood Bank Specimens require special labeling. See Appendix A for details.

Patient Identifiers	
Primary	• Patient Name • EPIC Medical Record Number (MRN)
Secondary	• Date of Birth (DOB) • Social Security Number (SSN) • Requisition Tag Number/Non-Epic EMR Requisition Number
UNACCEPTABLE	**CAN NOT BE USED** • Sex • Sources/Sites • Physician Name • Allergies

INPATIENTS:

- All original specimen labeling should happen at bedside using the appropriate PPID protocol. See Appendix A.
- All specimens must have a barcoded EPIC Beaker label upon arrival in the laboratory.
- Retrievable specimens such as blood, urine and stool which are sent with a PLUE (demographics label) or any other form of labels, other than a Beaker label, will be rejected and sent for Redraw/recollection.

- **Exception:** In Epic/Beaker downtime situations, it is acceptable for specimens to be labeled with a patient demographics (PLUE) label. Date/time and collectors initials must be on the label as well.

OUTPATIENTS:

- All specimens collected at the Outpatient draw sites must be sent to the laboratory with a Beaker label.
- **Downtime Exception**
  Handwritten labels are acceptable and must have:
  - ✓ At least two (2) identifiers, one of which must be a **primary identifier.**
  - ✓ Collection date/time
  - ✓ Initials of the collector

TRINITY-AFFILIATED PROVIDERS USING EPIC:

- All specimens must have a barcoded Beaker label upon arrival in the laboratory.

- **Exception:** Specimens may be labeled with:
  - ✓ A patient demographics (PLUE) label,
  - ✓ collection date/time,
  - ✓ collector's initials. **OR**
- Handwritten labels with at least two (2) identifiers, one of which must be a primary identifier, collection date/time and initials of collector

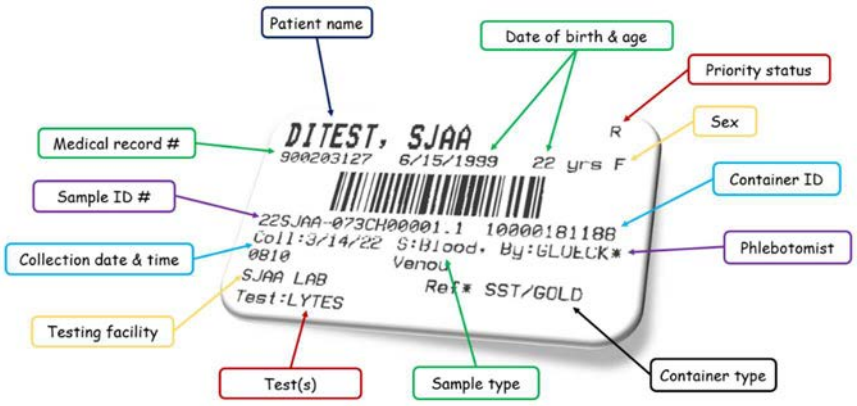
NON-EPIC PROVIDERS;

Handwritten labels and office EMR labels are acceptable if the specimen has:

- ✓ At least two (2) identifiers, one of which must be a **primary** identifier.
- ✓ Collection date and time

These specimens will receive an EPIC Beaker label after registration in the laboratory

EPIC BEAKER LABEL



Trinity Health Michigan Laboratories-Visual Aid

LABELING OF BLOOD SPECIMENS

ACCEPTABLE

Affix Labels:

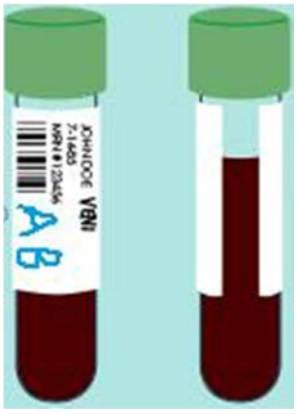
Straight.

Top of the tube, i.e., place label directly under cap.

Put label over existing label on tube. Leave visible window so blood can be seen.

One label/tube.

Collect date and time and collector name/initials must be on label or paperwork.



UNACCEPTABLE

Labeling is important because of automated instruments in the lab.

Improperly labeled tubes may cause result delays

PROCEDURE: SPECIMEN LABELING	REVISED: 12/29/24 CAY	

ORDER OF DRAW

ORDER	TUBE TYPE	INVERT TO MIX	DRAW VOLUME	CLOTTING TIME
1	Blood Culture Vials  Draw aerobic first	8-10 TIMES	10 mL per Vial (0.5 -3 mL PEDS)	NA
2	Citrate Tubes/Lt.Blue 	3-4 TIMES	2.7 mL	NA
3	Serum Separator Tubes/Gold or Tiger 	5 TIMES	5.0 mL	30 min.
4	Serum Tubes/Red 	5TIMES PLASTIC /0 TIMES GLASS	5.0 mL	60 min.
5	Rapid Serum Separator Tube/Orange 	8-10 TIMES	10 mL	5 min.
6	Plasma Separator Tube/Mint 	8-10 TIMES	4.5 mL	NA
7	Heparin Tube/Green 	8-10 TIMES	4.0-6.0 mL	NA
8	EDTA/Lavender OR Pink 	8-10 TIMES	6.0 mL	NA
9	Gray 	8-10 TIMES	4.0 mL	NA
10	Other tubes 	Variable	Variable	Variable

BLOOD SPECIMEN COLLECTION

Venipuncture Equipment

- Gloves
- Tourniquet
- Alcohol or alcohol wipes
- Gauze Pads
- Needle – Straight or Butterfly
- Tube Adapters
- Specimen tubes
- Tape or Coban
- Sharps disposal container

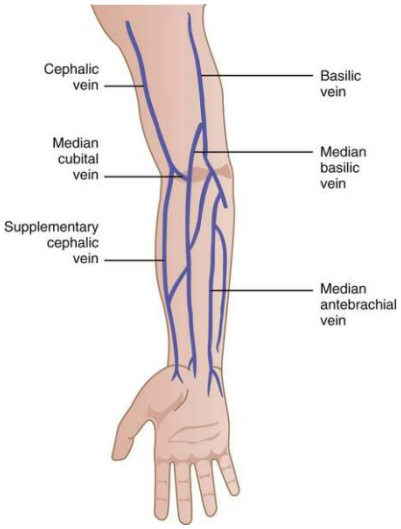
Prepare the Patient for Routine Venipuncture

Step	Action
1.	Verify that your patient has an active blood draw order.
2.	Check EPIC for dietary restrictions. *Note: if the test requires fasting make sure these requirements have been followed.*
3.	Reassure the patient and answer any questions they may have.
4.	Sanitize your hands.
5.	Position the patient. • The patient should be in a sitting or reclined position. • The arm should be in a straight extended position. • NEVER perform venipuncture on a patient who is standing.
6.	Don gloves.
7.	Get all necessary blood collection tubes ready checking each expiration date.
8.	Apply a tourniquet to help locate an appropriate venipuncture site. Tourniquets should be placed 4 inches above the draw site and removed after one minute. For vein selection assistance ask your patient to make a fist.
9.	Attach a sterile needed to the vacutainer holder. • Straight needle 21G or 23G – This method attaches directly to a standard vacutainer holder. • Butterfly needle 21G or 25G – This method of blood collection is useful when drawing infants or difficult veins. The butterfly consists of a needle with wings and up to 12 inches of tubing with attaches to a vacutainer holder.
10.	Cleanse the draw site with alcohol in a circular motion starting in the center and working outside. Allow alcohol to air dry.

Perform the Venipuncture

Step	Action
1.	**With Straight needle** -Grasp the adaptor with your thumb, index, and middle fingers. Pull the protective cap off with firm pressure pulling away from you exposing your needle. Turn the adapter so that the bevel side of the needle is facing up and ensure the needle is free of burrs.
2.	**With Butterfly needle** – Hold both wings together and remove the sheath from the needle with firm pressure pulling away from you exposing the needle. Ensure the needle is free of burrs and that the bevel is facing up.
3.	The vein should be "fixed" or held taut during the puncture. To do this, place your opposite thumb about an inch below where the needle is to enter and press down on the arm while pulling the skin towards you, your fingers should be wrapped around the patient's arm. The needle should be in line with the vein and at a 15-degree angle.
4.	Insert the needle with a single direct puncture. With your free hand place your collection tube in the vacutainer holder and push the tube to the end to activate the vacuum to draw blood.
5.	Tubes should be filled till the vacuum is exhausted. This ensures the correct ratio of anti-coagulants to blood. As each tube is filled successfully, invert each tube accordingly. Do not shake. Vigorous mixing may cause hemolysis. • SST tubes 5 times • Citrate tubes 3-4 times • All other additives tubes 8-10 times
6.	Once good blood flow is achieved, release the tourniquet, and have the patient release their fist.
7.	If more than one specimen tube is needed, exchange tubes by grasping the tube with your fingers and pushing off the adapter and pulling the tube back
8.	Insert the next empty collection tube in the adapter and repeat the process as needed.
9.	Once the last tube is filled and removed for adaptor, place gauze over the venipuncture site and withdraw the needle immediately engaging the safety and dispose in appropriate container.
10.	Label the collection tubes with appropriate labels. This must be done in the presence of the patients
11.	Check the patients' draw site for bleeding. Once bleeding is done wrap the patient with Coban and instruct them to leave it on for minutes.
12.	Process the specimens according to policy.

Vein Selection



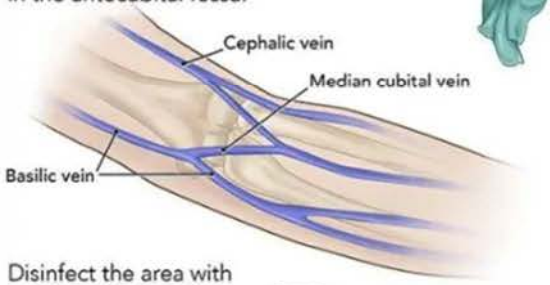
- The diagram below shows the veins most used for venipuncture. These veins are generally large and are close to the skin surface. The median cubital is used most often and is the least painful for the patient. The blood from the cephalic and basilic veins flows slower and tends to roll and bruise easier. Not all veins are suitable for venipuncture, to assist you in your selection:
  - Examine both arms and hands.
  - Have the patient make a fist to make the veins more prominent. Vigorous pumping should be avoided. This may interfere with tests results.
  - Palpate with your index finger.
  - Apply heat to the draw site.
  - Lower the patient's arm over the side of the draw chair.
  - Only keep the tourniquet on for 1 minute.
- Never enter a vein you cannot feel.
- If you have attempted to draw and were unsuccessful only try once more before asking for assistance

Venipuncture

Blood collection procedure guide

Gather all equipment, wash hands, and put on sterile gloves.

Ask the patient to make a fist and select the venipuncture site in the antecubital fossa.



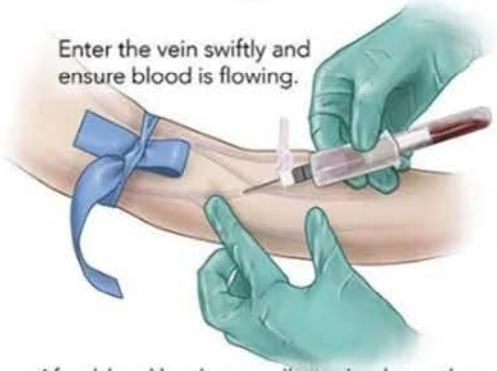
Disinfect the area with a 70% alcohol swab, working from the center outwards.

Apply a tourniquet about 3 to 4 inches above the site.

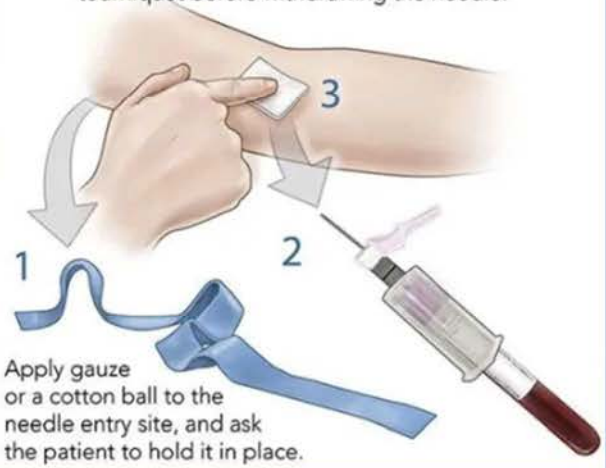
Anchor the selected vein with thumb and index finger.

Position the needle at a 30° angle.

Enter the vein swiftly and ensure blood is flowing.



After blood has been collected, release the tourniquet *before* withdrawing the needle.



Apply gauze or a cotton ball to the needle entry site, and ask the patient to hold it in place.

Remove and immediately invert the tube 8 to 10 times to mix the sample with the tube additives.

Discard the used needle in the sharps container.

Remove gloves and wash hands with soap and water.

Label the tube for transport to the lab, indicating:

- Patient's full name
- Patient ID
- Birth date
- Date of sample.

For more information, visit:
World Health Organization Guidelines on Drawing Blood: Best Practices in Phlebotomy

Trinity Health

Order of Draw

Vacutainer Tube Guide

 BLOOD CULTURE VIALS	 BLUE	 DARK BLUE Serum NO Additive	 RED	 GOLD	 ORANGE	 MINT GREEN	 DARK GREEN	 LAVENDER	 PINK	 DARK BLUE $K_{2\ EDTA}$
Skin antisepsis is critical Draw discard tube, cleaned with alcohol or CHG prior to collection of blood culture vials Draw aerobic vial first Monitor fill volume using label graduations or syringe graduation	Coagulation ANTI-THROMBIN III* (ACTIVITY) DIMER* FACTOR ASSAYS * FIBRINOGEN * APTT* PT LAC* *SEPARATE AND FREEZE PLASMA NOTES: FOR ACCURATE RESULTS, FILL BLUE TOP TUBE TO THE TOP OF THE LABEL. DRAW A RED DISCARD TUBE PRIOR TO COLLECTING THE LUE TUBE.	Trace Elements Aluminum Copper Chromium Selenium Zinc **NOTE: SEPARATE AS SOON AS POSSIBLE**	Select Chemistry Tests & <u>OB Tests</u> MSAFP INT ONE INT TWO QUAD FTS SEQ SCR1 INT ONE NT INT TWO NT	Gen Chemistry See Mint Green List Use this if Mint Green/Dark green with yellow ring or the Dark green plan or with black ring are not available.	Troponin	Gen Chemistry AFP TUMOR MARKER ALBUMIN ALK PHOS AMYLASE ANA BAS PANEL BILIRUBIN BUN BHCG CA 125 CALCIUM CEA CK CMP CRP CHOLESTEROL CHLORIDE CREATININE ELECTROLYTES ESTRADIOL FERRITIN FOLATE GLUCOSE HDL HEPATITIS AB HPR (A,B)	HEPATITIS C (HCVR) 1 SST & 1 LAV IGA,IGG,IGM IRON PROFILE LDH LDLD LPT LIPASE LITHIUM MAGNESIUM MONO POTASSIUM PROTEIN PSA RF SYPTPA SYSTEM RUBELLA SGOT(AST) SGPT(ALT) SODIUM TESTOSTERONE TRIGLYCERIDE TSH FT3 FT4 URIC ACID VITAMIN B12 VITAMIN D, 25H	**Lactic Acid** Specimen good for 30 min on ice, 10 min at room temperature **Homocysteine** **Parathyroid Hormone, Intact**	Hematology & BNP HEMOGLOBIN A1C RBC FOLATE SED RATE SICKLE CELL F5L VITAMIN B6 DELIVER TO LAB WITHIN 1 HR. VITAMIN B1 DELIVER TO LAB WITHIN 1 HR. **AMMONIA** TRANSPORT ON ICE AND DELIVER WITHIN 3 HOURS 2 4mL or 1 6mL can be used in place of pink top for Blood Bank	Blood Bank ABO Type & Rh Antibody Screen Direct Coombs DAT Antepartim RHIG Postpartum RHIG 2 ml minimum EPIC: PPID Compliant, Collected, No Override Downtime: B4 band Date, time and collectors first initial and full last name must be on the specimen's demographic label.	<u>Trace Elements</u> Arsenic Cadmium Lead Manganese Mercury RBC Zinc RBC Copper RBC Magnesium

BD Helping all people live healthy lives

BD Microtainer™ Tubes with Microgard™ Closure

Tube Guide and Order of Draw

Catalog #/Closure Color	Additive	Mix by Inverting	Laboratory Use
 365974 Lavender	K_2 EDTA	10x	For whole blood hematology determinations. Tube inversions prevent clotting.
 365965 Green	Lithium Heparin	10x	For plasma determinations in chemistry. Tube inversions prevent clotting.
 365985 Mint Green 365987 Mint Green	Lithium Heparin and Gel for plasma separation	10x	For plasma determinations in chemistry. Tube inversions prevent clotting.
 365992 Grey	$NaFl/Na_2$ EDTA	10x	For glucose determinations. Tube inversions ensure proper mixing of additive and blood.
 365967 Gold 365978 Gold	Clot Activator and Gel for serum separation	5x	For serum determinations in chemistry.
 365963 Red	No additive	0x	For serum determinations in chemistry, serology and blood banking.

365976
Tube Extender

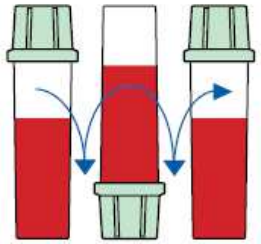
BD Vacutainer Systems
Preanalytical Solutions
1 Becton Drive
Franklin Lakes, NJ 07417

BD Vacutainer Technical Services: 1.800.631.0174
BD Customer Service: 1.888.237.2762
www.bd.com/vacutainer

Processing of Tubes

Why

- Most tubes contain an additive or clot activator that needs to be mixed with the blood sample.
- Tubes with anticoagulants such as EDTA need to be mixed to ensure the specimen does not clot.



How

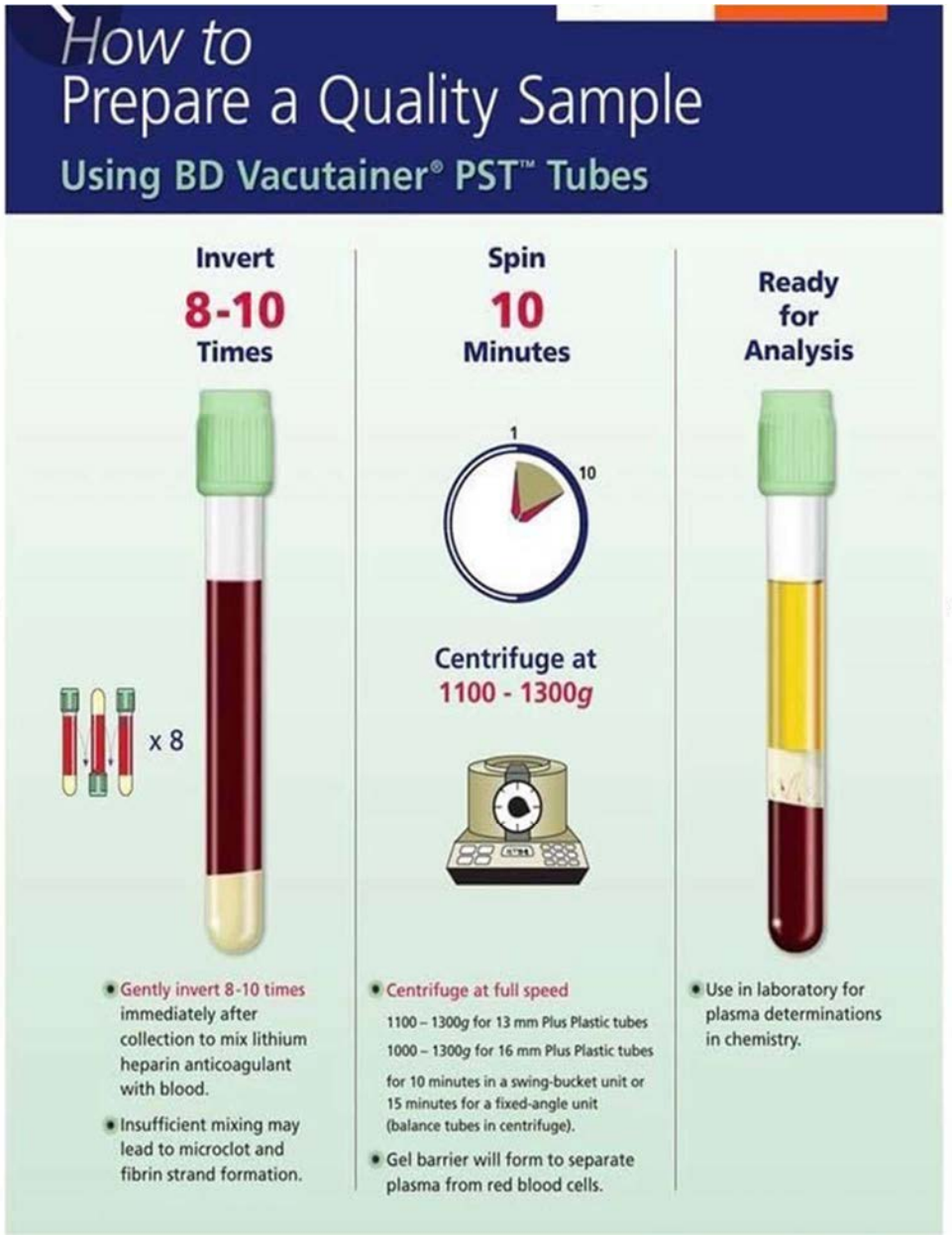
- Holding tube upright, gently invert 180° and back.
- Repeat movement as prescribed for each tube.

When

- Immediately after drawing.

Consequences if not mixed

- Tubes with anticoagulants will clot.
- BD SST™ tubes may not clot completely.
- Specimen will often need to be recollected.

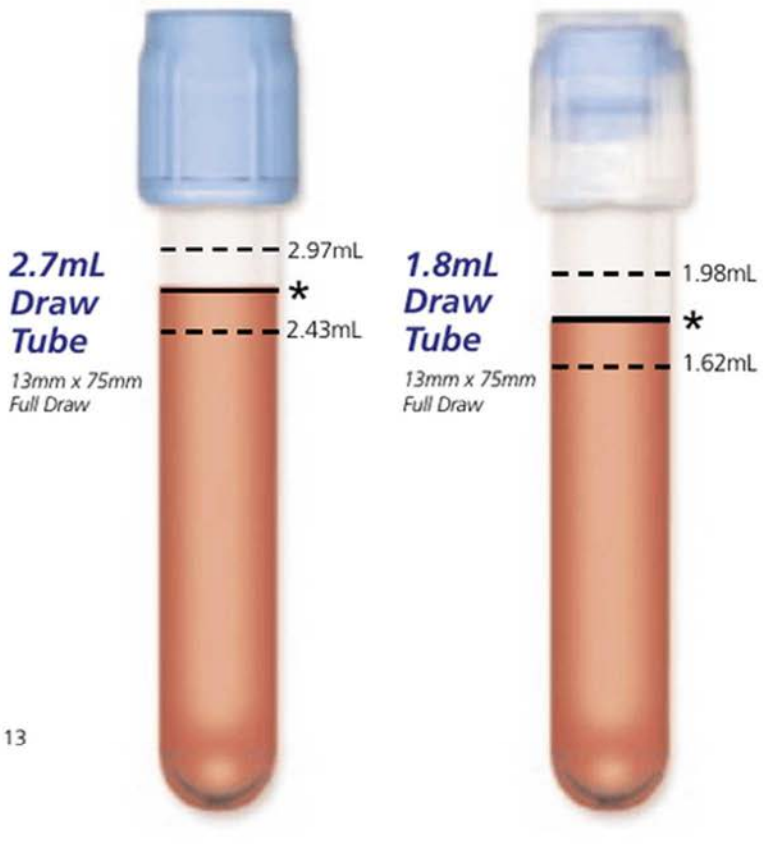


BD Vacutainer™ Plus Plastic Citrate Tube

BD Vacutainer™ Plus Plastic Citrate Tube Draw Volume Guide

Ensure proper draw volume by holding tube up to this guide.

Sufficient volume achieved if blood drawn falls within the dashed minimum and maximum fill lines illustrated on the tubes pictured to the right.



Note: The quantity of blood drawn into evacuated tubes varies with altitude, ambient temperature, barometric pressure, tube age, venous pressure and filling technique.

* ±10% draw and fill accuracy.
NCCLS Dec. '96, Doc. H1-A4, Vol. 16, No. 13

Minimum Amounts for Chemistry & Hematology Testing

CBC or CBCD only:
1mL

Chemistry 1-3 tests:
1mL

CBCD & Sed Rate or
CBCD & HBA1C:
2mL

BD Indispensable to human health

BD Vacutainer™ Blood Transfer Device

Methods of Collection:

If blood is collected into the syringe without using a needle:

- Disconnect the blood-filled syringe from the I.V. port or needleless system used for venous access.

If blood is collected into the syringe using a safety-engineered hypodermic needle (BD Safety-Glide™ Needle or BD Eclipse™ Needle):

- Draw the blood into the syringe using your institution's procedure.
- Ensure that the needle's safety mechanism has been properly activated.
- Disconnect the blood-filled syringe from the activated safety-engineered needle.

If blood is collected into the syringe using safety-engineered winged collection set (BD Safety-Lok™ Blood Collection Set or BD Saf-T E-Z™ Set):

- Draw the blood into the syringe using your institution's procedure.
- Ensure that the wingset's safety mechanism has been properly activated.
- Disconnect the blood-filled syringe from the activated safety-engineered wingset.

Appropriate Transfer:

1. Peel off paper backing.

2. Insert syringe tip into hub of device. Rotate syringe clockwise to secure syringe to hub.

3. With the syringe held facing down, center BD Vacutainer™ tube or BD Bactec™ blood culture bottle and push forward into holder of BD Vacutainer™ Blood Transfer Device. Do not depress the plunger of the syringe.

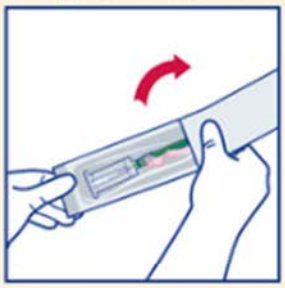
4. After removing the last BD Vacutainer™ tube or BD Bactec™ blood culture bottle, discard entire assembly (BD Vacutainer™ Blood Transfer Device and syringe) in an approved sharps collector in accordance with applicable regulations and institutional policy.

BD Helping all people live healthy lives

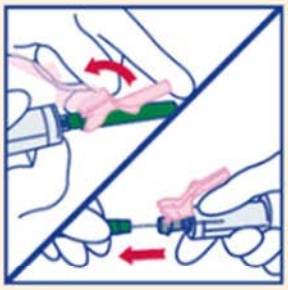
BD Vacutainer® Eclipse™ Blood Collection Needle

with Pre-Attached Holder

Usage of Product



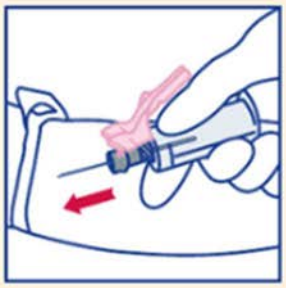
1. Ready to use right out of the package, with no assembly required!



2a. Gently position pink safety shield straight back toward the holder.

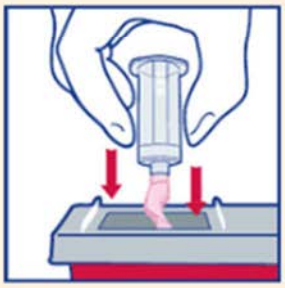
2b. Twist and pull colored needle cap straight off.

Note: The needle bevel is always in position for venipuncture when the pink safety shield is facing up. **DO NOT** twist or rotate the pink safety shield.



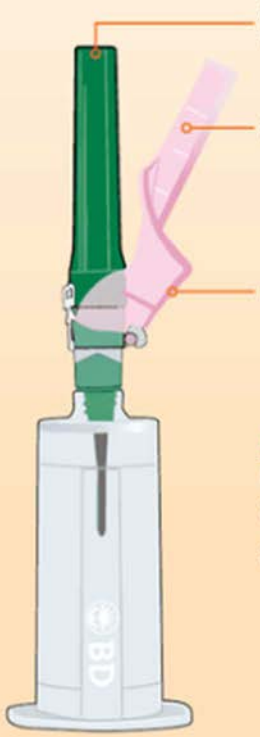
3. Perform venipuncture according to your facility's established procedures.

4. Immediately after removing needle from vein, position thumb squarely on pink safety shield thumb pad and push pink safety shield forward to cover needle. An audible click may be heard. Lock shield into place and inspect. **DO NOT** attempt to engage safety shield by pressing against a hard surface.



5. Discard immediately into an approved sharps disposal container. **DO NOT** remove needle from holder. Dispose of the needle and holder as one unit into nearest sharps container. **DO NOT REUSE.**

BD Vacutainer® Eclipse Blood Collection Needle with Pre-Attached Holder



Ordering Information

Reference Numbers:

368650	21 G x 1 ¼"	
368651	22 G x 1 ¼"	

FOR SINGLE USE ONLY

BD Global Technical Services: 1.800.631.0174
BD Customer Service: 1.888.237.2762
www.bd.com/vacutainer

BD Vacutainer® Safety-Lok™ Blood Collection Set

Instructions for Activation: One-Handed Technique

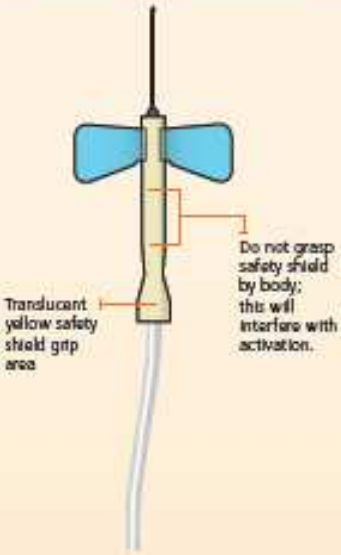
1. Upon completion of collection, apply light pressure to site using three fingers as shown. Remove the Safety-Lok Blood Collection Set by...

2. ...grasping the translucent yellow safety shield grip area with the thumb and index finger while at the same time grasping the tubing securely with the other 3 fingers.

3. Advance translucent yellow safety shield forward with thumb and index finger until the needle is completely covered and a click is heard, indicating that the safety shield is locked in place over the needle tip.

4. Once the safety shield is completely advanced, immediately dispose of the device in an approved sharps container.

BD Vacutainer® Safety-Lok™ Blood Collection Set



Instructions for Activation: Two-Handed Technique

1. Upon completion of collection, apply light pressure to site using three fingers as shown.

2. Withdraw blood collection set by grasping the translucent yellow safety shield grip area with the thumb and index finger.

3. With the opposite hand, grasp tubing between thumb and index finger.

4. Push the yellow shield forward until the needle is completely covered. An audible click may be heard when the safety shield is locked into place. Discard immediately into an approved sharps container.

CAUTION:
Handle all biologic samples and blood collection "sharps" (lancets, needles, luer adapters, and blood collection sets) in accordance with the policies and procedures of your facility. Obtain appropriate medical attention in the event of any exposure to biologic samples (e.g., through a puncture injury) since samples may transmit viral hepatitis, HIV (AIDS), or other infectious diseases. Utilize any safety-engineered feature if the blood collection device provides one. Discard all blood collection "sharps" into biohazard containers approved for their disposal.

For more information about this and other specimen collection products, please contact us at:

BD Global Technical Services:
1.800.631.0174

vacutainer_techservices@bd.com

BD Vacutainer® *UltraTouch*™ Push Button Blood Collection Set

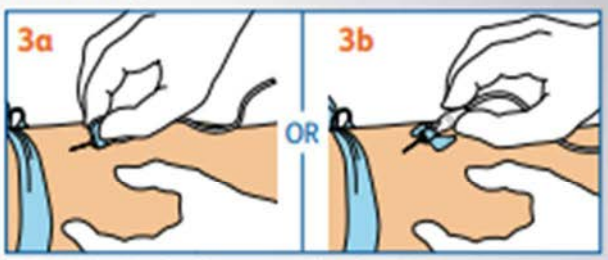
An unparalleled experience for patients and clinicians

General use and disposal (See package insert for detailed directions for use.)

Peel back packaging at arrow so that the back end of the wing set is exposed. With thumb and middle finger, grasp the rear barrel of the wingset and remove from package. Be careful to avoid activating the button.

CAUTION - Never use a blood collection set without a holder or syringe attached.

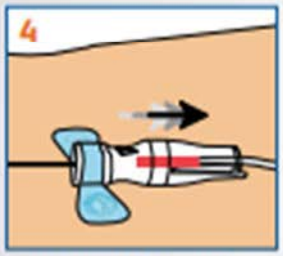
Assemble to BD Vacutainer® One Use Holder or BD Syringe.



With thumb and index finger, grasp the wings together and access vein using standard needle insertion technique.

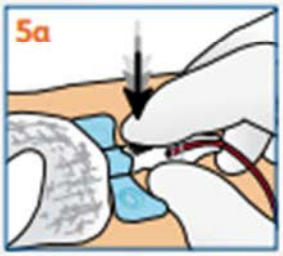
If preferred by your institution, the body of the device can be held, instead of the wings, during insertion.

The device is designed to be activated while the needle is still in the patient's vein.



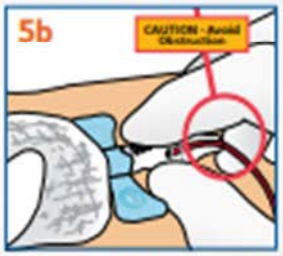
Proper access to the vein will be indicated by the presence of "flash" directly behind and below the button.

Collect the blood specimen according to your facility's procedure.



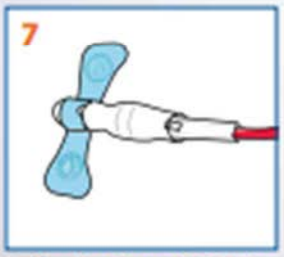
Place your gauze pad on the venipuncture site. Allow gauze pad to cover nose of front barrel. Following the collection procedure, and (**while the needle is still in the vein**), grasp the body with the thumb and middle finger.

Activate the button with the tip of the index finger. The needle will automatically retract from the venipuncture site, confirmed by an audible "click."



To ensure complete and immediate needle retraction, keep fingers and hands away from the place where back end of the blood collection set meets the tubing.

Apply pressure to the venipuncture site in accordance with your facility's protocol.



Confirm that the needle is in the shielded position prior to disposal.

Discard the entire shielded blood collection set and holder into an approved sharps disposal container.

Choose smart, safe and satisfying.
Choose a smaller gauge with superior flow.

- **Reduces needlestick injuries up to 88%.**
- **Minimizes patient discomfort.**
- **Improves venipuncture.**

Blood Collection Instructions for Use with the BD BACTEC™ Blood Culture System

WARNING

"Standard Precautions" should be followed in handling all items contaminated with blood or other body fluids.

Prior to use, (1) inquire if patient has a history of adverse reaction to iodine (see Step 1 below); and (2) inspect all vials and discard any vials showing evidence of contamination, damage or deterioration.

STEP 1. SKIN PREPARATION

- Cleanse the venipuncture site with 70% isopropyl alcohol.
- Starting at the middle of the site, swab concentrically with a 1 to 10% povidone-iodine solution or chlorhexidine-gluconate.

NOTE: Chlorhexidine-gluconate is recommended for infants two months and older and patients with iodine sensitivity.

- Allow the site to air dry.

NOTE: If the venipuncture proves difficult and the vein must be touched again to draw blood, the site should be cleansed again.

STEP 2. PREPARE BACTEC™ VIALS

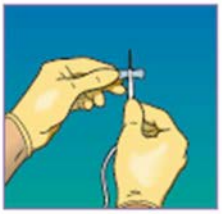
- Mark BACTEC culture vial label(s) at desired fill level.
- Remove flip-off caps from BACTEC culture vials(s).
- Wipe tops of vials with single alcohol swab and allow to dry.

STEP 3. BLOOD COLLECTION OPTIONS

BD Vacutainer® Safety-Lok™ and BD Vacutainer® Push Button Blood Collection Sets – COLLECTION

- Peel apart package and remove blood collection set.
- Thread the Luer end of tubing set into Vacutainer holder.
- Remove sheath covering needle at wings.
- Perform venipuncture by holding wings as shown. DO NOT hold by grasping the yellow safety shield.
- Select aerobic bottle first. Hold the bottle upright.
- Push and hold Vacutainer holder over top of vial to puncture septum.
- Collect blood to desired fill level on vial. Monitor to ensure proper blood flow and fill level.
- Remove holder from vial. Immediately push and hold holder onto second vial.
- Collect blood to desired fill level on second vial. Remove holder from vial.

NOTE: If more samples are required, additional tubes may be drawn at this time using the Vacutainer holder.



OPTION A:

BD Vacutainer® Safety-Lok™ Blood Collection Set – REMOVAL

- When final vial or tube is filled, withdraw the needle by grasping the wings and gently pulling. DO NOT withdraw by holding the yellow safety shield. Cover the puncture site with a sterile gauze pad and apply pressure.
- To activate the safety shield, grasp either wing with one hand and grip the yellow safety base with other hand. Slide the wings back into the rear of the safety shield until a snap is felt to ensure that the needle is retracted completely and locked in place.

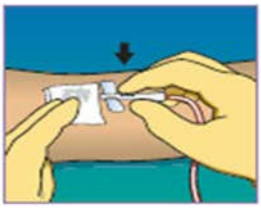
(continued on reverse)

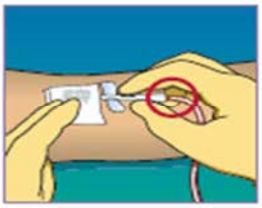
BD

Helping all people live healthy lives

Blood Collection Instructions for Use with the BD BACTEC™ Blood Culture System *(continued)*

STEP 3. BLOOD COLLECTION OPTIONS *(continued from front)*





OPTION B:

BD Vacutainer® Push Button Blood Collection Set – REMOVAL

- The device is designed to be activated while the needle is still in the patient's vein. Place your gauze pad or cotton ball on the venipuncture site. Allow gauze pad or cotton ball to cover nose of front barrel. Following the collection procedure, and while the needle is still in the vein, grasp the body with the thumb and middle finger. Activate the button with the tip of the index finger.
- To ensure complete and immediate retraction of device, make sure to keep fingers and hands away from the end of the blood collection set during retraction. Do not impede retraction.

OPTION C:

Needle and Syringe Collection

- Using aseptic technique, attach needle to syringe.
- A 20 mL syringe with a 21 gauge needle is recommended but other sizes may be used.
- Insert the needle into prepared vein and collect 10 to 20 mL blood in syringe.
- Withdraw needle after collecting 10-20 mL blood in syringe.
- Distribute blood equally into aerobic and anaerobic vials.

STEP 4. PATIENT SKIN CARE

- Place the gauze pad over the site, continuing mild pressure. Check bleeding has ceased, and apply an adhesive or gauze bandage over the site.
- After all specimens have been collected, remove remaining skin antiseptic from collection site using a sterile alcohol swab.

STEP 5. LABEL VIALS

- Label all vials. DO NOT write on or place any labels over the BACTEC vial barcode, as this is used by the instrument to process the specimen.

STEP 6. DISPOSAL

- Dispose of the blood collection devices in the nearest sharps container according to regulations. Dispose of all other used materials in appropriate container and wash hands.

STEP 7. ADDITIONAL CULTURES MAY BE COLLECTED IN A SIMILAR WAY

- A different venipuncture site should be used for each culture set collected.

BD BACTEC™ Blood Culture Media

Cat No.	Description	Quantity	Unit
442265	BACTEC™ Lytic/10 Anaerobic/F Medium	50	Shelf Pack
442003	BACTEC™ Myco/F Lytic Medium	25	Shelf Pack
442288	BACTEC™ Myco/F Lytic Medium	50	Shelf Pack
442194	BACTEC™ PEDS PLUS™/F Medium	50	Shelf Pack
442192	BACTEC™ Plus Aerobic/F Medium	50	Shelf Pack
442193	BACTEC™ Plus Anaerobic/F Medium	50	Shelf Pack
442191	BACTEC™ Standard Anaerobic/F Medium	50	Shelf Pack
442260	BACTEC™ Standard/10 Aerobic/F Medium	50	Shelf Pack
442000	Blood Culture Procedural Tray 1, Adult	20	Shelf Pack
442001	Blood Culture Procedural Tray 2, Adult	20	Shelf Pack
442002	Blood Culture Procedural Tray 3, PEDS	20	Shelf Pack

To order any of the above BACTEC Blood Culture Media, please contact your local BD sales representative. To order BD Vacutainer™ products, please call 1.888.237.2762 or visit www.bd.com/vacutainer.

BD

BD Diagnostics
7 Loveton Circle
Sparks, MD 21152-0999
800.638.8663
www.bd.com/ds

BLOOD BANK SPECIMEN COLLECTION

Positive identification of the patient is the most crucial step in preventing hemolytic transfusion reactions. All specimens that are not labeled properly will be rejected. This stringent policy is the standard of care for transfusion safety.

Inpatient: See Appendix A for Blood Bank Labeling and Positive Patient ID.

Outpatient:

1. Tube MUST include:
2. Patient's full first and last name
3. Patient's DOB
4. A 3*rd* unique identifier (ex: Driver's License #, SSN, MRN, Chart #, etc.)
5. Phlebotomist's first and last name

URINE SPECIMEN COLLECTION

Procedure for Clean Catch Midstream Samples

Equipment needed: BD Vacutainer Complete Urine Kit
1 Castile Soap Towelette Wipe
Permanent marking pen.
Gauze pads

Step	Action
1	Ask patient to identify themselves using two patient identifiers. Ensure information matches the requisition.
2	Write the patient's full first and last name on a sterile urine specimen cup using a permanent marker, or if available, print a beaker label and apply to the collection container.
3	**Instructions For Males**: • Wash hands with soap and dry them. • Open the urine container and avoid touching the inside. • If uncircumcised, withdraw foreskin. • Using the povidone-iodine wipe, clean the urethral opening and the area around it. • Wipe the area dry with the gauze pad. • Begin urinating and void the first portion into the toilet. • Fill the urine container with the mid-portion. • Void the rest of the urine into the toilet. • Place the specimen in the receiving area or hand the specimen to the lab tech for processing.
4	**Instructions For Females**: • Wash hands with soap and dry them. • Open the urine container and avoid touching the inside. • Sit on the toilet and spread genital lips with one hand. • Using the Towelette wipe provided, clean the urethral opening and the area around it working from front to back. • Wipe the area dry with the gauze pad. • Begin urinating and void the first portion into the toilet. • Fill the urine container with the mid-portion. • Void the rest of the urine into the toilet. Place the specimen in the receiving area or hand the specimen to the lab tech for processing.
5	Aliquot the urine sample for the sterile cup as follows using the transfer straw: • Urinalysis: transfer urine into a tiger top tube. • Urine Chemistries: transfer urine into a clear or white top with no additive tube. • Urine Culture: transfer urine into a gray top tube. • Urine drug screen: submit the urine in a white cap urine cup only.
6	Label the aliquot tube(s) with a Beaker test label. If a Beaker label is not available, label the tube(s) with the following using a permanent marker: • Patient's full first and last name plus: • DOB or MRN • Phlebotomist's initials • Date and time of Collection.

Procedure for Timed Urine Collections

Equipment needed: One orange 3000 mL urine container containing a preservative, if necessary

Utilize the EPIC procedure catalog if clarification is needed.

Plastic toilet hat (for females only)

Permanent marker

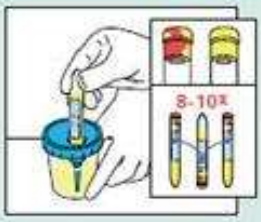
Step	Action
1	Ask patient to identify themselves using two patient identifiers. Ensure information matches requisition.
2	Label the urine container, using the Urine Collection sticker or a permanent marker, with: • Patients full first and last name • DOB or MRN • Patient's height and weight • Test(s) to be ordered.
3	Instruct the patient to place the start and stop date and times on label that is affixed to the container: COLLECTION START DATE _____ TIME_____ COLLECTION FINISH DATE_____ TIME_____
4	Provide the patient with a written instruction sheet for reference.
5	**2-hour, 6-hour or 12-hour COLLECTION:** • On day one of the urine collection, discard the first morning urine and note that date and time on the container. This is the start time for the collection. • Collect the patient's next voiding and add as soon as possible to the container. • Add all subsequent voiding's to the container until you have collected all urine samples for the requested timeframe.
6	**24-hour COLLECTION:** • On day one of the urine collection, discard the first morning urine and note that date and time on the container. This is the start time for the collection. • Collect the patient's next voiding and add as soon as possible to the container. • The last sample collected should be the first morning urine voided the following morning and note that date and time on the container. This is the finish time for the collection. For example: COLLECTION START DATE 6/02/2023 TIME 8:00am COLLECTION FINISH DATE 6/03/2023 TIME 8:00am **Instructions for females only:** • Place the collection hat on the toilet, put the seat down and urinate into the hat. • Carefully, pour the urine from the plastic hat into the large orange container.
7	Unless the physician indicates otherwise, instruct the patient to maintain the usual amount of liquid intake but to avoid alcoholic beverages.
8	Keep the container refrigerated during the duration of the collection.

Processing Urine Samples with BD Vacutainer™ Collection Products

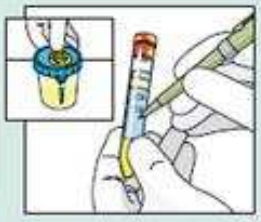
UA Preservative or Plain UA Tube and Culture & Sensitivity (C&S) Preservative Tube

1. Peel back protective sticker to expose rubber-covered cannula.

2. • Push C&S Preservative Tube (gray top) into the integrated transfer port.
   • Hold in position until flow stops.
   • Remove tube.
   • Shake tube vigorously.



3. • Push UA Preservative Tube (cherry red/yellow top) or plain UA Tube (yellow top) into integrated transfer port.
   • Hold in position until flow stops.
   • Remove tube.
   • Invert UA Preservative Tube 8-10 times to mix the sample.

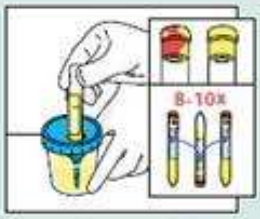


4. • Place protective sticker back over the integrated transfer port.
   • Label both filled tubes with patient's name, the date/time of specimen collection and any other data required by your institution.

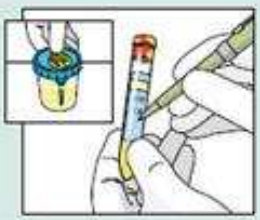
5. • Remove lid from cup and dispose in a sharps collector.
   • Dispose of urine according to your facility's policy.
   • Dispose of collection cup as a biohazard.

UA Preservative or Plain UA Tube Only

1. Peel back protective sticker to expose rubber-covered cannula.



2. • Push UA Preservative Tube (cherry red/yellow top) or plain UA Tube (yellow top) into integrated transfer port.
   • Hold in position until flow stops.
   • Remove tube.
   • Invert UA Preservative Tube 8-10 times to mix the sample.

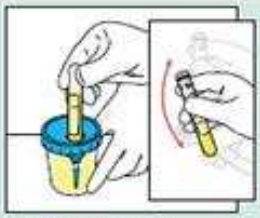


3. • Place protective sticker back over the integrated transfer port.
   • Label filled tube with patient's name, the date/time of specimen collection and any other data required by your institution.

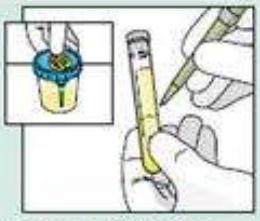
5. • Remove lid from cup and dispose in a sharps collector.
   • Dispose of urine according to your facility's policy.
   • Dispose of collection cup as a biohazard.

C&S Preservative Tube Only

1. Peel back protective sticker to expose rubber-covered cannula.



2. • Push C&S Preservative Tube (gray top) into the integrated transfer port.
   • Hold in position until flow stops.
   • Remove tube.
   • Shake tube vigorously.



3. • Place protective sticker back over the integrated transfer port.
   • Label filled tube with patient's name, the date/time of specimen collection and any other data required by your institution.

5. • Remove lid from cup and dispose in a sharps collector.
   • Dispose of urine according to your facility's policy.
   • Dispose of collection cup as a biohazard.

CYTOLOGY & HISTOLOGY/AP SPECIMEN COLLECTION

GYNECOLOGIC SPECIMENS

(PAP SMEARS) Specimens may be collected from the vagina, cervix, and/or endocervix.

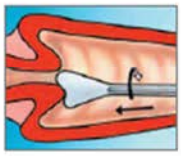
ThinPrep: Do not use lubricant. Rinse collection device (spatula, brush, or "broom") as quickly as possible. For brush: use a swirling motion while pressing the brush against the side of the collection vial. For broom: press the broom against the bottom of the vial 10 times, forcing the bristles apart, then swirl the broom vigorously in the collection vial. Discard the collection device. Tighten the ThinPrep vial cap so that the torque line on the cap passes the torque line on the vial.

High Risk HPV/Molecular Studies:
High risk HPV and/or Gonorrhea/Chlamydia detection studies may be requested on specimens collected in Thin Prep vials.

CLINICAL DATA: Must include any pertinent clinical data and/or patient history on the requisition. Include date of last menstrual period and source.

ThinPrep® Pap Test™ Quick Reference Guide

Endocervical Brush/Spatula Protocol

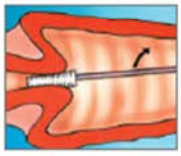


Obtain…

…an adequate sampling from the ectocervix using a plastic spatula. The use of lubricants is not recommended during Pap testing[1].

Rinse…

…the spatula as quickly as possible into the PreservCyt® Solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.



Obtain…

…an adequate sampling from the endocervix using an endocervical brush device. Insert the brush into the cervix until only the bottom-most fibers are exposed. Slowly rotate ¼ or ½ turn in one direction. DO NOT OVER-ROTATE.

Rinse…

…the brush as quickly as possible in the PreservCyt Solution by rotating the device in the solution 10 times while pushing against the PreservCyt vial wall. Swirl the brush vigorously to further release material. Discard the brush.

Tighten…

…the cap so that the torque line on the cap passes the torque line on the vial.

Record…

…the patient's name and ID number on the vial.

…the patient information and medical history on the cytology requisition form.

Place…

…the vial and requisition in a specimen bag for transport to the laboratory.

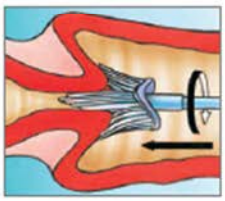
ThinPrep® Like no other.

1. Papanicolaou Technique Approved Guidelines (NCCLS Document GP15-A)

www.thinprep.com

ThinPrep® Pap Test™ Quick Reference Guide

Broom-Like Device Protocol



Obtain…

…an adequate sampling from the cervix using a broom-like device. The use of lubricants is not recommended during Pap testing[1]. Insert the central bristles of the broom into the endocervical canal deep enough to allow the shorter bristles to fully contact the ectocervix. Push gently, and rotate the broom in a clockwise direction five times.

Rinse…

…the broom as quickly as possible into the PreservCyt® Solution vial by pushing the broom into the bottom of the vial 10 times, forcing the bristles apart. As a final step, swirl the broom vigorously to further release material. Discard the collection device.

Tighten…

…the cap so that the torque line on the cap passes the torque line on the vial.

Record…

…the patient's name and ID number on the vial.

…the patient information and medical history on the cytology requisition form.

Place…

…the vial and requisition in a specimen bag for transport to the laboratory.

ThinPrep® Like no other.

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NON GYN CYTOLOGY

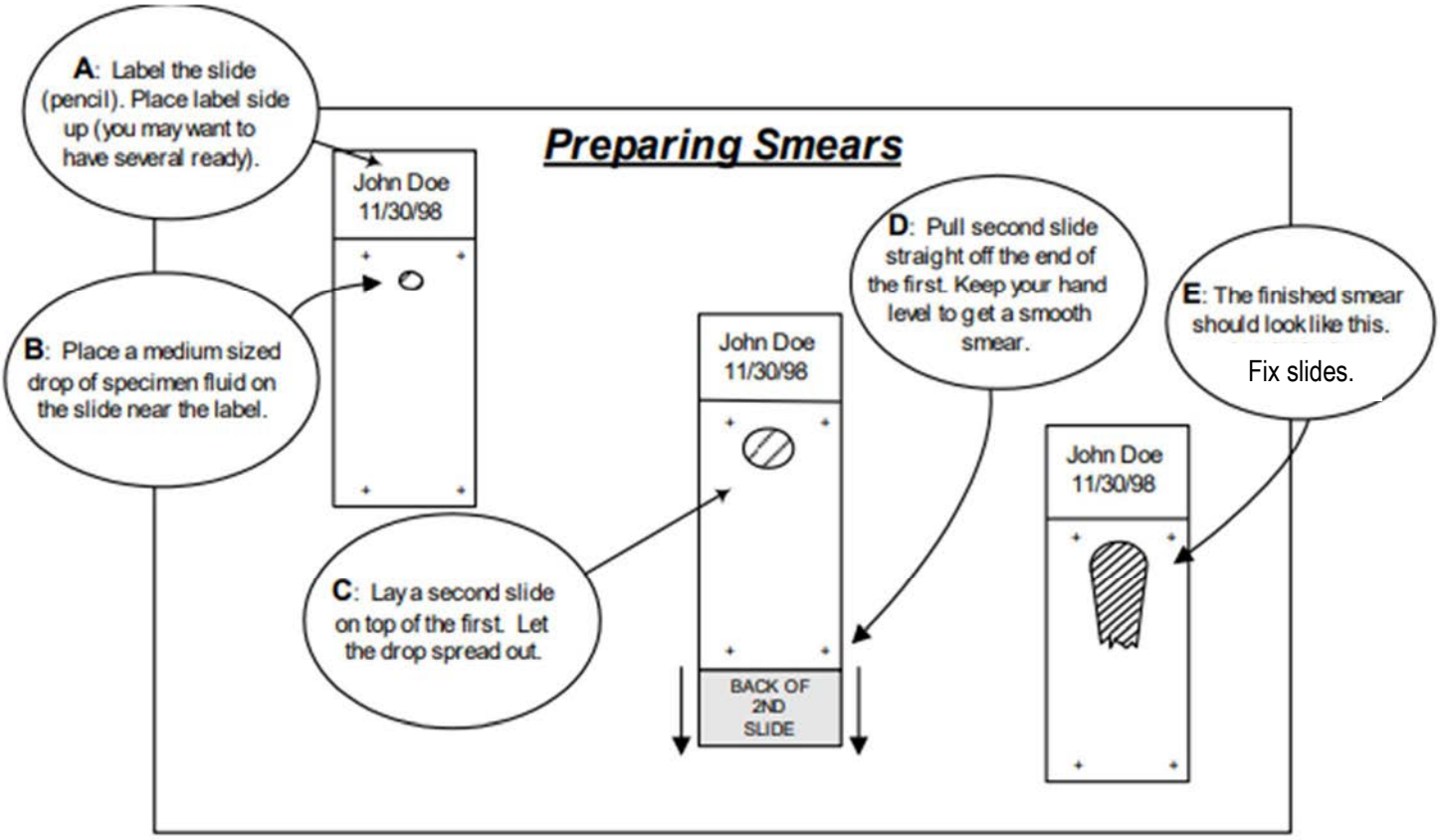
• Each specimen must be submitted in a separate, clearly labeled, leak proof container. Place lid tightly on specimen container.
• If submitting in fixative, shake gently to ensure uniform fixation of cells.
• If submitting fresh send to laboratory immediately, refrigerate if delayed.
• Label the specimen container/slides with the patient's name, source of specimen, and one other identifier (date of birth, SSN, MRN, etc.). When labeling slides use a graphite (lead) pencil only; ink will dissolve during processing.
• Place the specimen container in a biohazard bag, insert completed requisition into outside pouch and send to laboratory.

SPECIMEN TYPE	SPECIMEN REQUIREMENTS	ADDITIONAL INFORMATION
Body Fluid *pleural (thoracic), peritoneal (ascites), and pericardial*	Submit fresh without fixative. Greater than 50 ml is recommended.	
Brushing *(bronchial, gastroesophageal, small bowel, tracheal, ureteral*	Submit brush in a labeled CytoLyt fixative container or submit fresh in saline. Alternatively, direct smears may be submitted. Direct smears must be spray fixed. Label all prepared slides with patient's name, date of birth, and source (using lead pencil).	**Two slides are required if special fungal stains (e.g., GMS) are requested.**
Breast Secretion *(nipple discharge)*	Direct smears must be spray fixed. Alternatively, place material directly into a CytoLyt fixative container. Indicate left or right breast on each slide/container. Label all prepared slides with patient's name, date of birth, and source (using lead pencil).	
Fine Needle Aspirate *(FNA , needle biopsy)*	Submit material directly into a container of CytoLyT fixative. In addition, direct smears may be submitted. Direct smears must be spray fixed. Label all prepared slides with patient's name, date of birth, and source (using lead pencil).	Lymph node FNA's for flow cytometry: Obtain sterile tube with prefilled RPMI from Anatomic Pathology. Submit specimen directly into the RPMI tube. Label the tube with patient's name, date of birth, and source.
Spinal fluid (cerebrospinal fluid, CSF) **.**	Submit fresh with a minimum of 1ml. Deliver immediately to cytology.	**Note: A separate specimen without fixative must be submitted to microbiology dept. if culture is requested**
Sputum	Submit fresh with a minimum of 1ml (3ml to 10ml is preferred). Deep cough specimens only. No saliva.	The patient should be instructed to clear the throat of postnasal secretions and to gargle and rinse their mouth to remove food residue.

SPECIMEN TYPE	SPECIMEN REQUIREMENTS	ADDITIONAL INFORMATION
Tzanck smear (lip, leg *skin vesicle)*	Direct smears must be spray fixed. Alternatively place material directly into a CytoLyt vial. Label all prepared slides with patient's name and date of birth (using lead pencil). Indicate source, e.g.,	
Urine Specify source: *Voided Catheterized*	Submit fresh specimen in a labeled cytology container. 50mL to 100 mL is preferred	**24-HOUR collections are NOT acceptable due to degeneration.** Have the patient void and discard 1st early morning urine
Washing (bronchial, bladder, gastrointestinal tract, pelvic, synovial fluid, cyst) .	Submit fresh specimen in a labeled cytology container	**Note: A separate specimen without fixative must be submitted to microbiology dept. if culture is requested**

Trinity Health Michigan Laboratories-Visual Aid

PREPARATION OF A CYTOLOGY SMEAR



Fix Slides with Spray Fixative: Brushings, FNA, Breast Nipple Discharge/Secretions, Tzanck Smears

PROCEDURE: CYTOLOGY SMEARS	REVISED: 01/21//25 CAY	

TISSUES FOR PATHOLOGY EXAM

Introduction
Proper specimen handling requires that specimen integrity be maintained by proper preservative (where required) and that the sample identification and patient identification be clearly labeled on the specimen container and test requisition. The information in this manual will assist with that objective.

General Information
All histology specimens received by the laboratory must be accompanied by printed epic orders or a completed surgical pathology requisition that includes the following information:

-Patients full, legal name
-Physician (s) name
-Patients date of birth
-Patients gender
-Date and time of specimen collection
-Source of specimen (anatomical site)
-Brief clinical history-or ICD-10 code
    -Time specimen was removed from body and put in formalin for breast specimens only “Cold Ischemia time”
    -For off-site locations patient’s insurance or billing information
    -Electronic or handwritten signature of ordering provider

Confirm correct patient sample labeling by comparing all the information listed on the specimen container with the information written on the requisition and information verbalized by the patient or responsible party (if minor or unable to do so).
The physician and nursing staff should verbally verify the source, nature, number of specimens and appropriate container/preservative prior to the delivery of the specimen to the laboratory.
Ensure that any tissue specimens received in the laboratory after 3:30 pm on weekdays, as well as anytime on the weekends or holidays, that the tissue specimen either has the appropriate amount of formalin to completely submerge the specimen or if no formalin that it is refrigerated that way the specimen is properly preserved to prevent cellular degeneration.
Testing will be done on the next routine processing day.

Labeling Specimens Containers
Specimen containers should not be pre-labeled. They should be labeled immediately after the specimen is placed into the container. Specimens must have at least two patient identifiers or they will be rejected. Specimen containers must be labeled with patient identification on the bottle not the cap. Place multiple specimens in their own individual container.

Specimen containers must be labeled with the following:

1. Patient’s complete name
2. Medical record number or other unique patient identifier (i.e., date of birth)

3. Specimen anatomic site
4. Date specimen was collected

Properly identify the surgical specimen(s) by listing what the specimen is (mass, tumor, bone, etc.) and where (anatomical site) it was obtained. Include whether it is from a Right or Left anatomical site. A review of the completeness and accuracy of the requisition in comparison with the labeling of the specimen container and patient should occur prior to leaving the procedure area.

Specimen Requirements
Most specimens should be preserved and delivered to the lab in 10% Neutral Buffered Formalin to avoid cellular degeneration (see special specimen collection list below for specimens that should not be placed in formalin). Formalin and a variety of specimen containers are available through supply chain. At minimum, the amount of formalin should be a (10:1) ratio of formalin to specimen. Submerging the specimen completely in formalin is preferred.

Release of Pathology Specimens to Patients
Pathology specimens may be released to a patient after all medical testing ordered has been completed, the case has been signed out by the pathologist and the required retention period has been completed. Refer to consent “Release of Specimen/blood” policy for details and proper forms.

Special Specimen Collection

Procedure	Order Test	Specimen Handling	Additional Instructions
Fetal and Products of Conception Chromosome Studies	Chromosome analysis (LAB4276) and tissue exam (LAB1126) if needed	Submit fresh in a sterile container without fixative. Indicate “chromosome analysis” on the container.	Send to the lab ASAP. Use separate containers for chromosome analysis and tissue exam.
Frozen Tissue Sections	Pathology/Tissue exam (LAB1126)	Send immediately to Histology, fresh without formalin.	Mark specimen for “Frozen section.”
Kidney Biopsy	Pathology tissue exam (LAB1126)	Follow kit instructions; use Michels Fixative and 10% Formalin.	Obtain Arkana Laboratories Renal Biopsy kit. Complete and deliver paperwork to histology.
Muscle Biopsy	Pathology tissue exam (LAB1126)	Fresh in a sterile container with saline-moistened gauze.	Submit immediately to histology. Fill out “Muscle biopsy send out form.”
Nerve Biopsy	Pathology tissue exam (LAB1126)	Dry sterile container.	Immediate delivery to histology.
Immunofluorescence Skin Biopsy	N/A	Collect in Michel’s fixative (green top) and send to lab.	Michels fixative is stored in the lab.

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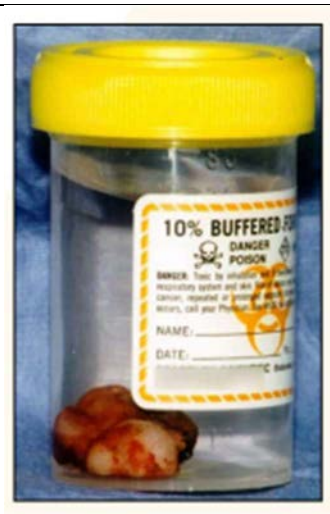
Submit specimen in 10% formalin or fresh sample with Cyto/Histo Request Form that details pertinent medical history. The site or source of collection must be indicated including the right or left (“R” or “L”). Please include the pre-operative diagnosis and any other pertinent information. Fresh samples should be transported to lab via hospital or commercial carrier

Trinity Health Michigan Laboratories-Visual Aid

FORMALIN FIXATION OF TISSUE SAMPLES



Add 10% formalin to achieve a 1:10 to 1:20 ratio of tissue to formalin by volume

- The container should be large enough to accommodate the specimen and filled with enough formalin to completely cover the specimen.
- . The specimen should be able to float freely in the container for adequate fixation.
- Make sure the lid is tightly closed to prevent leaks.
- ***DO NOT ADD 10% formalin*** to cytology, flow, cytogenetics, and frozen section Specimens or cultures
- Label sample, indicate source and right or left as applicable.
- 10% Formalin is hazardous. Avoid contact. Clean up spills according to procedure.

CAUTION: Contains **FORMALDEHYDE.** Toxic by inhalation and if swallowed. Irritating to the eyes, respiratory system and skin. May cause sensitization by inhalation or skin contact. Risk of serious damage to eyes. Potential cancer hazard. Repeated or prolonged exposure increases the risk.

PROCEDURE: FORMALIN OF TISSUE	REVISED: 12/29/24 CAY	

MICROBIOLOGY SPECIMEN COLLECTION

MICROBIOLOGY COLLECTION BY SPECIMEN TYPE

Detailed collection instructions for common microbiology specimens

Specimen Source	Collection Instructions	Comments
Body Fluids (Abdominal, Ascites, Bile, Joint, Pericardial, Peritoneal, Pleural, Synovial)	1. Disinfect overlying skin with alcohol and tincture of iodine or CHG. 2. Obtain specimen via percutaneous needle aspiration or surgery. 3. Transport immediately to Lab. 4. Always submit as much fluid as possible; never submit a swab immersed in fluid.	
Bordetella Pertussis Detection by PCR	1. Seat the patient comfortably and tilt the head back. 2. Insert the wire swab through the nares until resistance is met due to contact with the nasopharynx. 3. Rotate the swab gently and allow the swab to maintain contact with the nasopharynx for 20-30 seconds. 4. Place swab immediately in an approved transport medium.	Due to the fastidious nature of the organism and the low sensitivity of both culture and DFA, diagnosis by PCR is the current method of choice.
Bronchoalveolar lavage, Bronchial Brush or Wash or Tracheal aspirate	1. Place aspirate or washing in a sputum trap. 2. Place brush in a sterile container with 1 ml or less of non-bacteriostatic saline.	
Catheter, I.V.	1. Cleanse the skin around the catheter site with alcohol or alcohol + tincture of iodine. 2. Aseptically remove and clip the 5 cm /2-inch distal tip of the catheter directly into a sterile container. 3. Transport immediately to the Laboratory to prevent drying.	Acceptable IV catheters for semiquantitative culture (Maki method): Central, CVP, Hickman, Broviac, Peripheral, Arterial, Umbilical, Hyperalimentation, Swan-Ganz.
Chlamydia Culture	1. Collect with a Dacron culture swab. 2. Place directly into Viral/Chlamydia Transport Medium.	Any source is acceptable but generally reserved for specific specimen types (Buboes, Lung, Sputum, Nasopharynx) and for treating sexual abuse cases (throat, rectal, vaginal specimens). This information cannot be used as evidence in court since no chain of command is used.
Chlamydia trachomatis – Amplified Probe	See instructions for collection of Neisseria gonorrhoeae Amplified Probe.	
Cerebrospinal Fluid	Physician collected specimens. Collect by Lumbar Puncture. Tube 2 is preferred for culture.	
Ear – Inner	1. Tympanocentesis reserved for complicated/recurrent/chronic persistent otitis media. 2. INTACT EAR DRUM: Clean ear canal with soap solution. Collect fluid via syringe aspiration technique.	

Specimen Source	Collection Instructions	Comments
	3. RUPTURED EAR DRUM: Collect fluid on flexible-shaft swab via an auditory-speculum. 4. Place fluid/aspirate in a sterile container. 5. Transport to Laboratory.	
Ear – Outer	1. Remove any debris/crust from the ear canal with a moistened swab. 2. Obtain a sample by firmly rotating a swab in the outer canal.	For otitis externa, vigorous swabbing is required since surface swabbing may miss streptococcal cellulitis.
Eye – Conjunctiva	Sample both eyes with separate swabs (pre-moistened with sterile saline) by rolling over each conjunctiva.	Mini-tip swabs are available from Microbiology.
Eye – Corneal Scrapings	1. Instill 1-2 drops of local anesthetic. 2. Using a sterile spatula scrape ulcers/lesions and inoculate directly onto media obtained to Laboratory. (NOTE: Media should be at room temperature.) 3. If desired, apply the remaining material to 2 clean glass slides for staining.	It is generally recommended that swabs for conjunctival culture be taken prior to anesthetic application, whereas corneal scrapings are obtained after.
Feces - Clostridium difficile Toxin	Transfer 5 ml of soft liquid stool directly into a clean, dry container. (Soft stool: defined as assuming the shape of its container.)	Patients should be passing 5 stools/24hr, the consistency of which should be liquid/soft. Formed stools will not be tested.
Feces – Stool Culture/Ova and Parasite Exam/Rotavirus	1. Pass stool into a clean container. Place a piece of plastic wrap under the toilet seat to aid in collection in adults. 2. For pediatric patients, do not collect from diapers. Turning diaper “inside out” may aid in collection. 3. For test requiring multiple specimens, do not collect multiples on same day. Generally, multiple samples should be spaced at least 1 day apart.	Avoid contamination with urine or water from the toilet as this may prevent recovery. For parasite examinations, patient should not have ingested barium bismuth or other antidiarrheal preparations for at least 7 days.
Feces - Rectal Swab	1. Carefully insert a swab ~1 inch beyond the anal sphincter. 2. Gently rotate the swab to sample the anal crypts.	Reserved for detecting GC, Shigella, HSV, and anal carriage of S. pyogenes OR for patients unable to pass a stool specimen.
Genital - Female – Cervix	1. Visualize the cervix using a speculum without lubricant. 2. Remove mucus/secretions from the cervix with swab and discard. 3. Firmly yet gently, sample the endocervical canal with a sterile swab.	
Genital - Female – Vagina	1. Wipe away any excessive amounts of secretion or discharge. 2. Obtain secretions from the mucosal membrane of the vaginal vault with a sterile swab. 3. If a smear is also requested, obtain it using a second swab.	For intrauterine devices (IUD's), place the entire device into a sterile container and submit at room temperature. 1-2 ml non-bacteriostatic saline may be added for moisture.
Genital - Male – Prostate	1. Cleanse the glans with soap & water. 2. Massage prostate through rectum. 3. Collect fluid on a sterile swab or in a sterile tube.	
Genital - Male – Urethra	Insert a urethrogenital swab 2-4 cm into the urethral lumen, rotate while maintaining for 2 seconds.	Mini-tip swab available from Microbiology.
Genital Lesion - Male or Female	1. Using a sterile gauze pad cleanse the lesion with sterile saline and remove its surface. 2. Allow a transudate to accumulate.	

Specimen Source	Collection Instructions	Comments
	3. While pressing the base of the lesion, firmly sample with a sterile swab.	
Hair (Dermatophytosis)	1. Using forceps collect at least 10-12 affected hairs with the base of the hair shaft remaining intact. 2. Place it in a clean tube or container.	Scalp scales, if present, should be collected along with scrapings of active borders of lesions. Note any antifungal therapy taken recently.
Lymph Node	1. Collect aseptically and avoid indigenous microbiota. 2. Do not immerse in saline or other fluid or wrap in gauze.	
Nail – Dermatophytosis	1. Wipe the nail with 70% alcohol using gauze (not cotton). 2. Clip away a generous portion of the affected area and collect material/debris from UNDER the nail. 3. Place it in a clean container.	
Nasal	1. Insert a swab, premoistened with sterile saline, approx. 2 cm into the nares. 2. Rotate the swab against the nasal mucosal.	Anterior nose cultures are reserved for detecting staphylococcal and streptococcal carriers, or for nasal lesions.
Nasopharynx	1. Gently insert a Dacron swab into the posterior nasopharynx via the nose. 2. Rotate slowly for 5-20 seconds to absorb secretions; remove and inoculate media at bedside or place swab in transport medium.	
Neisseria gonorrhoeae - Amplified Probe	1. Use unisex swab for urethral cervical collection. 2. For genital specimens, instruct patient not to urinate 1 hour prior to sample. 3. Urethral specimen: Insert swab 2-3 cm into the urethra. Gently rotate the swab ensuring contact with all urethral surfaces for 3-5 seconds. Withdraw swab and break into transport tube.	PLEASE NOTE: FOR THE TEST TO BE VALID ONLY THE SWABS PROVIDED IN THE COLLECTION KIT MAY BE USED! Probes for both GC & Chlamydia can be performed from a single swab. This is the method of choice for sexually transmitted cases, but NOT SEXUAL ABUSE CASES. SEXUAL ABUSE CASES MUST BE COLLECTED & TESTED BY THE MICHIGAN STATE POLICE. MICROBIOLOGY RESULTS ARE TO BE USED FOR TREATMENT PURPOSES ONLY. THEY ARE NOT PERMISSIBLE AS EVIDENCE IN COURT!
Respiratory (Lower) BAL/BBW Tracheal Aspirate	1. Place aspirate/wash into a sputum trap. 2. Place brush in a sterile container with saline.	
Respiratory (Lower) Sputum, Expectorated	1. Collect Specimen under the DIRECT supervision of a nurse or physician. 2. Have patient rinse/gargle with water. 3. Instruct patient to cough DEEPLY to produce a lower respiratory specimen (not post-nasal fluid) into a sterile container.	
Respiratory (Lower) Sputum, Induced	1. Have patient rinse his mouth with water after brushing gums/tongue to minimize contaminating specimen with food	

Specimen Source	Collection Instructions	Comments
	particles, mouthwash, or oral drugs which may inhibit the growth of bacteria. 2. With the aid of a nebulizer, have the patient inhale ~25 mLs of 3-10% sterile saline. 3. Avoid sputum contamination with nebulizer reservoir water. Saprophytic mycobacteria in tap water may produce false-positive AFB culture or smear results. 4. Collect the induced sputum into a sterile container.	
Skin – Dermatophytosis	1. Cleanse the affected area with 70% alcohol. 2. Gently scrape the surface of the skin at the active margin of the lesion. Do not draw blood. 3. Place sample in clean container.	
Throat for Group A Strep	1. Using a tongue depressor, depress the tongue. 2. Vigorously sample the posterior pharynx, tonsils/pillars and areas of purulence, exudation, or ulceration. 3. Microbiology recommends using a dual swab during collection, so that one swab may be used for a "RAPID STREP SCREEN" and the second swab is available for a culture.	Order throat culture and note R/O yeast for Candidiasis/Thrush. Notify Microbiology if C. diphtheriae, N. gonorrhoeae, Vincent's disease or Arcanobacterium are suspected.
Tissue	1. Submit in a sterile container. 2. For small samples,	
Urine - Indwelling Catheter/Foley	1. Disinfect the catheter collection port with 70% alcohol. 2. Aseptically, collect 5-10 mLs of urine using a needle/syringe. 3. Transfer to a sterile tube/container/Gray Vacutainer.	Urine samples collected directly from indwelling catheter bags are NOT acceptable.
Urine - Midstream (Female)	1. Thoroughly cleanse the urethral area with soap & water. 2. Rinse with wet gauze pads/towelettes. 3. While holding the labia apart, begin voiding. 4. After several milliliters have passed, collect a midstream portion without stopping the flow of urine.	
Urine - Midstream (Male)	1. Cleanse the glans with soap & water. 2. Rinse with wet gauze pads/towelettes. 3. While holding the foreskin retracted, begin voiding. 4. After several milliliters have passed, collect a midstream portion without stopping the flow of urine.	
Urine – Straight Catheter	1. Thoroughly cleanse the urethral area with soap & water. 2. Rinse with wet gauze pads. 3. Aseptically, insert a catheter into the bladder. 4. After allowing ~15 mLs to pass, collect urine to be submitted in a sterile container.	
Wound/Abscess (Closed)	1. Remove surface exudate by wiping with sterile saline. 2. Allow surface to dry. 3. Using a needle with a Luer-tip syringe, aspirate abscess wall material. 4. Remove needle using a protective device; then recap syringe. 5. Label syringe and place in a sealable, leak-proof-specimen transport bag. 6. Alternatively, the aspirated material may be transferred to a sterile container. Also inoculate Anaerobic transport if anaerobic infection suspected. 7. Deliver PROMPTLY to Microbiology.	

Specimen Source	Collection Instructions	Comments
Wound/Abscess (Open)	1. Remove surface exudate by wiping with sterile saline. 2. Allow surface to dry. 3. If possible, aspirate. 4. Alternatively, pass a swab(s) deep into the lesion and firmly sample the lesion's advancing edge. For mycobacterial culture, 2 swabs are preferred.	

Trinity Health Oakland Microbiology Department Order List

Culture and Gram Stains

Orderable procedure	Test mnemonic	Lab code	Sources accepted	Container	Other information
Culture AFB with Smear		LAB5552	Sputum, Bronchial wash or lavage, urine, stool, blood, tissue, pleural fluid, body fluids	Sterile Container	Swabs not acceptable
Culture anaerobic	AC	LAB233	Deep wounds, tissue, body fluids, etc.	E-swabs, fluids in syringes (needle removed), tissue/bone/fluids in sterile container	An aerobic culture must also be ordered. NOT acceptable: Cervix, vaginal, placenta, mouth, skin (wounds ok), sputum, stool, Throat, Urine (unless surgical), medical devices.
Culture blood	BC	LAB462	Blood	Bactec Blood culture bottles (Aerobic and Anaerobic=1 set)	Normally 2 sets are ordered.
Culture body fluid	BFC	LAB269	Sterile body fluids. Peritoneal, pericardial, pleural, bile and synovial, etc.	Fluids in syringes (needle removed) or sterile container.	>5 ml is recommended for optimal culture sensitivity. Other sources (like an abscess) should be ordered as a wound culture.
Culture body fluid with gram stain	BFCAD	LAB6915	Sterile body fluids. Peritoneal, pericardial, pleural, bile and synovial, etc.	Fluids in syringes (needle removed) or sterile container.	>5 ml is recommended for optimal culture sensitivity. Other sources (like an abscess) should be ordered as a wound culture.
Culture bone	BCAD	LAB5010	Bone	Sterile container	
Culture IV catheter	CATHCL	LAB224	Segment of a catheter or catheter tip	Sterile container	NOT acceptable: Foley catheters
Culture CSF with gram stain	CSFC	LAB7998	Spinal fluid from lumbar puncture or shunt	Sterile container	>2ml is recommended for optimal culture sensitivity. (5ml if possible)
Culture ear	EAC	LAB942	Ear	Culture swab, e-swab	
Culture ear with gram stain	EACAD	LAB7197	Ear	Culture swab, e-swab	
Culture eye	EYC	LAB943	Eye	Culture swab, e-swab	
Culture eye with gram stain	EYCAD	LAB6922	Eye	Culture swab, e-swab	
Culture fungal, blood	Fungal BC	LAB242	Blood	Bactec Blood culture bottles Myco F Lytic	The fungal blood culture bottles incubate for 30 days If yeast is requested, aerobic and anaerobic bottles will be incubated for 14 days.
Culture fungus, Other	FNC	LAB7198	Wounds, tissue, body fluids, etc.	Sterile container, culture swab, e-swab etc.	Hair, skin, and nail sources should be ordered using the test below.
Culture fungus, skin hair or nails	FC	LAB4413	Hair, skin, nails	Sterile container containing pieces	

Orderable procedure	Test mnemonic	Lab code	Sources accepted	Container	Other information
				of hair, skin, or nails	
Culture genital	GCA	LAB465	Any genital source	Culture swab, e-swab	We recommend only ordering a full genital culture if our screening tests below do not cover needed organisms. "Cervix" is Epic's default source. Please change to the correct source (e.g., vaginal) when ordering.
Culture genital with gram stain	GCAD	LAB6925	Any genital source	Culture swab, e-swab	We recommend only ordering a full genital culture if our screening tests below do not cover needed organisms. For vaginal sources, the gram stain will be read to indicate if the patient has bacterial vaginosis.
Culture gonorrhea	GCSCR	LAB235	Any source	Culture swab, e-swab	Do not refrigerate swab
Culture group B strep	GBSSC	LAB4002	Vaginal/Rectal	Culture swab	Prenatal screening culture
Culture MRSA	MRSA SC	LAB234	Nasal	Culture swab	Generally, for preoperative testing (surgery date greater than four days away).
Culture peritoneal fluid dialysate with gram stain and susceptibility	CFCAD	LAB7202	Dialysate fluid	Sterile container	>100cc is recommended for optimal culture sensitivity.
Culture respiratory with gram stain	RCAD	LAB6931	Sputum, BAL, Tracheal aspiration, Nasal etc.	Sterile container	
Culture sterility	STC	LAB226	Water	Sterile container with water sample, or water placed in Millipore Heterotrophic plate count sampler.	20-50ml of water
Culture stool	STOC	LAB223	Feces	Sterile container, Cary Blair is also acceptable	
Culture strep A	CXSTREPA	LAB236	Throat or Rectal	Culture swab or e-swab	
Culture tissue with gram stain	TCAD	LAB7999	Tissue	Sterile container	
Culture tissue, quantitation	QTC	LAB7241	Tissue	Sterile container	
Culture urine	UCA	LAB239	Urine	Grey top boric acid.	Sterile containers are also acceptable, but discouraged, due to lack of preservative present to stabilize colony counts.
Culture vancomycin resistant enterococcus	VRESC	LAB238	Urine, rectal swab, fresh stool	Sterile container, culture swab, e-swab	

Orderable procedure	Test mnemonic	Lab code	Sources accepted	Container	Other information
Culture wound with gram stain	WCAD	LAB6939	Misc. sites-please specify body location when ordering	Culture swab, e-swab	
Culture yeast	YSTSC	LAB6942	Any	Culture swab, e-swab	This test is used often to screen for yeast in vaginal specimens
Gram stain	GRAM STAIN	LAB250	Any source	Culture swab, e-swab	If a gram stain is needed, it is recommended to order one of the culture + gram stain tests above.
KOH prep, skin, hair, nails	KOHSK	LAB7594	Hair, skin, nails	Sterile container	

Antigen and Molecular Testing

Orderable procedure	Test mnemonic	Lab code	Sources accepted	Container	Other information
BV PCR	BVPCR	LAB4025	Vaginal	Xpert Swab Collection Kit	
Chlamydia & Gonorrhea PCR	CTGC	LAB1376	Urine, vaginal, endocervical, pharyngeal and rectal	Xpert Urine Collection Xpert Swab collection	**Inpatients and ER Only.**
Chlamydia & Gonorrhea PCR	CTGC	LAB1376	Urine, vaginal, endocervical, pharyngeal and rectal	Alinity Swab or Urine	**Outpatients Only.**
Clostridium difficile molecular study	CDTM	LAB257	Feces	Sterile container	Formed specimens will be rejected
Cryptococcal antigen, CSF	CRYPTO CSF	LAB927	Spinal fluid	Sterile container	
Cryptococcal antigen	CRYPTO AG	LAB779	Serum	SST tube or Red top	
Group B strep Antigen CSF		LAB7616	CSF	LP Tube	
Influenza A & B Screen	INFLU	LAB7609	Nasal, Nasopharyngeal	Sterile Foam Tipped Applicator	
MRSA Nasal PCR	MRSAN	LAB7607	Nasal	Copan Dual Swab with breakable points (Do not break the swabs).	For patients that are having surgery (cardiac, neurological, orthopedic, and spinal) in the next four days. This is also orderable to assess for MRSA related pneumonia to discontinue vancomycin therapy and may be ordered by pharmacists. This should only be ordered by Infectious Diseases or physician assistants involved with the surgical patient. Specimens from patients ≤21 years of age will be rejected.
Mycobacterium tuberculosis complex, molecular study, respiratory	TB PCR	LAB4602	Sputum	Sterile Container	Sources other than sputum are sent out.

Orderable procedure	Test mnemonic	Lab code	Sources accepted	Container	Other information
Parasite Antigen		LAB7395	Stool	Sterile container or Ova and Parasite Kit	
Rapid strep screen with reflex culture	RSSC	LAB885	Throat	Culture swab	Negative results will reflex to a throat culture.
Respiratory virus panel molecular study	RVP	LAB8132	Nasopharyngeal	Viral Transport (M4) media	**Inpatients only.** Tests for 19 respiratory pathogens including covid, RSV, and flu A/B Outpatients: Order LAB8198
Rotavirus Antigen		Lab443	Stool	Sterile Container	
RSV Antigen		LAB256	Nasopharyngeal	Np swab in M4RT Media	
Sars-Cov2 PCR-4 in 1	COVRSVAFBPCR	LAB8198	Nasopharyngeal	Viral Transport (M4) media	Sars-Cov-2, Influenza A/B, and RSV
Sars-Cov2 PCR-Single	SARS-COV	Lab7888	Nasopharyngeal	Viral Transport (m4) media	Sars-Cov-2 only
Sars-Cov2 Screen	COVIDSCRN	Lab7901	Nasal	Puritan Sterile Foam Tipped Applicator swab.	

Miscellaneous Procedures

Orderable procedure	Test mnemonic	Test lab code	Sources accepted	Container	Other information
Arthropod identification	ARTHID	LAB4174	Tick	Sterile Container	Deer ticks (Ixodes species) can be sent out for Lyme disease testing (LAB4216) if requested.
Autoclave check	AUTCLV	LAB9035		Biological indicator vial	
Pinworm prep	PINWORM	LAB248	Anus	Pinworm paddle or clear cellulose tape.	

MICROBIOLOGY COLLECTION CONTAINERS

Aerobic Culture Swab

USE: Ear, Eye, Genital, Throat, Wound Cultures

TRANSPORT:
Room Temp.

E Swab

USE: Anaerobic, Ear, Eye, Genital, Wound Cultures

TRANSPORT:
Room Temp.

Anaerobic Swab

USE: Anaerobic culture 9e swab)

TRANSPORT:
Room Temp.

Sterile Cup

USE: AFB, Body Fluid, Device, Fungal, Sputum, Tissue Cultures, C. difficile

TRANSPORT:
AFB: Refrigerate
C. diff: Refrigerate
Others: Room Temp

M4RT Viral Transport

USE: Chlamydia Culture, Viral Culture, Many PCR/molecular assays

TRANSPORT:
Room Temp. or

Xpert Swab

USE: PCR Vaginitis Screen, PCR Chlamydia/GC /Trich (ER,INPT)

TRANSPORT:
Room Temp.

Sterile Tube

USE:
Rapid Covid-19 PCR

TRANSPORT:
Room Temp.

Red Vacutainer

USE:
Cryptococcal antigen

TRANSPORT:
Room Temp.

Blood Culture Vials

USE: Blood Culture
TRANSPORT: Room Temp.

Routine

Fungus/AFB

CSF LP Tube

USE: CSF culture

TRANSPORT:
Room Temp.

CCMS Urine Kit

USE: Urine Culture

TRANSPORT:
Gray tube: Room Temp
Do not send in Blue Cup

Occult Blood

USE: Fecal Occult Blood

Stool Culture

USE: Stool Culture
Fill to red line.

TRANSPORT:
Room Temp

Ova and Parasite Exam

USE: Ova & Parasite Exam, Parasite Antigen
Fill to red line.

TRANSPORT:
Room Temp.

Pinworm Exam

USE: Pinworm Exam

TRANSPORT:
Room Temp

.Xpert Urine

USE: PCR Chlamydia/GC /Trich (ER/inpt)

TRANSPORT:
Room Temp

Alinity Swab

USE: PCR, Chlamydia GC /Trich (OUTPT)

TRANSPORT:
Room Temp

Trinity Health Michigan Laboratory Visual Aid

AFB/ACID-FAST STAIN AND CULTURE SPECIMEN REQUIREMENTS

SOURCE	BLOOD, BONE MARROW	BODY FLUID/CSF	BRONCHIAL WASH/BAL	GASTRIC	SPUTUM	STOOL	TISSUE	URINE	WOUND/ ASPIRATE
CONTAINER	,MYCO LYTIC F 	STERILE LEAK-PROOF CONTAINER OR LP TUBE 	LUKENSTUBE OR STERILE, LEAK-PROOF CONTAINER 	STERILE LEAK- PROOF CONTAINER 	STERILE LEAK-PROOF CONTAINER 	STERILE LEAK-PROOF CONTAINER 	STERILE LEAK-PROOF CONTAINER 	STERILE LEAK-PROOF CONTAINER 	STERILE LEAK-PROOF CONTAINER 
VOLUME	1 -5 ML 3-5 ML OPTIMAL	≥1.0 ML BODY FLUID 0.5 ML MINIMUM	3 ML MINIMUM 10 ML OPTIMAL	3 ML MINIMUM 5-10 ML OPTIMAL	3 ML MINIMUM 10 ML OPTIMAL	1 GRAM OF STOOL MINIMUM 10 GRAMS OF STOOL OPTIMAL	VISIBLE PIECE OF TISSUE	5 ML MINIMUM 40 ML OPTIMAL	0.5 ML MINIMUM ASPIRATE OR BIOPSY SAMPLE
REPLICA LIMITS	2 PER DAY	1 PER DAY/ SAME SOURCE	1 PER DAY/ SAME SOURCE	1 PER DAY	SPECIMENS SHOULD BE COLLECTED AT LEAST 8 HOURS APART. SEE COMMENTS	1 PER DAY	NA	1 PER DAY	1 PER DAY /SAME SOURCE
COMMENTS	Use blood culture collection technique as skin antisepsis is critical. Clean skin with CHG or iodine + alcohol prior to collection.	Csf: tube 2 preferred. Submit uncentrifuged specimen.	Replace cap of Leukens tube with solid cap to prevent leaks during transport	First morning specimen required. Neutralize Ph with sodium carbonate. Transport to THOA lab within 4 hours	Collect specimen from deep cough. Do not submit saliva. Submit 3 consecutive specimens collected 8-24 hours apart. At least one specimen must be first-morning. Specify if specimen is expectorated or induced.	Utilized in immuno-compromised patients as an aid in diagnosing disseminated infection with M. avium complex		Collect 3 consecutive first-morning urine specimens.	Aerobic swab specimens will be rejected. Eswab will be accepted if no other specimen type is available. Eswab must be dedicated for AFB, no other tests can be performed.
CRITERIA FOR REJECTION	MISLABELLED SPECIMEN, UNLABELED SPECIMEN, LEAKING SPECIMEN, QUANTITY NOT SUFFICIENT, DELAY IN TRANSPORT, IMPROPER TRANSPORT TEMPERATURE, AND INCORRECT PRESERVATIVE. 24-HOUR POOLED URINE OR SPUTUM COLLECTIONS ARE NOT ACCEPTABLE.								
STORAGE/ TRANSPORT	NPATIENT LOCATIONS: TRANSPORT TO LAB IMMEDIATELY. OUTPATIENT LOCATIONS: REFRIGERATE AFTER COLLECTION & DURING TRANSPORT. TRANSPORT TO LAB WITHIN 24 HOURS IS OPTIMAL								

LABORATORY PROCEDURE: AFB CULTURE	CREATED BY: C A Y UPDATED: 07/31/25	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

SPECIMENS FOR ANAEROBIC CULTURE

Acceptable Specimens: aspirated pus, tissue, body fluids, suprapubic urine TTA and lung aspirates. Tissues fluids and aspirates are always preferred over swab samples.

Unacceptable Specimens: throat, NP swabs, sputum, gastric contents, feces, swabs from decubitus ulcers, skin, voided urine, stool, prostatic or seminal fluid and vaginal or cervical swabs. Always submit an aerobic swab with an E swab.

Submit in an E swab or for fluids and aspirates sterile container. Transport to Laboratory IMMEDIATELY.

LABORATORY PROCEDURE: ANAEROBIC CULTURE	CREATED BY: CAY UPDATED: 02/04/24	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

BLOOD CULTURE COLLECTION

DO NOT COVER BAR CODES ON BOTTLES!

DO NOT USE EXPIRED BOTTLES!

Adult Blood Culture Set Bottle

Pediatric

SKIN ANTISEPSIS:

- Skin antisepsis is critical. Clean skin with CHG (Chlorhexidine gluconate) swab or scrub. Air-dry for 30 seconds. Collect samples.
- DO NOT use CHG in infants <2 months of age. Alcohol + iodine should be used for skin antisepsis in infants <2 months old.
- For allergy to CHG or iodine, clean site with alcohol 3 times prior to drawing blood culture.
- Avoid drawing from lines. If line draw required, please order catheter draw and indicate on bottle. To diagnose line sepsis often one set is drawn through the catheter and the second set is peripheral.

NUMBER OF SETS:

- Collect two blood cultures in adult patients. A set consists of an aerobic + an anaerobic bottle.
- For pediatric patients, a single pediatric bottle is usually sufficient.
- Order of more than two sets in a 24-hour period requires Pathology approval.

TIMING:

- For orders of BLOOD CULTURE x2, it is not necessary to collect the cultures 10-30 minutes apart. Blood culture x2 may be collected "back-to back" from two different venipuncture sites.
- Always collect blood culture as close to the patient's fever spike as possible.
- Subacute bacterial endocarditis requires multiple blood cultures spaced at defined intervals.

VOLUME OF DRAW:

- Aerobic bottle 3-10 ml acceptable, 8-10 ml optimal
- Anaerobic bottle: 3-10 ml acceptable, 8-10 ml optimal
- Pediatric Bottle: 0.5-5 ml required
- DO NOT OVERFILL OR UNDERFILL BOTTLES AS THIS MAY AFFECT RECOVERY.

SPECIAL COLLECTIONS:

- Recovery of yeast, fungus and AFB require collection of a Mycolytic F vial (1-5 ml blood.) Obtain from Lab.
- Notify Lab if Brucella is suspected.

LABORATORY PROCEDURE: BLOOD CULTURE	CREATED BY: CAY UPDATED: 07/31/25	Trinity Health

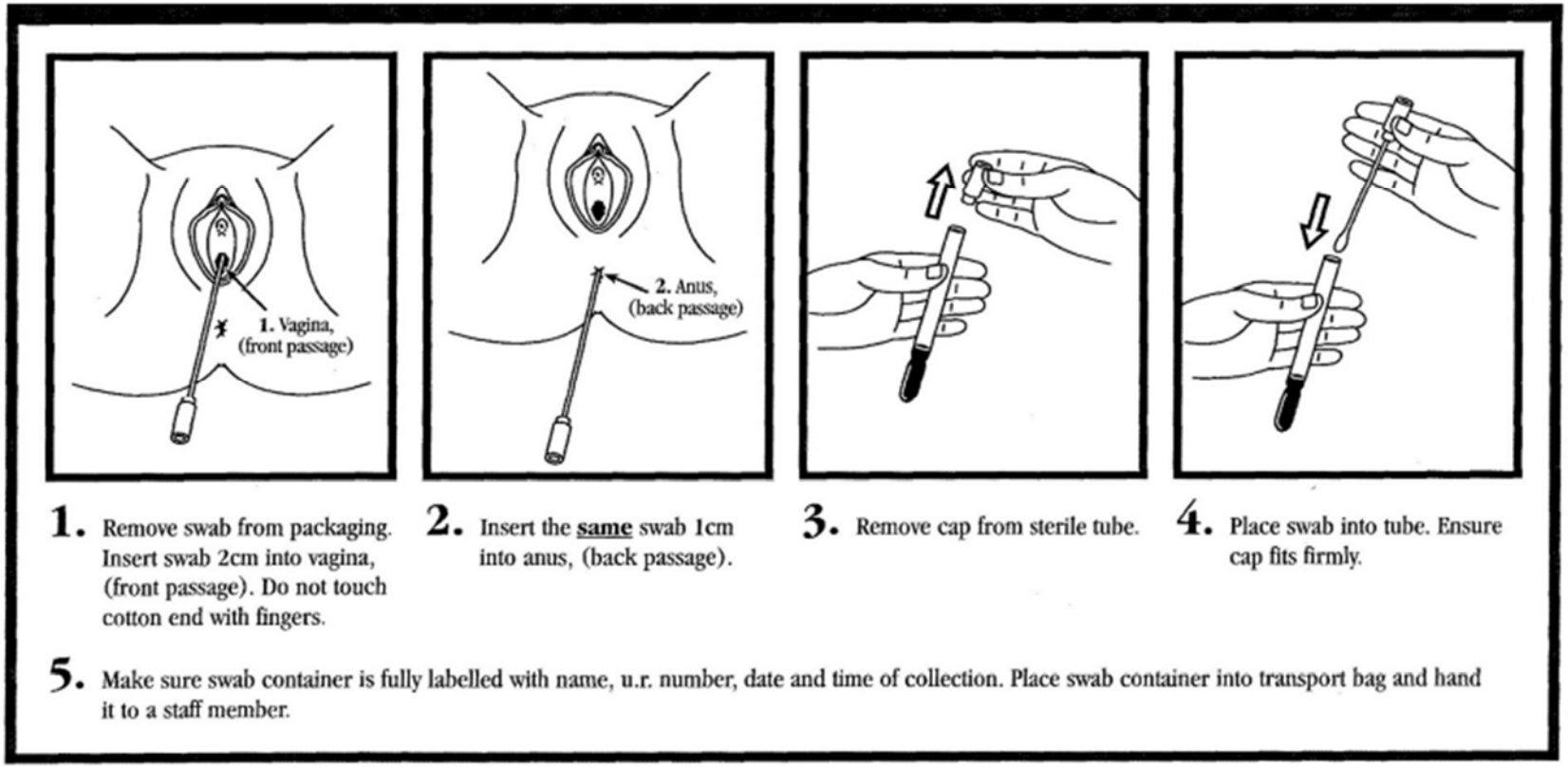
Trinity Health Michigan-Oakland
Fecal Specimen Collection Guide

Trinity Health

Procedure Name	Collection Device	Comments
Culture Stool		• Detects *Salmonella* species, *Shigella* species, *Campylobacter* and enterohemorrhagic/shiga-toxin producing *E. coli*. • Culture for Vibrio and Yersinia performed with special request. • Collect at at least 2 samples to rule out bacterial gastroenteritis
Ova and Parasite and Parasite Antigen		• Detects protozoans and parasites found in stool samples
Pinworm Preparation	 	• Sticky paddle for Pinworm Collection (Device type may vary)

Trinity Health Michigan Laboratory Visual Aid

COLLECTION OF A VAGINAL RECTAL SPECIMEN FOR GBS



Make sure the swab is labeled with name, MRN or date of birth and date and time of collection. GBS swabs should be collected between 36 weeks to 37 6/7 weeks of gestation.

LABORATORY PROCEDURE: GBS CULTURE	CREATED BY: CAY UPDATED: 02/04/24	Trinity Health

Trinity Health Michigan-Oakland
Genital Specimen Collection Guide

Trinity Health

Procedure Name	Collection Device	Comments
Genital culture		• Detects Neisseria gonorrhoeae, yeast in significant numbers, Gardnerella vaginalis, Group B Streptococcus. • Store at room temperature. DO NOT REFRIGERATE. • NOTE: Gardnerella vaginalis is best detected by Vaginitis probe (VAG DNA) or gram stain. • Collect vaginal/rectal swab and order Group B Strep Screen for detection of GBS in pregnant patients.
Chlamydia trachomatis/Neisseria gonorrhoeae, Trichomonas vaginalis		• Cervix and urethra are acceptable specimens. • Use only swab provided with kit. • Note Cepheid collection used for CT/GC on ER and inpatients • Alinity swab used for Outpatients
Vaginitis screen		• Detects Gardnerella vaginalis, Trichomonas vaginalis and Candida species. • Use only Cepheid swab provided with kit.
Herpes simplex PCR		• Submit genital swab or swab of lesion in viral transport medium. Refrigerate until transport. 06/06/25

Trinity Health Michigan Laboratory Visual Aid

MYCOPLASMA AND UREAPLASMA TESTING

Mycoplasma/Ureaplasma, PCR

Yellow Aptima

Source: Urine, **Males ONLY** (Female urine unacceptable)

Epic: LAB4759
Warde: MUPCR

*Must choose Specimen Type AND Specimen Source when ordered. They are not a hard stop in Epic ordering.

Purple Aptima Unisex Swab
(Same swab used for Throat/Anal/Rectal CTNG)

Females: VAGINAL only

Males: Urethra

Epic: LAB4759
Warde: MUPCR

*Must choose Specimen Type AND Specimen Source when ordered. They are not a hard stop in Epic ordering.

Mycoplasma/Ureaplasma, CULTURE

Green Top Tube
(Pink bucket in micro fridge)

Epic: LAB944
Warde: MYHUC

*Hard stop built-in in Epic for Specimen Type and Source. Source is REQUIRED.

Females: Urine or Vag/Cervical swab

Males: Urine or Urethral swab

Other sources:

- Nasopharyngeal
- Lesion/Other

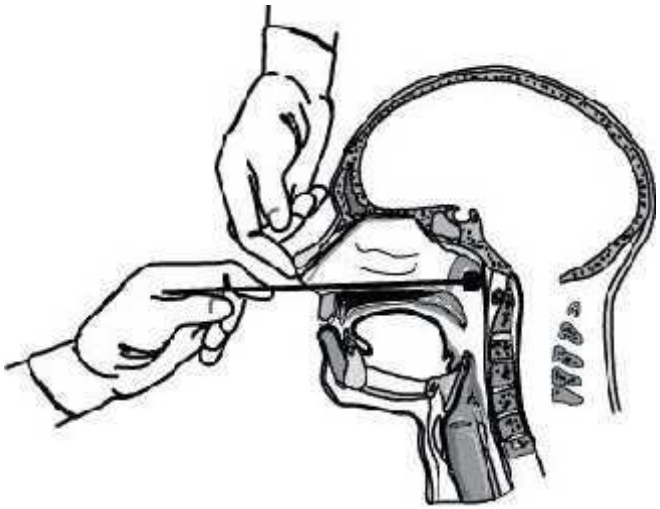
Multitest swab of vaginal specimen also acceptable for Mycoplasma/Ureaplasma PCR

LABORATORY MYCOPLASMUREAPLASMA	CREATED BY: CAY UPDATED: 02/04/24	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

COLLECTION OF A NASOPHARYNGEAL (NP) SPECIMEN

The technique described below can be used for Rapid Influenza testing, Rapid RSV, Bordetella pertussis PCR/culture and viral culture for some agents.



1. Immobilize the patient's head.
2. Gently insert nasopharyngeal swab into a nostril until the posterior nares is reached.
3. Leave the swab in place for up to 10 seconds. This procedure may induce coughing and tearing.
   If resistance is encountered during insertion of the swab, remove it and attempt insertion of the opposite nostril.
4. Remove the swab slowly.
5. Place in transport media. (VIRAL TRANSPORT FOR FLU, RSV)

LABORATORY PROCEDURE: NP CULTURE	CREATED BY: CAY UPDATED: 02/04/24	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

COLLECTION OF A SPUTUM SAMPLE

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Before collecting a sputum specimen, the patient should rinse his mouth with water and remove dentures. Rinsing the mouth lessens the contamination of sputum specimens from oropharyngeal secretions and their associated normal oral flora.

2. Sputum specimens must contain lower respiratory tract secretions.

3. Patients should be instructed to cough as deeply as possible. Appropriately collected induced specimens or aspirations are recommended for adult patients who cannot produce acceptable sputum samples. Consultation with Respiratory Therapy may be required.

4. Collect the sputum specimen generated from a deep, productive cough in a clean, sterile specimen cup. The traps used with suction devices are also acceptable.

5. The specimen should be refrigerated and transported to the laboratory immediately.

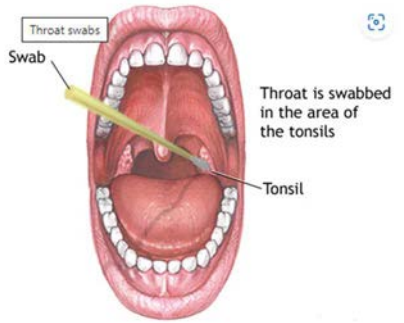
First morning sputum specimens are the best, especially if a Mycobacteria (AFB) culture has been ordered. Expectorated sputum specimens are unacceptable for Pneumocystis testing. An induced sputum or bronchoscopy specimen should be submitted.

LABORATORY PROCEDURE:	CREATED BY: CAY UPDATED: 02/04/24	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

COLLECTION OF A THROAT SPECIMEN

1. Shine a bright light into the oral cavity of the patient so that the swab can be guided to the posterior pharynx.
2. The patient is instructed to tilt his/her head back and breathe deeply.
3. Depress the tongue with a tongue depressor to help visualize the posterior pharynx.
4. Use a sterile Dacron swab. Extend the swab to the back of the throat between the tonsil pillars and behind the uvula.
5. Have the patient phonate a long ‘aah’ which will lift the uvula and help to prevent gagging.
6. The tonsil areas and posterior pharynx should be firmly rubbed with the swab.
7. Care should be taken not to touch the teeth, cheeks, gums, or tongue when inserting or removing the swab to minimize contamination with normal mouth flora.



LABORATORY PROCEDURE: THROAT CULTURE	CREATED BY: CAY UPDATED: 02/04/24	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

URINE CONTAINER REQUIREMENTS BY TEST

TUBE/ CONTAINER	 Minimum Fill Line	 Minimum Fill Line		 **BD URINE VACTAINER CUP ORDER OF DRAW** 1. Gray (4ml) 2. Tiger top (8ml) 3. Clear (6ml) Note: Minimum of 18 ml of urine is required to fill all 3 tubes	
ACCEPTABLE URINE TESTS	Urine Culture* *Use sterile white cup when less than minimal fill is obtained. Send to Lab within 20 minutes of collection.	Urinalysis** **Use sterile white cup when less than minimal volume is obtained.	Albumin Calcium Chloride Creatinine Eosinophils Glucose HCG (Pregnancy) Immunofixation Magnesium Phosphorus Potassium Urea Nitrogen Uric Acid		Cytology (Min.50 ml required) Drug Screen Osmolality Protein Sodium

LABORATORY PROCEDURE: URINE TESTS	CREATED BY: CAY UPDATED 01/09/25	Trinity Health

Trinity Health Michigan Laboratory Visual Aid

COLLECTION OF A WOUND CULTURE

All wound cultures must be clearly labeled with specific designations as to the site and nature of the wound. Example: Abscess from right thumb or drainage from trach site. Simply labeling as "Wound Culture" is not acceptable. **THE COLLECTION OF FLUID OR TISSUE IS PREFERABLE TO THE COLLECTION OF SPECIMENS ON SWABS.**

1. Open transport swab pack, and peel apart at the point labeled "TO OPEN" until the swab cap is visible.
2. Remove the sterile swabs and collect the specimen.
   a. The collection of superficial cultures is discouraged.
   b. Pass the swabs deep into the lesion to firmly sample the lesion's fresh border.
3. Remove the transport tube of medium from the package.
4. Remove and discard the cap from the tube. Place the swabs into the medium and push the swab cap firmly onto the tube.
5. Label and send them to the Laboratory immediately.
6. Specimens should be stored at room temperature prior to transportation to the Laboratory.
7. Anaerobic cultures are useful for deep wounds and those involving gastrointestinal or genitourinary tracts. A foul odor and copious pus are indications that an anaerobic culture should be requested. A E swab is required for anaerobic culture and is stable for 48 hours. Never submit an anaerobic swab alone. Anaerobic infections are usually mixed and require an aerobic plus anaerobic swab.

ESWAB	AEROBIC CULTURE SWAB

LABORTORY PROCEDURE: WOUND CULTURE	CREATED 02//04.24 CAY	Trinity Health

VIRAL SPECIMEN COLLECTION		
DISEASE/SYMPTOMS	VIRUSES	RECOMMENDED SPECIMEN
Cardiac Myocarditis and Pericarditis	Coxsackie B 1-5 Echovirus	Pericardial fluid, throat swab Pericardial fluid, throat swab
Congenital and Neonatal Infections	Rubella Cytomegalovirus Herpes Simplex Virus Enterovirus Varicella-Zoster Virus	CSF, throat, urine Urine, throat, blood, tissue, CSF, throat, brain biopsy, vesicle CSF, throat, stool, brain biopsy, autopsy Vesicle, throat
Gastrointestinal/Gastroenteritis	Adenovirus Astrovirus Norovirus Rotavirus	Stool Stool
Genital Infections	Herpes Simplex Virus	Genital swab, vesicle swab, vesicle fluid
Malaise Syndrome	Cytomegalovirus Epstein-Barr Virus	Blood, urine, throat swab Serological testing only
Neurologic Aseptic Meningitis and Encephalitis	Adenovirus Arbovirus Cytomegalovirus Enterovirus Herpes Simplex Virus LCM Measles Mumps Parechovirus Varicella-Zoster Virus	CSF, brain biopsy, blood CSF, brain biopsy, blood Brain biopsy, CSF CSF, throat swab, stool, brain biopsy CSF, brain biopsy, blood Serological testing only CSF, urine CSF, urine CSF, stool
Ocular Conjunctivitis and Keratitis	Adenovirus Cytomegalovirus Enterovirus Herpes Simplex Virus Varicella-Zoster Virus	Eye swab Eye swab Eye swab Corneal or conjunctival scrapings Eye swab, corneal or conjunctival scrapings

VIRAL SPECIMEN COLLECTION		
DISEASE/SYMPTOMS	**VIRUSES**	**RECOMMENDED SPECIMEN**
Respiratory Tract Infections	Adenovirus Enterovirus human Metapneumovirus Influenza A/B Parainfluenza 1/2/3 Rhinovirus RSV SAR	NP swab, transtracheal aspirate, throat swab NP swab, throat swab NP, throat swab, bronchial wash, lung tissue NP, throat swab, sputum NP, throat swab NP, throat swab NP swab, aspirate, or wash NP, throat swab, bronchial wash, lung tissue
Respiratory Pneumonia	Adenovirus Cytomegalovirus Herpes Simplex Virus human Metapneumovirus Influenza A/B Parainfluenza 1/2/3 RSV SAR S Varicella-Zoster Virus	Throat swab, nasopharyngeal (NP), bronchial wash, tissue Urine, throat swab, lung tissue, blood, bronchial wash Throat swab, bronchial wash, lung tissue, oral lesion, blood NP, throat swab, bronchial wash, lung tissue. Throat wash, sputum, lung tissue, NP, bronchial wash Throat swab, sputum, lung tissue, NP, bronchial wash NP, bronchial wash, lung tissue. NP, throat swab, bronchial wash, lung tissue Lung tissue, bronchial wash, skin lesions, blood
Skin /Cutaneous Exanthems and Enanthems	Enterovirus Herpes Simplex Virus HHV-6 Measles Parvovirus B19 Rubella Varicella-Zoster Virus	Vesicle swab, throat swab, stool Vesicle swab Serology/PCR Blood, throat swab Serology/PCR Throat swab, CSF, urine. Scrapings from fresh vesicle

Trinity Health

=Refrigerate after collection

MICROBIOLOGY SPECIMEN COLLECTION

Acid-Fast Culture

Anaerobic Culture

Blood Culture

ROUTINE

FUNGAL

Body Fluid Culture

Send to Lab ASAP.

Chlamydia Culture:

Chlamydia trachomatis & Neisseria gonorrhoeae PCR

ER INPT

OUTPT

C. difficile Toxin

CSF Culture

Tube 2 for culture.
Send to Lab STAT.

Ear/Eye Culture

.

or

Fungus Culture

Genital Culture

or

Giardia & Cryptosporidium Antigen (Parasite Antigen)

Fill to red line.

.

Group B Strep Culture

.

Herpes PCR

Rapid Influenza PCR OR 4 IN 1 FLU A&B, RSV+ Covid PCR

MRSA Culture/PCR

.

Ova and Parasite Exam

Fill to red line.

Pinworm Exam

Rotavirus Antigen

RSV Antigen

Sputum/Respiratory Culture

Stool Culture

Throat Culture/ Rapid Strep A Antigen

Organ-Tissue Culture

Send to Lab ASAP.

Urine Culture

Do not send blue cup. Fill gray tube within 20 min. of collection.

Vaginitis Screen

.

Viral Culture

Wound Culture

or

Instructions for common patients self-collected samples can be found in APPENDIX B.
Patient Instructions for self-collected samples.

4. SPECIMEN PROCESSING AND TRANSPORT

Centrifugation:
1. Serum tubes must be placed in an upright vertical position and allowed to clot for a minimum of 30 minutes before centrifuging. After the specimen has been allowed to fully clot, the tube is to be centrifuged within 1 hour of collection and no longer than 2 hours after collection. ** Failure to separate red cells from serum or plasma within 2 hours of collection, may lead to inaccurate results** Note: Patients on anticoagulant therapy may need longer time to clot.

2. Centrifugation: All serum tubes must be perfectly balanced, and tubes spun within the appropriate speed and time.

3.Observe each tube after centrifugation. Verify that the gel is completely separating cells from serum. If complete separation is not visible, DO NOT RECENTRIFUGE.

4.If aliquoting before transport is required, transfer serum or plasma to an aliquot tube using a pipette leaving a small amount on top of the gel or packed cells. Label aliquot with same information as primary tube.

Light Sensitive Specimens: Pour plasma/serum into a dark aliquot tube to protect the specimen from any light source to ensure specimen integrity. If a dark aliquot tube is not available, wrap aluminum foil or paper towel around the tube (not the stopper) tightly.

To minimize exposure to bloodborne pathogens in transport of specimens, Standard Precautions must be used. ALL blood and other potentially infectious materials are treated as if they are known to be infectious with HIV or hepatitis and other bloodborne pathogens.

All specimens must be transported in a sealed biohazard bag. Please refer to the Laboratory Test Directory for specific storage requirements (room temperature (ambient), refrigeration, or frozen) for the testing of the patient sample.

Room Temperature Specimens: If your specimen does not have a specific storage requirement and will be stored at room temp before transport, please place in a sealed orange/red biohazard labeled specimen bag. Note: Do not store tubes in direct contact of a heat source such as direct sunlight, top of refrigerator, heating/air vents, etc.

Refrigerated Samples: If your specimen requires refrigerated temperatures during transport, package the specimen in a biohazard b then place the specimen in your refrigerator until transport.

Frozen Samples: If your test requires the specimen to be frozen after processing, the specimen must be centrifuged, and serum/plasma must be transferred to an aliquot tube by pipette without disturbing gel or packed cells. Following labeling requirements for all aliquots.

Temperature Definitions: Room temperature: 15° to 30° C Refrigerated:2° to 8° C Frozen: -20° or below

STAT Samples: If your specimen has a “STAT” priority, please call your Courier for pickup. Place the sample in a biohazard labeled specimen bag. The expected turnaround time for STAT outpatient samples is 4 hours and for inpatient samples 30-60 minutes.

Other Requirements:
●Remove all needles and sharps from all specimens before transporting.

●All specimens must be transported in sealed biohazard, leak-proof, puncture resistant container tightly closed before transportation. Please place specimens in the Ziploc portion of the specimen bag. The completed requisition is to be placed in the outside pocket.

TRANSPORT OUTPATIENT Courier Service
Trinity Health Michigan Laboratories provide courier service for routine and stat pick-up service to physician offices and clinics. Contact your local Trinity laboratory for more information. A lock box can be provided for after-hour pick-ups.

TRANSPORT INPATIENT Pneumatic Tube
In-house, many specimens can be transported to the Laboratory via the pneumatic tube system. When transporting specimens via the tube system, lids must be tightened, and all specimens must be tightly sealed in a biohazard specimen bag to prevent leakage and contamination of the tube system. Large volume samples, specimens which are irreplaceable (high-risk) or those where specimen integrity will be compromised cannot be transported in the tube system. Refer to your site’s pneumatic tube policy for more detail.

TEST SUPPLIES

Inpatient: Within the hospital, supplies for laboratory testing are obtained through the Trinity Supply Chain. Some specialized supplies may be obtained directly from the Laboratory.

Outpatients: The lab will supply all forms; blood collection tubes and all materials related to specimen collection. See supply order form in APPENDIX B. Supply Requisition

5. RESULT REPORTING

Reporting laboratory results is a crucial part of laboratory management, as it affects the quality of patient care, clinical decision making, and public health. However, reporting results can also pose various challenges, such as ensuring accuracy, timeliness, confidentiality, and compliance with regulations and standards.

Turnaround Times

Certainly! Here is a statement about laboratory test turnaround times for a CAP-compliant lab user manual:

Laboratory Test Turnaround Times

At Trinity Health, we are committed to providing timely and accurate laboratory test results to support patient care. Our laboratory test turnaround times (TAT) are established in accordance with the College of American Pathologists (CAP) standards to ensure high-quality service and patient satisfaction. Many routine test results are available within the same business day. However, not every test is performed every day.

TEST TYPE	TURNAROUND TIME
Inpatient Stat tests	30-60 minutes
Routine tests	1 Day
Microbiology tests	1-6 Days
Cytology and Pathology	1-7 Days
Outpatient Stat tests	4 Hours
Reference Lab tests	Variable

See the Test Directory for TATs on specific tests. The Laboratory attempts to maintain the shortest turnaround times possible and constantly tracks testing to ensure compliance. However, unforeseen events, such as instrument failures, may delay or interfere with testing. In such cases, the Laboratory will notify caregivers and make every effort to rectify the situation as soon as possible.

Critical and Alert Results

In collaboration with medical staff, Trinity Clinical Labs have established a list of critical results that are felt to be potentially life threatening. Test results meeting these criteria will be immediately phoned to the ordering physician's office (outpatients) or the nursing unit (inpatients or physician). In addition, a list of alert results that, while not immediately life threatening, pose significant/public risk will be communicated to providers. A list of critical and alert values follows.

Reporting to Trinity Providers

Laboratory results are reported electronically to the EPIC electronic health record as soon as they are completed. Outpatient providers will be alerted to new results by an inbox message.
In the event of a prolonged computer downtime (>2-3 hours), hardcopy reports will be prepared and delivered to the nursing stations and critical and stat results will be telephoned. During downtime, please refrain from calling the laboratory unless there is an urgent need, as these interruptions can further delay the ability to report results.

Reporting to non-Trinity Providers

If you are a provider at an institution that utilizes an Epic electronic medical record system, you may be able to access your patient's Trinity records through Epic's "Care Everywhere" functionality. Please contact your internal Epic support team for additional information.
If computer access is not available, a hard copy report will be printed and sent via U.S. Mail to the address on record.

Reporting to Patients

Patients that would like direct access to the laboratory results are encouraged to sign up for MyChart access.

Reference Laboratory Results

Many reference lab results directly interface into the EPIC system. For those reference laboratory results that do not automatically report in EPIC, results will be scanned in or manually entered in EPIC.

Public Health Reporting

Certain state and federal regulations require Trinity Laboratories to report specific laboratory results to governmental agencies. These are communicable diseases or conditions that have significant public health contact. Contact your Trinity Laboratory for a list of Michigan and Federal reportable results.

Reference Ranges

Current reference ranges for assays can be found in the Laboratory Test Directory. These are also reported in EPIC and hard copy reports.

Trinity Health Oakland Laboratory Critical Values

Red Alert: Called within 25 minutes 24hrs/7 days a week.

Yellow Alert: Called between 8 am and 5 pm

DO NOT CALL-Per Protocol

TEST – TEST CODE	CRITICAL ABNORMAL TEST RESULT		Inpatient Red Alert	Outpatient Red Alert	Outpatient Yellow Alert	Outpatient DO NOT CALL-Low Critical
	Critical Low ≤	Critical High ≥				
Chemistry						
Ammonia (0-15 yrs)		160 umol/L	X	X		
Bilirubin total (0- 3 days)		15 mg/dl	X	X		
Bilirubin total (-3 days-18 yrs)		18 mg/dl	X		X	
Bilirubin, direct (0 - 3 months)		2.1 mg/dl	X	X		
Beta HCG- (0-150 yr)		200,000 mIU/ml	X		X	
Calcium, ionized, @ pH 7.4	3.7 mg/dl	6.3 mg/dl	X	X		
Calcium, total	6.4 mg/dl	13.1 mg/dl	X	X		
Carboxy-Hemoglobin (CO-HGB) (0 - 5 yrs)		10%	X	X		
Carboxy-Hemoglobin (CO-HGB) (>5 yrs)		20%	X	X		
CO2-	10 mmol/L	40 mmol/l	X		X	
Creatinine (0-15 yrs)		2.5 mg/dl	X	X		
Creatinine (15 yrs– 150 yr)	N/A	10 mg/dl	X		X	
Lactic acid		4.1 meq/L	X	X		
SGOT – (0-15 yrs)		1000 U/L	X	X		
SGPT – (0-15 yrs)		1000 U/L	X	X		
Magnesium	0.9 mg/dl	5.1 mg/dl	X	X		
pH (arterial 0 -1 mo)	7.24	7.49	X	X		
pH (arterial 1 mo-150 yr)	7.24	7.56	X	X		
pH (capillary 0-1 mo)	7.25	7.48	X	X		
pH (capillary 1 mo – 150 yrs)	7.25	7.56	X	X		
pH (venous 0- 1mo)	7.25	7.48	X	X		
pH (venous 1 mo – 150 yr)	7.25	7.56	X	X		
pH (arterial cord)	7.00		X	X		
PH (venous cord)	7.00		X	X		
BE (arterial cord)	-11.9 mmol/L		X	X		
BE (venous cord)	-11.9 mmol/L		X	X		
pCO2 (arterial 0-1 mo)	33 mmHg	62 mmHg	X	X		

TEST – TEST CODE	CRITICAL ABNORMAL TEST RESULT		Inpatient Red Alert	Outpatient Red Alert	Outpatient Yellow Alert	Outpatient DO NOT CALL-Low Critical
	Critical Low ≤	Critical High ≥				
pCO2 (capillary 0-1 mo)	33 mmHg	72 mmHg	X	X		
pCO2 (venous 0-1 mo)	33 mmHg	67 mmHg	X	X		
pCO2 (arterial, capillary, venous 1 mo – 150 yr)	19 mmHg	71 mmHg	X		X	
PO2 (arterial 0 – 1 mo)	33 mmHg	101 mmHg	X	X		
PO2 (arterial 1 mo-150 yr)	54 mmHg		X	X		
PO2 (capillary 0-1 mo)	33	81	X	X		
PO2 (capillary 1 mo-150 yr)	53		X	X		
PO2 (venous 0-1 mo)	33	81	X	X		
Inorganic Phosphorus	1 mg/dl		X		X	
Potassium (0-15 yr)	2.9 mEq/L	6.5mEq/L	X	X		
Potassium (15yrs-150yrs)	2.9 mEq/L	6.0 mEq/L	X	X		
Sodium	120 mEq/L	160 mEq/L	X	X		
Uric Acid		15.0 mg/dl	X		X	
Enzymes						
CK		10,000U/L	X	X		
High Sensitivity Troponin I		101 ng/L	X	X		
Glucose						
CSF GLUCOSE		40 mg/dl	X	X		
Glucose, random–peds (0-1 mo)	40 mg/dl	250 mg/dl	X	X		X
Glucose, random-peds (1 mo–18 yrs)	50 mg/dl	250 mg/dl	X	X		X
Glucose, random - (18 yrs-150 yrs)	53 mg/dl	451 mg/dl	X	≥451 mg/dl		X
Glucose (fasting) - pediatrics (0 - 1 months)	40 mg/dl	250 mg/dl	X	≥ 250 mg/dl		X
Glucose (fasting) - (1 mos-18 yrs)	50 mg/dl	250 mg/dl	X	≥250 mg/dl		X
Glucose, fasting (18 yrs-150 yrs)	53 mg/dl	451 mg/dl	X	≥451 mg/dL		X
Glucose - 1 Hr, 2 Hr, 3 Hr. (Gestational and non-Gestational tolerances)	39 mg/dl, 40mg/dl, 53 mg/dl**	451 mg/dl	X	≥451 mg/dL		X
Glucose, Gestationnel	53 mg/dl	451 mg/dl	X	≥451 mg/dl		X
Therapeutic Drug Monitoring (TDM)						
Digoxin		2.5 ng/ml	X	X		
Lithium		1.6 mEq/L	X	X		

TEST – TEST CODE	CRITICAL ABNORMAL TEST RESULT		Inpatient Red Alert	Outpatient Red Alert	Outpatient Yellow Alert	Outpatient DO NOT CALL-Low Critical
	Critical Low ≤	Critical High ≥				
Theophylline		23 mcg/ml	X	X		
Toxicology						
Acetaminophen		101 mcg/ml	X	X		
Carbamazepine		15.1 mcg/ml	X	X		
Phenobarbital		60 mcg/ml	X	X		
Phenytoin (Dilantin)		30.1 mcg/ml	X	X		
Gentamicin (trough)		3.0 mcg/ml	X	X		
Gentamicin (peak) 0-18yrs		12.1 mcg/ml	X	X		
Salicylate		31 mg/dl	X	X		
Tobramycin (trough)		3 mcg/ml	X	X		
Tobramycin (peak) 0-18yrs		12.1 mcg/ml	X	X		
Valproic Acid		150 mcg/ml	X	X		
Vancomycin (random)		50 mcg/ml	X	X		
Vancomycin trough		30 mcg/ml	X	X		
Hematology – Coagulation						
Fibrinogen	100 mg/Dl		X	X		
Hemoglobin, newborn (0 - 7 days)	13.0 g/dl	24 g/dl	X	X		
Hemoglobin (> 7 days)	6.5 g/dl		X	X		
Hematocrit, newborn (0 - 7 days)	37.0%	69%	X	X		
PTT (0 to 15 years)		150 sec	X	X		
APTT (15 years and up)		110 sec				
Prothrombin Time INR		4.5	X	X		
Outpatient Prothrombin INR >=5.0		5.0	X	X		
Outpatient Prothrombin INR 4.5 - 4.9			X	X	4.5 - 5.9	
Platelets, newborn (0 – 1 month)	100 K/µL		X	X		
Platelets (> 1 month)	20 K/µL		X	X		
WBC, newborn (0-1 month)	5.0 K/µL	50 K/mcl	X	X		
WBC (> 1 month)	1.5 K/µL	50 K/mcl	X		X	
Neutrophils	0.5 K/µL		X		X	
Malaria smear -Blood Parasite Smear		Positive	X		X	
KBT Stain		2%	X		X	
Immunology						
HIV		Reactive	X		X	
HIV Rapid	Non-Reactive	Reactive	X	X		

TEST – TEST CODE	CRITICAL ABNORMAL TEST RESULT		Inpatient Red Alert	Outpatient Red Alert	Outpatient Yellow Alert	Outpatient DO NOT CALL-Low Critical
	Critical Low ≤	Critical High ≥				
Send Outs						
Drug Levels as notified by Warde Lab - VARIES***		Toxic Levels	X		X	
Herpes PCR, **CSF only**		Positive	X		X	
Molecular/Virology as notified by Warde- **VARIES*** **		Positive	X		X	
Mycoplasma/Ureaplasma culture		Positive	X		X	
Mycoplasma IgM		Positive	X		X	
Mycoplasma/Ureaplasma PCR		Positive	X		X	
Neisseria Gonorrhoeae (GC)		Positive	X		X	
Norovirus		Positive	X		X	
Pertussis		Positive	X		X	
Syphilis Antibody or FTA		Positive	X		X	
Warde – Additional send out tests as defined ***		Positive	X		X	

Anatomic Pathology

- Malignancy in an uncommon location or specimen type
- Absence of chorionic villi or trophoblast when clinically expected.
- Fat in endometrial curettage
- Change in frozen section diagnosis after review of permanent sections.
- Significant disagreement between immediate interpretation and final FNA diagnosis
- Mycobacterial, fungal, or other significant infections organisms identified on special stains.
- Leukocytoclastic vasculitis
- Significant disagreement and/or change between primary Pathologist and outside Pathologist consultation.
- Any other diagnosis that may be defined as "significant" or "unexpected" as determined by the Pathologist handling the case.

Critical Values (Cont.)

Microbiology

- Positive Fungal Culture with Blastomycosis, Histoplasmosis, Coccidiomycosis or Cryptococcosis – Inpatient Only
- Positive Blood culture
- Positive AFB smear*, ** or culture *
- Positive culture for Mycobacterium tuberculosis **
- Positive CSF Gram Stain or Positive CSF cultures
- Positive Cryptococcal antigen- Inpatient Only
- Positive Group B strep antigen (CSF) or culture on infants 2 weeks of age
- Positive Legionella culture or antigen*
- Positive Listeria monocytogenes culture (CSF, Blood)
- Positive Neisseria meningitidis (CSF, Blood only) – *must* call to doctor and floor.
- Staphylococcus aureus that is intermediate or resistant to vancomycin (VISA/VRSA)
- Positive Clostridium difficile toxin- Inpatient Only
- Bioterrorism agent or emerging infection
- Positive Candida auris – Floor and Infection Prevention
- Positive Measles – Inpatient and Outpatient, Infection Prevention for Inpatient only

*After office hours call in AM
**If unable to contact a responsible licensed caregiver contact Infection Control and the Oakland County Health Department, TB Control Division
***Contact Sendout Laboratory Department for complete list

Trinity Health Michigan Laboratory Visual Aid

READ BACK OF CRITICAL LABORATORY VALUES

Read back of critical values is a Joint Commission requirement as one of their National Patient Safety Goals:

"Improve the effectiveness of communication among caregivers."

Organizations are required to "read back" verbal or telephone orders and critical test results to ensure accuracy.

See the Critical Laboratory Results policy for complete details.

FOR ALL CRITICAL LABORATORY RESULTS:

Laboratory Technologist will provide:

- Patient Name, First and Last
- Date of Birth
- Test Name and Critical Lab Result
- Technologist full name
- Technologists must document the read back and full name & title of the licensed care giver receiving the critical lab value in the Laboratory Information System within 15 minutes.

RN or Licensed Caregiver will read back:

- Their full name and title
- Patient Name, First and Last
- Date of Birth
- Test Name and Critical Lab Result
- Document the critical lab result in the EMR* or approved form
- Notify the physician within 45 minutes of receiving the critical lab value.

*Electronic Medical Record

LABORATORY: ALL PROCEDURE: ALL	CREATED: C. Yonke REVISED: 02/01/2024	Trinity Health

SPECIMEN ACCEPTANCE AND REJECTION

The intent of the laboratory is to provide the most accurate and reliable test results possible. This depends on proper specimen collection, handling, and transport. The laboratory makes every effort to provide a timely and accurate test result. If a specimen is unsatisfactory for testing, the laboratory will cancel the test or may contact the physician's office or floor for follow-up.

- Clotted specimen
- QNS (insufficient specimen)
- Hemolyzed specimen
- Incorrect specimen container or collection tube
- Specimen improperly collected.
- Specimen not transported properly.
- Stability exceeded.
- The specimen received without an order.
- No diagnosis code given.
- Test requested - No specimen received.

Please note that any specimen submitted in unsanitary condition is dangerous to laboratory personnel and may not be accepted for testing. Be sure to follow the specimen guidelines for handling and transporting specimens.

If a test is cancelled for any of the reasons above, Th cancellation will be documented in Epic. A new specimen and new order should be submitted.

UNLABELED AND INCOMPLETELY LABELED SPECIMENS

Occasionally, specimens are delivered to the laboratory without a complete patient ID, with incorrect patient identification or without any patient identification. Identification errors are classified as minor or major.

MINOR IDENTIFICATION ERROR:

DEFINITON	A minor change to the first or last name that does not change the patient's identity or an acceptable patient alias or nickname. Examples: • Spelling error • Last name, first initial • Last name, nickname • Last names change due to marital status.
PROCEDURE	• **Inpatients:** The specimen will be recollected if a replaceable* sample. • **Outpatients:** For replaceable* samples, the lab will use other acceptable identifiers to try and resolve the discrepancy. The lab may contact the collector/provider office to obtain the correct information. • Test information will not be released until the minor ID issue is satisfactorily resolved. The test will be cancelled if the discrepancy cannot be resolved, or the provider fails to respond to laboratory communications regarding the mislabeled sample. • Any test cancellation will be documented in the chart/report. • Specimens must be recollected and a new order submitted if the discrepancy cannot be resolved. • Specimens not processed will be saved for 7 days.
EXCEPTION	An irreplaceable specimen may be processed after the provider signs off on the Specimen Consent form.
EXCEPTION	**BLOOD BANK SPECIMENS MUST ALWAYS BE RECOLLECTED.**

MAJOR IDENTIFICATION ERROR:

DEFINITION	A discrepancy in patient name such that it can be interpreted as a completely different patient or an incorrect Epic MRN, or DOB. Examples: • Unlabeled specimen • Multiple spelling errors • Discrepancy between name on order and name on specimen • The specimen has only initials
PROCEDURE	• The specimen will not be processed, and the test will be cancelled. • The specimen must be recollected and a new order submitted. • Specimens not processed will be saved for 7 days.
EXCEPTION	An irreplaceable* may be processed after the provider signs off on the Specimen Consent form.
EXCEPTION	**BLOOD BANK SPECIMENS MUST ALWAYS BE RECOLLECTED.**

***Replaceable Specimens:** Blood (not blood culture), sputum, voided/clean catch urine, pap smears, swabs from superficial sites (cervix & oral cavity),

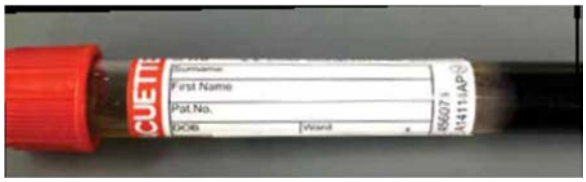
***Irreplaceable Specimens;** Surgical biopsy, non-gyn cytology (except voided/clean catch urine & sputum), swabs from deep tissue sites, and CSF.

Contact the Laboratory for the full policy on mislabeled and unlabeled specimens.

Trinity Health Michigan Laboratory Visual Aid

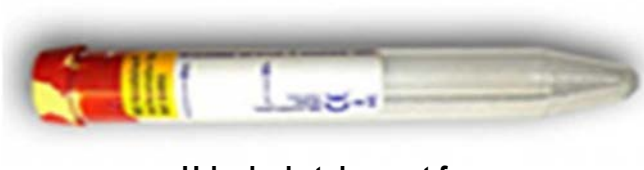
COMMON REASONS FOR SPECIMEN REJECTION

UNLABELLED SPECIMEN

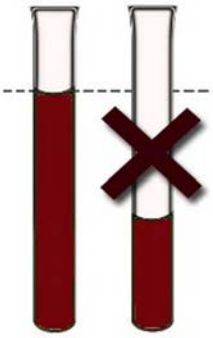


MISLABELLED SPECIMEN

WRONG TUBE OR TRANSPORT MEDIA



Urinalysis tube sent for
Urine Culture

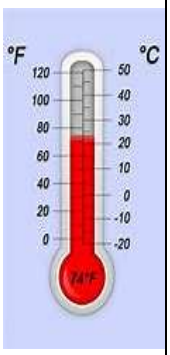


QNS/ INSUFFICIENT VOLUME

HEMOLYZED OR CLOTTED SAMPLE

BROKEN OR LEAKING SPECIMEN

STABILITY EXCEEDED OR INCORRECT TEMPERATURE DURING TRANSPORT/STORAGE

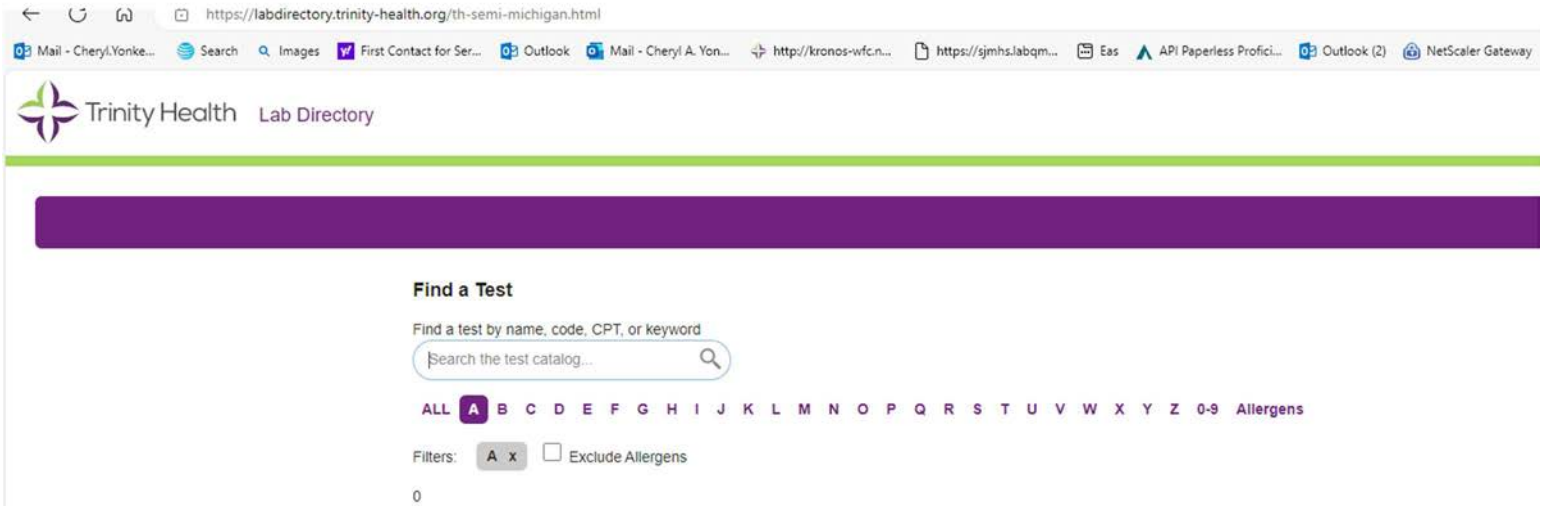


MISC. REASONS: EXPIRED TUBE, WRONG SOURCE, CONTAMINATED, LIPEMIA, SAMPLE SENT IN SYRINGE, OTHERS

6. TEST DIRECTORY

Epic/Beaker users should use the Epic Procedure Catalog to obtain detailed test information, for those without access to Epic/Beaker, a list of Laboratory Tests is available at the address below. It provides a searchable table of all tests arranged in alphabetical order according to their most common name. In addition, some tests are also listed by their most commonly known synonyms. Test order name, collection container, storage for transport, CPT, test methodology and other information are provided.

For convenience in ordering, some test panels are available. Refer to the test requisition or contact your local laboratory for orderable test panels.



https://labdirectory.trinity-health.org

REFERENCE LABORATORIES

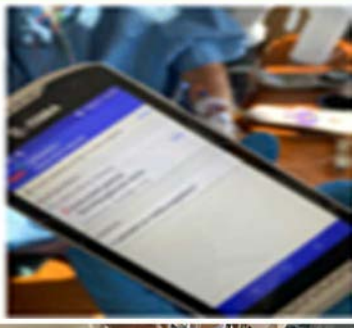
Specialized testing may be sent to a reference laboratory. Reference laboratories currently utilized by Trinity Health Michigan Laboratories include:

- Warde Medical Laboratories
- Quest Diagnostics
- ARUP Laboratories
- MAYO Clinical Laboratories
- LabCorp
- Michigan Department of Public Health and Human Services
- University of Michigan Laboratories

APPENDIX A
INPATIENT SPECIFIC INFORMATION

PPID-POSITIVE PATIENT IDENTIFICATION IN EPIC

1. Scan the patent hospital ID wristband



2. Tess that need to be collected will be in Rover. Draw your specimens.

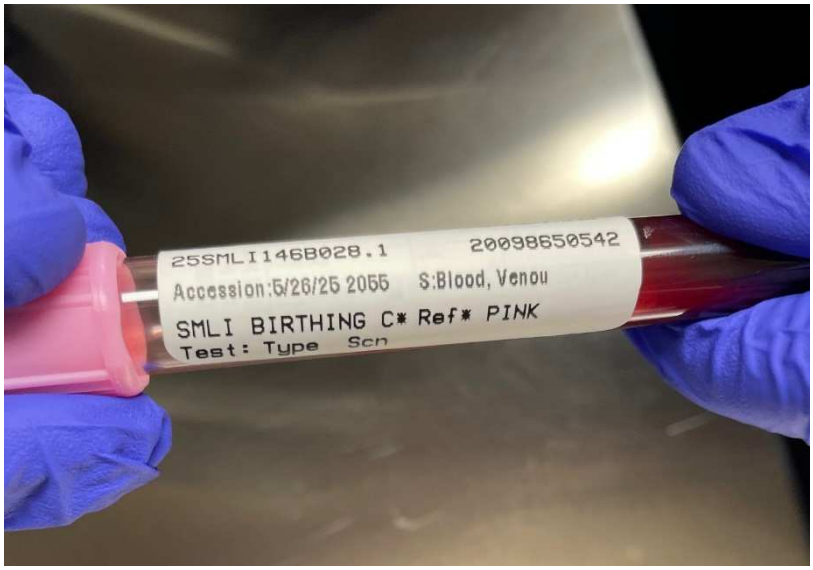
3.Scan the patient's hospital ID wristband again. Labels will print.

4. Label your specimens

5. Scan all labelled specimens. This step documents the collection date and time and collector name in Epic.

Blood Bank PPID
Positive Patient Identification

Blood Bank Specimens are labelled with your Laboratory Beaker Label.
Collection must be done at Bedside.
Specimens must be in “Collected “status when received in the laboratory or it will be **rejected** as PPID has not been followed.
Specimens with Overrides will be **rejected** as PPID has not been followed.



Blood Bank Downtime

- **Blue Armband MUST be used during Downtime.**
- Label the Blood Bank Armband with a demographic label and seal.
- Blood bank tube should be labelled with demographic label, B4 label from blue armband, date/time of draw with first initial/ last name of nurse.
- Downtime form should accompany the specimen.

APPENDIX B
OUTPATIENT-SPECIFIC INFORMATION

ICD-10 CODES

Due to requirements of third-party payers such as Medicare and Blue Cross/Blue Shield, physicians must include the sign, symptom, or if known, the diagnosis that prompted the order for laboratory outpatient testing. When the actual numeric code is provided, there is less chance for transcription and coding errors. Diagnosis information must be submitted for all tests ordered as documentation of the medical necessity of the service.

ICD-10 DIAGNOSIS CODING FOR SCREENING TESTS

The diagnosis code placed on the claim should reflect the reason for the test. If the intent of the test is for screening purposes, use the appropriate V code in the ICD-10-CM coding system, regardless of the finding. For example, when a screening laboratory test gives in abnormal finding, the test should be assigned the ICD-10-CM diagnosis for “why” the test was ordered, not the diagnosis indicated by the finding.

STANDING ORDERS

Standing orders are effective for six months. To meet compliance regulations, all orders are required to have:

1. Date (include expiration date)
2. Physician signature
3. Diagnosis or ICD-10 code

A written signed and dated standing order will expire after 6 months; the laboratory will be unable to provide services with an expired date. If a standing order does not meet the medical necessity criteria for the diagnosis provided, then appropriate ABN procedures must be followed.

Your cooperation and compliance with this regulation is appreciated.

ADVANCED BENEFICIARY NOTICE (ABN)

An ABN is a written notification required by Medicare. The form should be utilized before services are furnished, as Medicare is likely to deny payment. ABN’s allow beneficiaries to make informed consumer decisions about receiving lab tests which they may have to pay out of pocket, and to be more active participants in their own health care treatment decisions. If it is expected that payment for laboratory tests (listed on ABN) will be denied by Medicare, you should advise the beneficiary that he/she will be personally and fully responsible for payment. An ABN should be used every time it is determined Medicare will deny payment. When using an ABN please indicate the test(s) that were ordered. An explanation should be given to the patient that Medicare may not pay. The patient should

review the form, select an option, and then sign the form. One copy should be sent to the laboratory (attached to the request form), and the patient retains the other.

TRINITY HEALTH MICHIGAN CLINICAL LABORATORIES
ANN ARBOR, BRIGHTON, CHELSEA, LIVINGSTON, LIVONIA, OAKLAND
PHONE: 1-800-528-8755
https://labdirectory.trinity-health.org/th-semi-lab

Trinity Health 20-0060615

20-0060615 PATIENT | 20-0060615 PATIENT | 20-0060615 PATIENT | 20-0060615 PATIENT
20-0060615 PATIENT | 20-0060615 PATIENT | 20-0060615 PATIENT | 20-0060615 PATIENT

PATIENT INFORMATION

NAME (LAST, FIRST):
STREET ADDRESS:
CITY: STATE: ZIP:
___ MALE ___ FEMALE | DATE OF BIRTH: (MM/DD/YYYY): | PHONE: ( )
PRIMARY INSURANCE:
POLICY NUMBER:
ENROLLEE ID:
GROUP NUMBER:
SUBSCRIBER/GUARDIAN NAME (If patient is a minor - LAST, FIRST NAME & DOB of SUBSCRIBER):
MEDICARE/MEDICAID NUMBER: circle one ___SUBSCRIBER ___SPOUSE ___DEPENDENT

ICD-10 CODES (REQUIRED)

ACCOUNT / PROVIDER:
PROVIDER SIGNATURE: DATE:
COPY TO: (PROVIDER FIRST NAME, LAST NAME, ADDRESS, PHONE OR FAX NUMBER REQUIRED)

SPECIMEN COLLECTED ON:
DATE:
TIME:
COLLECTED:
VERIFIED BY:
( )
( )

___ STAT RESULTS
___ CALL RESULTS
___ FAX RESULTS

MEDICARE / MEDICAID PATIENTS: Medicare / Medicaid will pay for certain tests only if a "Medicare / Medicaid payable" diagnosis code is provided by the physician. If a payable diagnosis is provided, the patient will be asked to sign an Advanced Beneficiary Notice (ABN) allowing TRINITY HEALTH to bill the patient.

PANELS / PROFILES: (CHECK BOX)

LAB15	Basic Metabolic Panel
LAB17	Comprehensive Metabolic Panel
LAB16	Electrolyte Panel
LAB20	Hepatic Function Panel
LAB551	Hepatitis Acute Panel
****	Lipid Panel (No Reflex)
LAB5162	Lipid Panel with Reflex to Direct LDL
LAB19	Renal Function Panel

HEMATOLOGY: (CHECK BOX)

LAB295	CBC with Differential
LAB294	CBC (No Differential)
LAB322	Erythrocyte Sedimentation Rate, (ESR)
****	Pathologist Evaluation

COAGULATION: (CHECK BOX)

LAB320	PT/INR
LAB325	PTT
LAB314	Fibrinogen

BLOOD BANK: (CHECK BOX)

LAB995	ABO Rh (Blood type)
LAB278	Antibody Screen
LAB276	ABO Rh and Antibody Screen
LAB275	Antibody Titer
LAB274	DAT (Direct Antiglobulin Test)

Transfusion Date:
# of units:
Transfusion Location:

OBSTETRICAL TESTS: (CHECK BOX)

****	Prenatal Panel
LAB143	HCG, Beta Quantitative
LAB437	HCG Urine Qualitative
LAB692	Alpha Fetoprotein Maternal
LAB560	Quad Screen

CHEMISTRY/IMMUNOLOGY: (CHECK BOX)

LAB45	Albumin
LAB112	Alkaline Phosphatase
LAB559	Alpha Fetoprotein Tumor Marker
LAB132	ALT (SGPT)
LAB131	AST (SGOT)
LAB48	Amylase
LAB146	ANA (Ab with Reflex to 7 Connective Tissue Disease Antibodies
LAB648	Anti-DNA Antibody, Double Stranded
LAB52	Bilirubin, Direct
LAB50	Bilirubin, Total
LAB106	BNP (B-Type Natriuretic Peptide)

CHEMISTRY / IMMUNOLOGY: (CHECK BOX)

LAB140	BUN
LAB53	Calcium
LAB155	Cancer Antigen 125
LAB57	CEA (Carcinoembryonic Antigen)
LAB60	Cholesterol, total
LAB61	Cortisol
LAB149	CRP (C-Reactive Protein)
LAB150	CRP (C-Reactive Protein), High Sensitivity
LAB62	CK (Creatine Kinase)
LAB383	Creatinine, Serum
LAB524	DHEAS (Dehydroepiandrosterone Sulfate)
LAB983	Epstein Barr Virus Antibody Panel
LAB523	Estradiol
LAB68	Ferritin
LAB69	Folate
LAB66	FSH (Follicle Stimulating Hormone)
LAB65	GGT (Gamma Glutamyl Transferase)
LAB537	Glucose Tolerance Test, 1Hr, Gestational
LAB81	Glucose, Fasting
LAB82	Glucose, Random
LAB101	HDL Cholesterol
LAB90	Hemoglobin A1C (Glycohemoglobin)
LAB2900	Hemoglobin Electrophoresis
LAB1242	Hepatitis B Core Antibody, Total
****	Hepatitis B Surface Antibody
LAB471	Hepatitis B Surface Antigen
LAB4450	Hepatitis C Antibody with Reflex to Molecular
LAB4477	HIV 1, 2 Antibody P24 Antigen, Screen
LAB4476	HIV 1, 2 Antibody P24 Antigen, Diagnostic
****	Homocysteine, Serum / Plasma
LAB4452	HSV IgG/IgM
LAB74	IgE
LAB1174	Immunofixation Electrophoresis, Serum
LAB166	Immunoglobulins, GAM
LAB575	Insulin
LAB64	Iron
LAB6951	Iron Binding Capacity with Transferrin Saturation
LAB56	LDH (Lactate Dehydrogenase)
LAB102	LDL Cholesterol, Direct
LAB86	Lead
LAB99	Lipase
LAB67	LH (Luteinizing Hormone)
LAB103	Magnesium
LAB482	Mononucleosis Screen
LAB160	Mumps IgG Antibody

CHEMISTRY / IMMUNOLOGY: (CHECK BOX)

LAB108	Parathyroid Hormone Intact
LAB113	Phosphorus
LAB114	Potassium
LAB115	Prealbumin
LAB529	Progesterone
LAB531	Prolactin
LAB116	PSA (Prostate Specific Antigen), Screen
LAB4009	PSA (Prostate Specific Antigen), Diagnostic
LAB171	PSA (Prostate Specific Antigen), Free and Total
LAB119	Protein Electrophoresis, Serum
LAB118	Protein, Total
LAB206	Rheumatoid Factor
LAB490	Rubella Antibody IgG
LAB8418	Syphilis Antibody Treponema Pallidum Ab with Reflex to RPR
LAB124	Testosterone, Total
LAB5558	Testosterone, Free
LAB129	TSH (Thyroid Stimulating Hormone)
LAB4049	TSH with Reflex to Free T4
LAB127	Free T4 (Thyroxine Free)
LAB137	Free T3 (Triiodothyronine Free)
LAB134	Triglycerides
LAB141	Uric Acid
LAB152	Varicella Zoster Antibody IgG
LAB67	Vitamin B12
LAB535	Vitamin D25 Hydroxy

URINE: (CHECK BOX)

LAB384	Creatinine, Random Urine
LAB689	Microalbumin Creatinine Ratio Urine
LAB439	Protein, Random Urine
LAB743	Urine Protein and Creatinine with ratio, Random Urine
LAB4869	Urinalysis with Reflex to Microscopic
LAB347	Urinalysis with Reflex to Microscopic and Culture

FECES: (CHECK BOX)

LAB397	Helicobacter Pylori Antigen, Stool
LAB4645	Ova and Parasites

TOXICOLOGY: (CHECK BOX)

LAB21	Carbamazepine (Tegretol®)
LAB23	Digoxin (Lanoxin®)
LAB4290	Drug Abuse Screen Urine 8C GCMS
LAB4850	Drug Abuse Screen Urine 9C GCMS
LAB4848	Drug Abuse Screen Urine 10C GCMS
LAB29	Lithium
LAB31	Phenytoin (Dilantin®)
LAB24	Valproic Acid (Depakote®)
LAB40	Vancomycin, Random
LAB39	Vancomycin, Trough

**** SITE SPECIFIC TEST CODE ****

****SITE SPECIFIC SPECIMEN **** OA=LAV / AA= SST

MICROBIOLOGY: ALL TESTS INCLUDE A SENSITI... WHEN INDICATED (CHECK BOX)

SOURCE

****	Acid Fast/AFB Culture with Smear
LAB233	Anaerobic Culture
LAB462	Blood Culture
LAB0915	Body Fluid Culture with Gram Sta...
LAB257	C. Difficile PCR
****	Chlamydia GC Molecular Study
****	GC only Molecular Study
****	Chlamydia only Molecular Study
LAB342	Ear Culture RT or LT (CIRCLE ...
LAB343	Eye Culture RT or LT (CIRCLE ...
LAB4413	Fungal Culture, Hair, Skin, Nails
LAB7198	Fungal Culture, Other Source
LAB7594	KOH Prep / Fungal Stain Skin, Hair, Na...
LAB8621	Genital Culture with Gram Stain
LAB4502	Genital Screen Culture: GROUP B ST...

PENICILLIN ALLERGY: YES or NO (CIRCLE ON...

LAB235	Culture, Screen: N. Gonorrhea
LAB342	Culture, Screen: Yeast
****	BV (Bacterial Vaginosis) Gram Sta...
LAB572	H. Pylori Breath test
LAB4403	Herpes Simplex Virus 1/2 PCR
LAB7609	Influenza A/B Rapid Molecular
LAB234	MRSA Screening, Culture
LAB5194	Occult Blood, Screen
LAB5193	Occult Blood, Diagnostic
LAB6831	Respiratory Culture with Gram sta...
LAB223	Stool Culture
LAB236	Strep, A Culture (Throat)
LAB7999	Tissue Culture with Gram Stain
LAB4031	Trichomonas Antigen (Vaginal only) (AASMM...
LAB921	Trichomonas Vaginalis RNA / APTI...
LAB239	Urine Culture
LAB4835	Vaginitis Screen / AFFIRM™ (SJMO...
LAB7839	Wound Culture with Gram Stain

ORDER OF BLOOD DRAW

1	BLD CULT
2	BLUE
3	NAVY PLN
4	RED
5	GOLD
6	MINT
7	LAV
8	PINK
9	NAVY EDTA
10	GREY

BLUE		LAV		SST	
RED		PINK		MINT	
NAVY EDTA		NAVY PLN		FROZEN	
TOTAL FIX		APTIMA™		AFFIRM®	
UR TIGER		UR 24H		UR CUP	
VTM		STOOL		UNSPUN	
GREEN					
YEL(ACD)					
SWAB					
UR GREY					
BLD CULT					
OTHER					

ADDITIONAL TESTS/COMMENTS:

SEE PAGE TWO FOR SPECIMEN REQUIREMENTS

LABORATORY

TRINITY HEALTH MICHIGAN CLINICAL LABORATORIES
ANN ARBOR, BRIGHTON, CHELSEA, LIVINGSTON, LIVONIA, OAKLAND
PHONE: [illegible]
[illegible]

MICROBIOLOGY SPECIMEN COLLECTION CONTAINER GUIDE

CUP	ACID FAST/AFB CULTURE w/ STAIN	CUL	EYE CULTURE	CUP	LEGIONELLA ANTIGEN, URINE	FOB	STOOL OCCULT BLD SCREEN	VTM	VIRUS CULTURE/ PCR COMP
AC	ANAEROBIC CULTURE	CUP	FUNGAL CULTURE (HAIR, SKIN, NAILS)	CUL	MRSA SCREEN	FOB	STOOL OCCULT BLD DIAGNOSTIC	CUL/ CUP	WOUND CULTURE w/ GRAM STAIN
CUP	ARTHROPOD/ INSECT ID	CUP	FUNGAL CULTURE (OTHER SOURCE)	TOT PG	OVA AND PARASITE EXAM	CUL	THROAT CULTURE (GR A STREP)	CUL/ CUP	YEAST SCREEN, GENITAL
BC	BLOOD CULTURE	CUP	KOH PREP/ FUNGAL STAIN	TOT PG	PARASITE ANTIGEN / GIARD + CRYPTO	CUL	THROAT, RAPID STREP SCREEN	CUL/ CUP	YEAST SCREEN, NON GENITAL
AFL/BF/CUP	BODY FLUID CULTURE	CUL	GROUP B STREP (GBS) SCREEN RECTOVAGINAL	PIN	PINWORM PREPARATION	CUP	TISSUE CULTURE	CUL/ CUP	AEROBIC CULTURE, OTHER
CUP	C DIFFICILE TOXIN (2 STEP)	CUL/ CUP	GENITAL CULTURE	CUP	RESPIRATORY CUL w/ GRAM STAIN	CUL	TRICHOMONAS [illegible]		
[illegible]	CHLAMYDIA GC MOLECULAR	CUL/ CUP	GRAM STAIN	VTM	RSV, RAPID	US/CUP	URINE CULTURE		
CUL	EAR CULTURE	VTM	INFLUENZA, RAPID MOLECULAR	STO	STOOL CULTURE	SPT	BACTERIAL VAGINITIS BY MVP (XpertSwab)		

KEY FOR TUBE TYPES

AC	ANAEROBIC SWAB	CSF	CSF/LP TUBE	LAV	LAVENDER TUBE	ORG	ORANGE TUBE	TAN	TAN TUBE
AFL	AMNIOTIC FLUID	CUL	AEROBIC SWAB	LEU	[illegible] TUBE	PAP	PAP VIAL	TOT PG	[illegible]
XPT	XpertSwab	CUP	STERILE CUP	MG	MICROTAINER GREEN	PAR	PARASITE KIT	UA	URINE TIGER TUBE
AP	APTIMA SWAB	FFN	FETAL FIBRONECTIN TUBE	MINT	MINT GREEN/PLASMA	PIN	PINWORM TUBE	UG	URINE GRAY TUBE
APU	APTIMA URINE	CYT	CYTOLYTE	ML	MICROTAINER LAVENDER	PNK	PINK TUBE	US	[illegible]
BC	BLOOD CULTURE	FOB	FECAL OCCULT BLOOD VIAL	MR	MICROTAINER RED	RED	RED TUBE	VTM	VIRAL TRANSPORT MEDIA
BF	BODY FLUID CONT	FOR	FORMALIN VIAL	MUT	MYCOPLASMA/UREAPLASMA	SST	SST TUBE	YEL	YELLOW TUBE
BLU	LIGHT BLUE TUBE	GRN	DARK GREEN TUBE	NAV EDTA	NAVY TUBE w/ EDTA	STO	STOOL TRANSPORT VIAL	24HR	24HR URINE JUG
CLR	CLEAR (URINE)	GRY	GRAY TUBE	NAV PLN	NAVY PLAIN TUBE	SYR	SYRINGE w/CAP		

MEDICARE / MEDICAID APPROVED PANELS

BMP: BASIC METABOLIC PANEL Na, K, Cl, CO2, BUN, CALCIUM, CREATININE, GLUCOSE LAB[illegible]	**ACUTE HEPATITIS PANEL:** HEPATITIS A ANTIBODY IgM, HEPATITIS B CORE ANTIBODY IgM, HEPATITIS B SURFACE ANTIGEN, HEPATITIS C ANTIBODY LAB[illegible]
CMP: COMPREHENSIVE METABOLIC PANEL Na, K, Cl, CO2, BUN, CALCIUM, CREATININE, GLUCOSE, TOTAL BILIRUBIN, ALKALINE PHOSPHATASE, AST, ALT, ALBUMIN, TOTAL PROTEIN, A/G RATIO LAB[illegible]	**LIPID PANEL: NO REFLEX TO LDLD:** TOTAL CHOLESTEROL, TRIGLYCERIDES, HDL, LDL CALCULATED, CHOL/HDL RATIO, CHD INTERPRETATION LAB[illegible]
ELECTROLYTES Na, K, Cl, CO2 LAB[illegible]	**LIPID PANEL: WITH REFLEX TO LDLD:** TOTAL CHOLESTEROL, TRIGLYCERIDES, HDL, LDL CALCULATED, CHOL/HDL RATIO, CHD INTERPRETATION, REFLEX LDLD (DIRECT/ MEASURED) IF TRIGLYCERIDES >400 MG/dL LAB[illegible]
HFP: HEPATIC FUNCTION PANEL TOTAL PROTEIN, ALBUMIN, A/G RATIO, TOTAL BILIRUBIN, DIRECT BILIRUBIN, AST, ALT, ALKALINE PHOSPHATASE LAB[illegible]	**RENAL PANEL:** Na, K, Cl, CO2, BUN, CALCIUM, CREATININE, GLUCOSE, ALBUMIN, PHOSPHORUS LAB[illegible]

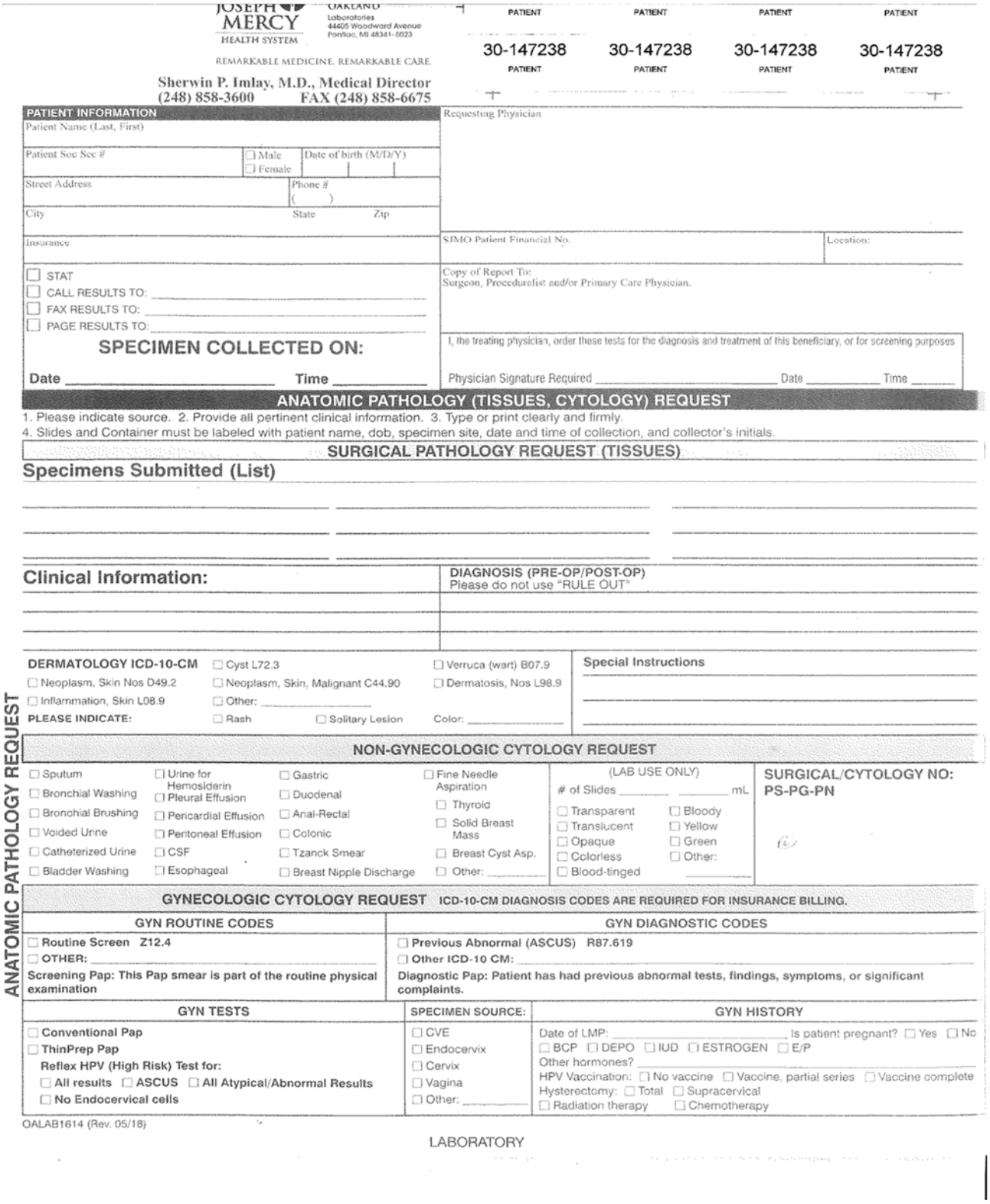
ADVANCED BENEFICIARY NOTICE
MEDICARE / MEDICAID PATIENTS
Medicare / Medicaid will pay for certain tests only if a "Medicare / Medicaid payable" diagnosis code is provided by the physician. If a payable diagnosis is not provided, the patient will be asked to sign an Advanced Beneficiary Notice (ABN) allowing TRINITY HEALTH to bill the patient.

COMMON PROFILES

CBC: WBC, RBC, HGB, HCT, MCV, RDW, MCHC, PLATELET COUNT LAB[illegible]	**URINE DRUG SCREEN [illegible] PANEL, SCI MS:** AMPHETAMINE, BARBITURATE, BENZODIAZEPINE, COCAINE, ETHANOL, OPIATE, PHENCYCLIDINE (PCP), CANNABIS (THC) LAB[illegible]
CBC/DIFF: CBC w/ DIFFERENTIAL: WBC, RBC, HGB, HCT, MCV, RDW, MCHC, PLATELET COUNT, DIFFERENTIAL, MANUAL DIFF IF ABNORMAL LAB[illegible]	
IRON PANEL: IRON, TIBC, % SATURATION, TRANSFERRIN LAB[illegible]	**URINE DRUG SCREEN [illegible] PANEL, SCI MS:** AMPHETAMINE, BARBITURATE, BENZODIAZEPINE, COCAINE, METHADONE, OPIATE, PHENCYCLIDINE (PCP), PROPOXYPHENE, CANNABIS (THC) LAB[illegible]
QUAD SCREEN: MSAFP, ESTRIOL, HCG, INHIBIN A, INTERPRETATION LAB[illegible]	**URINE DRUG SCREEN 10 PANEL, SCI MS:** AMPHETAMINE, BARBITURATE, BENZODIAZEPINE, COCAINE, METHADONE, ETHANOL, OPIATE, PHENCYCLIDINE (PCP), PROPOXYPHENE, CANNABIS (THC) LAB[illegible]

ORDER OF BLOOD DRAW

	1	BLD CULT
	2	BLUE
	3	NAVY PLN
	4	RED
	5	GOLD
	6	MINT
	7	LAV
	8	PNK
	9	NAVY EDTA
	10	GREY



JOSEPH MERCY HEALTH SYSTEM
OAKLAND Laboratories
44405 Woodward Avenue
Pontiac, MI 48341-5023

REMARKABLE MEDICINE. REMARKABLE CARE.

Sherwin P. Imlay, M.D., Medical Director
(248) 858-3600 FAX (248) 858-6675

PATIENT 30-147238 PATIENT | PATIENT 30-147238 PATIENT | PATIENT 30-147238 PATIENT | PATIENT 30-147238 PATIENT

PATIENT INFORMATION

Patient Name (Last, First)

Patient Soc Sec # | ☐ Male ☐ Female | Date of birth (M/D/Y)

Street Address | Phone # ( )

City | State | Zip

Insurance

Requesting Physician

SIMO Patient Financial No. | Location:

☐ STAT
☐ CALL RESULTS TO: _____
☐ FAX RESULTS TO: _____
☐ PAGE RESULTS TO: _____

Copy of Report To:
Surgeon, Proceduralist and/or Primary Care Physician.

SPECIMEN COLLECTED ON:

Date _____ Time _____

I, the treating physician, order these tests for the diagnosis and treatment of this beneficiary, or for screening purposes

Physician Signature Required _____ Date _____ Time _____

ANATOMIC PATHOLOGY (TISSUES, CYTOLOGY) REQUEST

1. Please indicate source. 2. Provide all pertinent clinical information. 3. Type or print clearly and firmly.
4. Slides and Container must be labeled with patient name, dob, specimen site, date and time of collection, and collector's initials.

SURGICAL PATHOLOGY REQUEST (TISSUES)

Specimens Submitted (List)

Clinical Information:

DIAGNOSIS (PRE-OP/POST-OP)
Please do not use "RULE OUT"

DERMATOLOGY ICD-10-CM
☐ Neoplasm, Skin Nos D49.2
☐ Inflammation, Skin L08.9
☐ Cyst L72.3
☐ Neoplasm, Skin, Malignant C44.90
☐ Other: _____
☐ Verruca (wart) B07.9
☐ Dermatosis, Nos L98.9

PLEASE INDICATE: ☐ Rash ☐ Solitary Lesion Color: _____

Special Instructions

NON-GYNECOLOGIC CYTOLOGY REQUEST

ANATOMIC PATHOLOGY REQUEST

☐ Sputum
☐ Bronchial Washing
☐ Bronchial Brushing
☐ Voided Urine
☐ Catheterized Urine
☐ Bladder Washing
☐ Urine for Hemosiderin
☐ Pleural Effusion
☐ Pericardial Effusion
☐ Peritoneal Effusion
☐ CSF
☐ Esophageal
☐ Gastric
☐ Duodenal
☐ Anal-Rectal
☐ Colonic
☐ Tzanck Smear
☐ Breast Nipple Discharge
☐ Fine Needle Aspiration
☐ Thyroid
☐ Solid Breast Mass
☐ Breast Cyst Asp.
☐ Other: _____

(LAB USE ONLY)
# of Slides _____ _____ mL
☐ Transparent ☐ Translucent ☐ Opaque ☐ Colorless ☐ Blood-tinged
☐ Bloody ☐ Yellow ☐ Green ☐ Other: _____

SURGICAL/CYTOLOGY NO:
PS-PG-PN

GYNECOLOGIC CYTOLOGY REQUEST

ICD-10-CM DIAGNOSIS CODES ARE REQUIRED FOR INSURANCE BILLING.

GYN ROUTINE CODES
☐ Routine Screen Z12.4
☐ OTHER: _____
Screening Pap: This Pap smear is part of the routine physical examination

GYN DIAGNOSTIC CODES
☐ Previous Abnormal (ASCUS) R87.619
☐ Other ICD-10 CM: _____
Diagnostic Pap: Patient has had previous abnormal tests, findings, symptoms, or significant complaints.

GYN TESTS
☐ Conventional Pap
☐ ThinPrep Pap
Reflex HPV (High Risk) Test for:
☐ All results ☐ ASCUS ☐ All Atypical/Abnormal Results
☐ No Endocervical cells

SPECIMEN SOURCE:
☐ CVE
☐ Endocervix
☐ Cervix
☐ Vagina
☐ Other: _____

GYN HISTORY
Date of LMP: _____ Is patient pregnant? ☐ Yes ☐ No
☐ BCP ☐ DEPO ☐ IUD ☐ ESTROGEN ☐ E/P
Other hormones? _____
HPV Vaccination: ☐ No vaccine ☐ Vaccine, partial series ☐ Vaccine complete
Hysterectomy: ☐ Total ☐ Supracervical
☐ Radiation therapy ☐ Chemotherapy

OALAB1614 (Rev. 05/18)

LABORATORY

Clostridium difficile Toxin A/B or Rotavirus Antigen Collection Patient Instructions

Trinity Health Oakland
44405 Woodward Avenue
PONTIAC, Michigan 48341
248-858-3600

Your physician has ordered a laboratory test which will require you to collect a stool sample.
Please follow the instructions below to ensure accurate results.

Step	Instructions
1.	Confirm the collection container is labeled correctly with: • your (the patient) first and last name, • the date and time of collection, and • your date of birth **Incorrectly or incompletely labeled specimens will not be tested.** 
2.	**Do not** use laxatives, antacids, or antidiarrheal medication for at least 48 hours before collection of the specimen. Only soft or liquid stools can be tested for C. difficile toxin.
3.	First pass urine into the toilet (if you have to).
4.	Collect the stool specimen in the container provided or place a large plastic bag/plastic wrap may be placed over the toilet opening (but under the toilet seat) and the stool specimen passed onto the plastic. **The stool specimen must not come in contact with water or urine.** **Note:** For small children having diarrhea, fasten plastic kitchen wrap to the diaper using childproof safety pins or turn the diaper inside out. After the bowel movement, remove stool from the liner and transfer it into the collection vial. Stool collected in diapers is not acceptable.
5.	Carefully unscrew the cap from the plastic collection container. Do not touch the inside of the lid or container with your fingers.
6.	Using the applicator stick, fill the container half full. **Do not** add any foreign materials such as toilet paper or plastic wrap. Collect stool from areas that look bloody, mucoid, or watery.
7.	Close the screw cap tightly.
8.	Seal the container in the zip locked section of the bag and requisition in the pouch section of the bag.
9.	Wash your hands with soap and water.
10.	Bring the container and lab requisition to the laboratory as **soon as possible** (within 18 hours). Keep the sample refrigerated/cold until it is brought to the lab. Prolonged delays will affect the test results.

Fecal Occult Blood
Patient Instructions

Trinity Health Oakland
44405 Woodward Avenue
PONTIAC, Michigan 48341
248-858-3600

Your physician has ordered a laboratory test which will require you to collect a stool sample. Please follow the instructions below to ensure accurate results.

Step	
1.	**Open the collection kit provided by your physician.**
2.	Place the collection paper inside the toilet. A piece of plastic wrap stretched over the toilet bowl may also be used.
3.	Have a bowel movement on the paper or plastic.
4.	Remove the green cap with probe from the bottle,
5.	Scrape the stool with the probe.
6.	Return the probe to the vial. Seal tightly.
7.	Complete the information on the label. Print your name, date of birth, and collect date.
8.	Package and mail immediately. The test must be received within 15 days of collection.

Ova and Parasite Examination
Patient Instructions

Trinity Health Oakland
44405 Woodward Avenue
PONTIAC, Michigan 48341
248-858-3600

Your physician has ordered a laboratory test which will require you to collect a stool sample. Please follow the instructions below to ensure accurate results.

WARNING: The preservatives in the collection containers are poisonous. Keep out of reach of children.

Step	Instructions
1	ZZConfirm the collection container is labeled correctly with: your first and last name the date and time of collection your date of birth. 
2	**Do not** use laxatives, antacids, or anti-diarrheal medication for at least a week before collecting the specimen. If these medications were used within the last week, the detection of some parasites may be compromised.
3	Collect the stool specimen in a clean wide-mouthed container (e.g., paper plate or a large plastic bag/plastic wrap may be placed over the toilet opening (but under the toilet seat) and the stool specimen passed onto the plastic. **The stool specimen must not come in contact with water or urine.** **Note:** For small children having diarrhea, fasten plastic kitchen wrap to the diaper using child proof safety pins. After the bowel movement, remove stool from the liner and transfer it into the collection vials. Alternately the diaper may be put on "inside –out" with the outer plastic next to the child's skin. Please do this at home. Stool submitted in diapers cannot be accepted for testing.
4	Carefully unscrew the cap from the plastic collection container. Do not touch the inside of the lid or container with your fingers.
5	Using the fork/spoon which is attached to the lid of the preservative container, place scoopfuls of stool into the containers especially from areas that look bloody, mucousy or watery.
6	Add stool until the liquid comes to the 'FILL LINE' on the container. Do not overfill. Mix thoroughly with the fork/spoon.
7	Do not add any foreign materials such as toilet paper or plastic wrap. . Close the screw cap tightly. If using container with preservative, shake the container several times. . Seal the container in the zip locked section of the bag. Put the Patient History Sheet and lab requisition in the pouch section of the bag.
8	**Wash your hands with soap and water.**
9	Bring the container, requisition, and Patient History Sheet to any laboratory **as soon as possible** (within 18 hours). Keep the sample at room temperature until it is brought to the lab. DO NOT refrigerate it. Prolonged delays will affect the test results.

Pinworm Collection
Patient Instructions

Trinity Health Oakland
44405 Woodward Avenue
PONTIAC, Michigan 48341
248-858-3600

Your physician has ordered a laboratory test which will require you to collect a sample for pinworm examination. Please follow the instructions below to ensure accurate results.

Step	Instructions
1.	Confirm the collection container is labeled correctly with: your (the patient) first and last name, the date and time of collection, and another identifier such as date of birth or medical record number. **Incorrectly or incompletely labeled specimens will not be tested.** 
2.	The ideal time for this procedure is early in the morning before emptying the bowels.
3.	Unscrew the cap from the container. Inside the container is a plastic paddle. One side of the paddle is coated with a non-toxic, mildly sticky material. Do not touch the sticky surface with your fingers.
4.	Using moderate pressure, press the sticky surface against the skin surrounding the anus.
5.	Place the paddle back into the container and tighten the cap.
6.	Seal the container in the zip-locked section of the bag and lab requisition in the pouch section of the bag.
7.	Wash your hands with soap and water.
8.	Bring the container and requisition to the laboratory as soon as possible. Prolonged delays will affect the test results.

Sputum Collection
Patient Instructions

Trinity Health Oakland
44405 Woodward Avenue
PONTIAC, Michigan 48341
248-858-3600

Your physician has ordered a laboratory test which will require you to collect a sputum sample. Please follow the instructions below to ensure accurate results.

Step	Instructions
1.	Confirm the collection container is labeled correctly with: •your (the patient) first and last name, •the date and time of collection, and •another identifier such as date of birth or medical record number. **Incorrectly or incompletely labeled specimens will not be tested.** 
2.	The ideal time to collect the sample is early in the morning just after getting out of bed. However, sample may be collected at any time sputum is available to be produced.
3.	Gargle and rinse your mouth with water. Sputum collection for Culture and Sensitivity — Do not use mouthwash or brush teeth with toothpaste immediately before collection.
4.	Open the container and hold it close to your mouth.
5.	Take as deep a breath as you can and cough, deeply from within the chest. Do not spit saliva into the container.
6.	The sample you cough should look thick and white, yellow, or green in color. A A minimum of 5 mLs (approx.1 tablespoon) of sample is required.
7.	Close the container lid tightly and give sample to your caregiver right away.
8.	If you are at home, seal the sample in the zip locked section of the bag and the lab requisition in the pouch section of the bag.
9.	Bring the container and lab requisition to the laboratory as soon as possible. If you are unable to return the sample to the laboratory right away, the sample can be stored in the refrigerator for up to 24 hours. Prolonged delays will affect the test results.
10	**If your doctor has ordered multiple sputum cultures, collect only one specimen per day. Bring the sample to the laboratory within 18-24 hours**

24 Hour Urine Collection
Patient Instructions

Trinity Health Oakland
44405 Woodward Avenue
PONTIAC, Michigan 48341
248-858-3600

Your physician has ordered a laboratory test which will require you to collect a sample for the pinworm examination. Please follow the instructions below to ensure accurate results.

Step	Instructions
1.	Obtain a labeled 24-Urine container from your doctor or outpatient laboratory. It should be labeled with your name, medical record number (MRN), date of birth (DOB) and the tests that have been requested by your doctor. 
2.	The 24-Urine container may contain a preservative. If it does, follow any warnings on the container label.
3.	To get started, empty your bladder as usual but do not keep this urine. Discard it. This begins your collection period. Write the time on the label.
4.	For the next 24 hours, collect all urine in the container. If even one specimen of urine is not collected, the results will not be valid, and you must start the 24-hour
5.	At the end of the 24-hour collection period, empty your bladder one last time, save the specimen in your 24-Urine container and write the final time on the label.
6.	Keep the collection container in the refrigerator during the collection period and until you return it to your doctor or lab. Make sure you have written the beginning and ending
7.	Return the sample to your doctor's office or the lab within 24 hours.

Trinity Health

TRINITY HEALTH OAKLAND LABORATORY
PHONE: 1-800-858-3600 FAX: 1-248-858-6675
https://labdirectory.trinity-health.org/th-semi-lab

DATE: _____

Please fax order to our supply line: 248-858-6085
For questions, please call: 248-858-3600
PLEASE ALLOW 3-5 DAYS FOR SUPPLY DELIVERY.

SUPPLY ORDER FORM

REQUESTING PHYSICIAN

AMT	QUANTITY	ITEM
		BLOOD COLLECTION
	BOX/100	BENZALKONIUM WIPES
	BOX/100	BANDAIDS
	BOX/50	BANDAIDS - CHILDRENS
	BOX/200	ALCOHOL WIPES
	PKG	GAUZE 2X2
	BOX/250	TOURNIQUETS
	BAG/250	VACUTAINER HOLDER (single use)
		NEEDLES
	BOX/100	MULTI 21 X 1 1/4
	BOX/100	MULTI 22 X 1 1/4
	BOX/50	BUTTERFLY 21 G
	BOX/50	BUTTERFLY 23 G
		TUBES
	BOX/100	BLUE 2.7 CC CITRATE
	BOX/100	PINK - HEPARIN 6 CC
	BOX/100	GRAY - FLUORIDE 6 CC
	BOX/100	LAVENDER - EDTA 4 CC
	BOX/100	RED - PLAIN 6 CC
	BOX/100	SST 5 CC
	EA	NAVY - PLAIN
	EA	NAVY - EDTA
	EA	TB GOLD KITS
	BAG/50	MICROTAINER - EDTA
	BAG/50	MICROTAINER - GREEN
		CYTOLOGY / SURGICAL PATHOLOGY
	BOX/25	THIN PREP PAP VIALS
	BOX/24	FORMALIN - 20 ml
	BOX/24	FORMALIN - 60 ml

AMT	QUANTITY	ITEM
		MICROBIOLOGY / URINE
	BAG/50	CULTURETTE, AEROBIC
	EA	CULTURETTE, ANAEROBIC
	EA	VIRAL
	EA	GEN PROBE
	BOX/10	AFFIRM
	SET/2	BLOOD CULTURE BOTTLES
	BAG/100	STERILE CONTAINER
	BOX/50	URINE CULTURE (transport)
	BOX/50	CLEAN CATCH KIT
	EA	URINALYSIS TUBES
	EA	24 HR URINE CONTAINERS
	BX	PEDIATRIC URINE BAG
	EA	URINE HAT
	EA	URINE STRAINER
	BOX/20	FOB KITS
	EA	STOOL, ENTERIC PLUS (stool culture)
	BOX/10	STOOL, PARAPAK (O & P)
		REQUISITION FORMS
	EA	GENERAL REQUISITIONS
	EA	CYTO/PATH REQUISITIONS
	EA	SPECIAL REQUISITION
	EA	SUPPLY ORDER FORMS
		MISCELLANEOUS
	BAG/150	BAG, LARGE - COURIER
	BAG/100	BAG, BIOHAZARD - SPECIMEN
	PACK/6	GLUCOLA - 100 gram ORANGE
	PACK/6	GLUCOLA - 75 gram ORANGE
	PACK/6	GLUCOLA - 50 gram ORANGE
	EA	GLUCOMETER CONTROLS
	EA	GLUCOMETER STRIPS

ADDITIONAL SUPPLIES NOT LISTED ABOVE

WHITE – Lab Copy PINK – Client Copy

REFERENCES

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- SoftTech, SEMI procedures Phlebotomy and Urine Collection. 2024.
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