

Specimen Collection Information

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Specimen Identification



BD Vacutainer® Order of Draw for Multiple Tube Collections

Designed for Your Safety

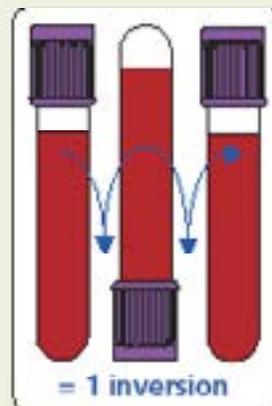
Reflects change in NCCLS recommended Order of Draw (NCCLS H3-A5, Vol 23, No 32, 8.10.2)

Closure Color	Collection Tube	Mix by Inverting
BD Vacutainer® Blood Collection Tubes (glass or plastic)		
	• Blood Cultures - SPS	8 to 10 times
	• Citrate Tube*	3 to 4 times
or	• BD Vacutainer® SST™ Gel Separator Tube	5 times
	• Serum Tube (glass or plastic)	5 times (plastic) none (glass)
	• Heparin Tube	8 to 10 times
or	• BD Vacutainer® PST™ Gel Separator Tube With Heparin	8 to 10 times
or	• EDTA Tube	8 to 10 times
	• Fluoride (glucose) Tube	8 to 10 times

*When using a winged blood collection set for venipuncture and a coagulation (citrate) tube is the first specimen tube to be drawn, a discard tube should be drawn first. The discard tube must be used to fill the blood collection set tubing's "dead space" with blood but the discard tube does not need to be completely filled. This important step will ensure maintenance of the proper blood-to-additive ratio of the blood specimen. The discard tube should be a nonadditive or coagulation tube.

Note: Always follow your facility's protocol for order of draw

Handle all biologic samples and blood collection "sharps" (scalars, needles, luer adapters and blood collection sets) according to the policies and procedures of your facility. Obtain appropriate medical attention in the event of any exposure to biologic samples (for example, through a puncture injury) since they may transmit viral hepatitis, HIV (AIDS), or other infectious diseases. Utilize any built-in used needle protector if the blood collection device provides one. BD does not recommend recapping used needles, but the policies and procedures of your facility may differ and must always be followed. Discard any blood collection "sharps" in biohazard containers approved for their disposal.



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SPECIMEN COLLECTION BY VENIPUNCTURE

PURPOSE:

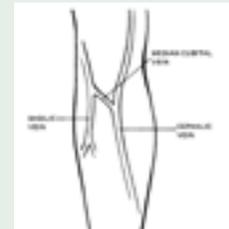
To provide instructions for obtaining a blood sample by Venipuncture.

MATERIALS:

SUPPLIES	EQUIPMENT
<ul style="list-style-type: none">Alcohol prep pad1-10% povidone-iodine pads for blood culture or ETOH collectionGauzeBlood collection tubes <p>*All blood collection tubes and supplies must be used within their expiration date and stored per manufacturer's instructions.</p>	<ul style="list-style-type: none">Blood collection needles or butterfly collection setGlovesTourniquetSharps containerMicropore tape or adhesive bandages

PROCEDURE:

- Identify the patient using at least two standard patient identifiers (name, date of birth, medical record number)
- Wash your hands.
- Organize supplies and equipment and put on gloves
- Extend the patient's arm to form a straight line between the shoulder and the wrist. Use a pillow if necessary to support the arm.
- Apply a tourniquet around the upper arm, three to four inches above the venipuncture site.
- Instruct the patient to make a fist to make the veins more prominent. Do not allow hand-pumping which can cause changes in the concentration of certain analytes in the blood.
- Select a collection site. See "Notes" below for additional considerations when choosing a site. Under normal circumstances, venipuncture should be limited to the three veins located in the antecubital fossa: the median cubital, the cephalic, and the basilic vein.
- Release the tourniquet
- Clean and dry the site
- Reapply the tourniquet and perform venipuncture
- Collect Vacutainer® tubes in the following order:
 - Blood cultures
 - Blue top (citrate)
 - Serum tube with or without clot activator, with or without gel
 - Green top (heparin)
 - Lavender (EDTA)
 - Other tubes, i.e. grey (sodium fluoride), black (ESR)Mix additive tubes as they are collected
- After removing the last tube from the holder, release the tourniquet.
- Place gauze over the needle, remove needle and apply pressure to the site
- Close the needle using the safety device.
- Dispose of the needle and hub as one unit in an approved sharps container.
- Examine the site and apply a bandage.
- Label specimens at the bedside.
- Dispose of remaining supplies
- Remove gloves and wash hands



SPECIMEN COLLECTION BY VENIPUNCTURE



NOTES:

- Special considerations when choosing a site for venipuncture
 - When antecubital veins are not acceptable or unavailable, veins on the back of the hand are acceptable for venipuncture. Veins on the underside of the wrist must not be used, as nerves and tendons are close to the surface of the skin in this area.
 - IV lines – Specimens should not be collected from an arm with an IV site unless there is no other alternative and the tests are critical to the care of the patient, as determined by the physician or nurse. In such cases, blood drawn distal to (below) the IV site will be accepted using the procedure below. Blood draws above an IV site are not recommended even with the IV turned off.
 - The IV should be turned off (by a nurse) for two minutes.
 - Place a tourniquet below the IV line.
 - Draw the blood below the IV site.
 - Fistula – a fistula is an artificial shunt connection done by a surgical procedure to fuse the vein and artery together. It is to be used for dialysis only. An arm with a fistula should not be used for blood collection, unless permission is received from the physician. The use of a tourniquet may lead to complications.
 - Alternative sites such as ankles or lower extremities, must not be used without permission of the physician. There is a potential for significant medical complications (phlebitis, thrombosis, tissue necrosis.)
 - Scarring - Avoid healed burn areas
 - Mastectomy – permission from a physician must be obtained before drawing blood from the side on which a mastectomy was performed because of the potential for complications due to lymphostasis.
 - Hematoma – specimens collected through a hematoma may cause erroneous test results.
- The tourniquet should be released after no more than one minute during specimen collection to prevent erroneously high values for protein-based analytes, packed cell volume and other cellular elements.
- Adhesive bandages are not to be used on children under the age of two (2).
- If only a coagulation tube is drawn, for routine testing (PT and PTT) the first tube drawn may be used for testing. For special testing, (Factor VIII) a discard tube should be drawn first.

NOTE: Life Labs explicitly prohibits the recapping, purposeful bending, breaking, removal from disposable syringes or other manual manipulation of needles.

REFERENCES:

Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture – Sixth Edition. CLSI. October 2007

Phlebotomy Workbook for the Multiskilled Healthcare Professional. Strasinger and DiLorenzo. F.A. Davis. 1996

RELATED DOCUMENTS:

- Life Laboratories Patient Identification Policy
- Life Laboratories Specimen Identification Policy
- Unsuccessful Venipuncture Policy

SPECIMEN COLLECTION BY SKIN PUNCTURE



PURPOSE:

To provide instructions for obtaining a blood sample by skin puncture.

MATERIALS:

SUPPLIES	EQUIPMENT
<ul style="list-style-type: none">Alcohol pre padGauzeMicrocollection TubesSharps Container	<ul style="list-style-type: none">Skin Puncture DeviceHeel Warmer Pack

PROCEDURE:

1. Identify the patient
2. Organize supplies and equipment, put on gloves
3. Select a collection site; warm if necessary
4. Clean and dry the site
5. Perform puncture and drop puncture device into Sharps container
6. Wipe away first drop of blood
7. Collect the hematology specimen first, followed by the other additive specimens
 - Specimens requiring Serum are last
 - Mix the specimens as necessary
8. Apply pressure until bleeding has stopped
9. Label specimen
10. Dispose of remaining supplies
11. Remove gloves and wash hands

NOTES:

- Acceptable sites are limited to the palmar surface of the finger and, in children less than one year old, specific areas of the heel.
- Microcollection devices containing anticoagulants must be mixed immediately to prevent clotting. Care must be taken not to overfill since clot formation can occur. Under filling can result in changes in cell morphology due to the effect of the anticoagulant.
- Holding the puncture site downward and applying gentle, intermittent pressure to the surrounding tissue may enhance blood flow from the puncture site. Strong repetitive pressure (milking) must not be applied; it may cause hemolysis or tissue fluid contamination of the specimen.
- After blood has been collected from an infant's heel, the foot should be elevated above the body and a clean gauze pad pressed against the puncture site until bleeding stops.
- Adhesive bandages are not to be used on children under the age of two (2).
- Skin puncture must not be performed
 - On the central area of an infants foot
 - Fingers of newborns
 - Swollen or previously punctured sites
- When sampling from a finger, the puncture should be made across the fingerprint and at a 45* angle to the midline.

REFERENCES:

Procedures for the Collection of Diagnostic Blood Specimens by Skin Puncture: Approved Standard – Fourth Edition. NCCLS. September 1999

Phlebotomy Workbook for the Multiskilled Healthcare Professional. Strasinger and DiLorenzo. F.A. Davis. 1996

COLLECTION AND TRANSPORT: PROPER SPECIMEN HANDLING MICROBIOLOGY

PURPOSE:

To outline policies related to specimen collection and transport.

POLICY:

Collection and Transport, topics included are:

- Collection and transport- proper handling of specimens
- Handling of specimens in the laboratory
- Criteria for rejection of unsatisfactory specimens
- Microbiology Specimen Collection: Guidelines for Bacteriology, Mycology, and Parasitology

COLLECTION AND TRANSPORT: PROPER SPECIMEN HANDLING

The laboratory diagnosis of infectious diseases begins with the collection of a clinical specimen for examination and culture. The following general rules apply to the collection and transport of any specimen for culture.

- Strictly aseptic technique must be applied throughout the procedure.
- Wash your hands before the collection.
- Collect the specimen at the optimum time as ordered by the provider. The timing of collection with relation to the patient's symptoms may be vital to the success of recovering the causative organism(s) in the culture.
- Make certain the specimen is representative of the infectious process.
- Collect and place the specimen aseptically in an appropriate sterile container provided by the laboratory.
- After the collection, make certain the outside of the specimen container is clean and uncontaminated. If the collection container has been soiled, it must be carefully cleansed with an effective germicide, to eliminate infectious material that would pose hazard to those who will come in further contact with the specimen.
- Make certain the container is tightly closed to prevent leakage while in transport.
- Check whether enough material has been collected to perform all tests that are requested.
- Specimens must have at least 2 pieces of identification: patient's full name and date of birth. If possible, label container with patient's identification label that includes full name, DOB, medical record number or, if inpatient, hospital admission number. Date and time of collection should be noted.
- Individually bag each specimen to be sent to the laboratory.
- Wash your hands after the collection.

COLLECTION AND TRANSPORT: PROPER SPECIMEN HANDLING

MICROBIOLOGY

All Microbiology specimens must be labeled with the following information:

- A minimum of two (2) patient identifiers (other than location) must be on all specimens.
 - Patient's full name printed in ink and spelling is consistent with the test requisition
 - Date of birth (or) an alternate traceable unique identification number, (e.g. social security number)
- Date and time of collection
- Specimen source (e.g. throat, vaginal, etc.)
- Collector's initials

All specimens to the Microbiology laboratory must be accompanied by a properly filled out requisition slip with test orders for submitted sample(s).

Arrange for immediate transport of the specimen to the laboratory. If at any time a specimen cannot be transported to the laboratory within a certain time period, then the laboratory should be notified so as to direct certain information regarding proper storage of the specimen.

TRANSPORT OF SPECIMENS TO THE LABORATORY

- Transport of the specimen to the laboratory must be done promptly, **preferably within 1 to 2 hours** of collection. If transport is delayed, specimens can be stored under conditions suitable for each specimen type. Refer to section on Specimen collection for details on specific transport criteria listed by source.
- **In general:**
 - Do not store specimens not in holding medium for bacterial culture for more than 24 h. Viruses, however, usually remain stable for 2-3 days at 4C.
 - Urine specimens must be kept refrigerated.
 - Material on swabs should be carried in a transport swab with holding medium. It is acceptable to store swabs up to 72 hours.
 - Body fluids for anaerobes should be transported in a tube that is specifically designed for the transportation of anaerobic cultures in order to minimize exposure to oxygen.
- **Never refrigerate** spinal fluid, genital, eye, internal ear, or respiratory specimens. Some environmentally sensitive organisms include *N. gonorrhoeae*, *N. meningitidis*, and *Haemophilus influenzae*; never refrigerate any specimens suspected with these organisms.
- Upon receipt of the culture in the laboratory the receiver must observe that the label on the culture matches that on the requisition slip.

CRITERIA FOR REJECTION OF UNSATISFACTORY SPECIMENS

MICROBIOLOGY SPECIMEN COLLECTION

GUIDELINES FOR BACTERIOLOGY, MYCOLOGY, AND PARASITOLOGY



SPECIMEN	COLLECTION DEVICE	COLLECTION INSTRUCTIONS	SPECIMEN STORAGE & OPTIMAL TRANSPORT TIME LIMITS
Anaerobe	Anaerobe Transport swab	*collect as per specimen site using anaerobic transport swab*	≤ 24 h, RT
Blood cultures	<p>Adults: 1 set= 2 Bottles 1 aerobic BacT/Alert FA And 1 anaerobic BacT/Alert FN</p> <p>Children: 1 pediatric BacT/Alert PF bottle</p> <p>Sets should be drawn from different sites at least 10 min. apart, or as directed by provider. Obtain before antibiotic therapy begins.</p>	<p>Disinfect bottle tops & patient with 70% isopropyl alcohol. Disinfect patient with iodine & allow to dry. Without touching site collect blood directly into BacT/Alert bottles using butterfly/Blood culture adapter(syringe may also be used) to optimal fill line.</p> <p>Optimal draws: Aerobic & anaerobic bottles: 8-10 ml (optimal 10ml) Pediatric bottles: up to 4 ml (optimal 4 ml)</p>	≤ 12 h, RT
Body Fluids	<p>Syringe with cap Sterile screw capped tube Sterile leak-proof specimen cup Sterile vacuum bottle Sterile plain red top vacutainer tube* Fluid transport vial*</p> <p>If anaerobe requested: Anaerobe Transport swab also</p>	<p>Disinfect overlying skin with 2% iodine. Obtain specimen via percutaneous needle aspiration. Submit as much fluid as possible, best if > 1 ml.</p> <p>*If transfer from syringe to another vial, disinfect with alcohol wipe or iodine the rubber top on vial before transferring.</p> <p>Note: Transport swabs are not recommended for aerobic culture, since they provide inadequate sample amounts.</p>	≤ 24 h, RT
Bone Marrow	A set of Blood culture bottles: 1 aerobic & 1 anaerobic BacT/Alert bottle.	<p>Prepare site as for surgical incision. Disinfect BacT/Alert blood culture rubber tops with alcohol wipe or iodine before transferring.</p>	≤ 24 h, RT
Bronchial Washings Aspirate	Sterile sputum Aspirate collector	Aspirate washings into a sputum trap. Best if ≥1ml and received within ≤2 h.	≤ 24 h, RT
Bronchial Brush	Sterile leak-proof specimen cup.	Place brush in sterile container with sterile saline.	≤ 24 h, RT
Cath Tip	Sterile specimen cup.	<p>Cleanse area around catheter with alcohol. Aseptically remove catheter and clip 5 cm of distal tip. Transport immediately to prevent drying.</p>	≤ 24 h, 4C

DIRECTORY OF SERVICES

MICROBIOLOGY SPECIMEN COLLECTION

GUIDELINES FOR BACTERIOLOGY, MYCOLOGY, AND PARASITOLOGY

SPECIMEN	COLLECTION DEVICE	COLLECTION INSTRUCTIONS	SPECIMEN STORAGE & OPTIMAL TRANSPORT TIME LIMITS
CSF	Sterile screw-capped tube Tube # 2 submit to micro	Disinfect site with iodine. Collect 1-2 ml into screw-capped sterile tubes Transport immediately to lab.	Bacteria: ≤24 h, RT Viruses: ≤72 h, 4C
Ear	Transport Swab with Amies or Stuart medium For internal ear: If anaerobe requested: Anaerobe Transport swab also	Outer ear: Use moistened swab to remove debris from canal. Obtain sample by rotating swab in outer ear canal Inner Ear: Intact eardrum- cleanse canal, collect by needle aspirate Ruptured drum- collect fluid on flexible shaft swab using auditory speculum	≤ 24 h, RT
Environmental Culture Screen	Transport Swab with Amies or Stuart medium	Swab surface of object.	≤ 24 h, RT
Eye	Transport Swab with Amies or Stuart medium Direct planting to SB/CHOC/THIO/slide	Conjunctiva: Collect specimen before anesthetic is applied. Pre-moistened with sterile saline and roll swab Corneal scrapings: Apply anesthetic first. Use sterile spatula to scrape ulcers or lesions. Plate material directly	≤ 24 h, RT
GC Specimen	Transport Swab with charcoal Transport Swab with Amies or Stuart medium, not ideal but acceptable if processed immediately	Vaginal & Cervix: remove excess mucous with swab, then with second swab obtain specimen. (Lubricant should not be used with speculum) Urethra: using urethrogenital(mini-tip) swab, insert & rotate swab. Other sources: eye, rectal, Bartholin gland abscess, Prostatic fluid, throat, synovial fluid, etc.; collect specimen as for routine culture of that source.	≤ 24 h, RT
<u>Genital</u> Vaginal Cervical Urethral	Transport Swab with charcoal, best collector for r/o GC. Transport Swab with Amies or Stuart medium	Vaginal & Cervix: Remove excess mucous with swab, then with second swab obtain specimen. (Lubricant should not be used with speculum) Urethra: using urethrogenital swab, insert & rotate swab.	≤ 24 h, RT
<u>Genital</u> Prostate fluid	Transport Swab with Amies or Stuart medium Sterile tube	Clean glans with soap & water, massage prostate through rectum & collect fluid.	≤ 24 h, RT
<u>Genital</u> other	Syringe with cap *If anaerobe requested: Anaerobe Transport swab also	Bartholin: Disinfect skin & aspirate fluid from ducts Endocervical: Transcervical aspirate Cul-de-sac: aspirate or fluid	≤ 24 h, RT
Hair	Sterile specimen cup.	With forceps collect 10-12 affected hairs with base of hair shaft still attached.	≤ 24 h, RT

MICROBIOLOGY SPECIMEN COLLECTION

GUIDELINES FOR BACTERIOLOGY, MYCOLOGY, AND PARASITOLOGY

SPECIMEN	COLLECTION DEVICE	COLLECTION INSTRUCTIONS	SPECIMEN STORAGE & OPTIMAL TRANSPORT TIME LIMITS
IUD	Sterile leak-proof specimen cup.	Remove and place in sterile cup with small amount of saline. Do not allow to dry out.	≤ 24 h, RT
Nail	Sterile specimen cup.	Cleanse area with 70% alcohol using gauze not cotton. Clip away a generous portion of the affected area.	≤ 24 h, RT
Nose	Transport Swab with Amies or Stuart medium	Insert swab moistened with saline & rotate against nasal mucosa.	≤ 24 h, RT
Oral	Transport Swab with Amies or Stuart medium	Remove oral secretions with swab and discard. Using a second swab, vigorously sample lesion, avoiding areas of normal tissue.	≤ 24 h, RT
Peritoneal Dialysate	BacT/Alert bottle set: 1 aerobic & 1 anaerobic 2 sterile plain red top vacutainer tubes	Disinfect BacT/Alert Bactec blood culture rubber tops with alcohol wipe or iodine before transferring. Inoculate directly blood culture bottles. Or Disinfect rubber tops with alcohol wipe or iodine before transferring the fluid to 2 plain red top vacutainer tubes.	≤ 24 h, RT
Skin	Sterile container	Cleanse area with 70% alcohol. Scrape the surface at the active margin. Place in container or in between 2 sterile slides inside the container.	≤ 24 h, RT
Sputum expectorate	Sterile leak-proof container	Rinse or gargle with water to remove superficial flora from mouth. Instruct patient to cough deeply to produce a lower respiratory specimen. Best if > 1ml, first morning specimen, and received in ≤2h	≤ 24 h, RT
Sputum induced aspirate	Sterile sputum Aspirate collector	Rinse with water to remove superficial flora from mouth. With Nebulizer have patient inhale ~25ml sterile saline. Collect the sputum in sterile cup or aspirate into sputum trap Best if > 1ml and received in ≤2h	≤ 24 h, RT
Stool routine	Clean leak-proof container Also acceptable: Vial with preservative intended for stool culture. Transport Swab with Amies or Stuart medium.	Collect directly into clean dry container. Transport immediately to lab, best if ≤ 1 hour Test requires ~1 ml If using vial with preservative: fill vial to fill line. Use of transport swab is not ideal, but is acceptable if a visible portion of stool is collected onto the swab. Use of swabs, only recommended for infants and active diarrhea.	Unpreserved ≤ 24 h, 4C Preserved Vial & swab ≤ 48 h, RT Acceptable up to 72 hrs in ParaPak C&S

MICROBIOLOGY SPECIMEN COLLECTION

GUIDELINES FOR BACTERIOLOGY, MYCOLOGY, AND PARASITOLOGY

SPECIMEN	COLLECTION DEVICE	COLLECTION INSTRUCTIONS	SPECIMEN STORAGE & OPTIMAL TRANSPORT TIME LIMITS
Stool VRE-Screen (Culture to screen only for Vancomycin-Resistant Enterococcus)	Clean leak-proof container Transport Swab with Amies or Stuart medium.	Collect directly into clean dry container. Transport immediately to lab.	Unpreserved ≤ 24 h, RT Preserved swab ≤ 48 h, RT
STOOL- C. Difficile Toxin	Clean leak-proof container	Collect directly into clean dry container. Transport immediately to lab, best if ≤ 1 hour **Note: Formed stools are unacceptable for testing.	≤ 1 h, RT ≤ 72 h, 4C
STOOL- O&P	Clean leak-proof container When transport can not be made immediately, it is recommend to use: Para-pak system: Formalin & PVA set	Collect directly into clean dry container. Transport immediately to lab, best ≤ 1 hour for liquid specimens for the detection of Trophs. A minimum of 5 grams (about size of walnut) is necessary Collect as above, transfer a portion of specimen to each vial, until fill line is reach. Cover and mix vials well.	Liquid & soft ≤ 1 h, RT Formed ≤ 24 h, RT Preserved Indefinite, RT
STOOL- Polys Fats Occult blood	Clean leak-proof container	Collect directly into clean dry container.	≤ 1 h, RT ≤ 24 h, 4C
SUTURE	Sterile leak-proof container	Place in sterile container and add a small amount of sterile saline. Do not allow to dry out. Best if received <15 min.	≤ 24 h, RT
Tissue	Sterile leak-proof container *If possible, Anaerobic Transport swab also	Place in sterile container. For very small samples add a small amount of sterile saline. Do not allow to dry out. Best if received <15 min.	≤ 24 h, RT
Throat	Transport Swab with Amies or Stuart medium	Depress tongue with tongue depressor Sample posterior pharynx, tonsils, and inflamed areas with sterile swab. See attachment to procedure, diagram A.	≤ 24 h, RT
Transfusion reaction	Unit in Question (i.e. Red blood cells, platelets)	Send the entire unit, do not transfer.	≤ 24 h, 4C

MICROBIOLOGY SPECIMEN COLLECTION

GUIDELINES FOR BACTERIOLOGY, MYCOLOGY, AND PARASITOLOGY

SPECIMEN	COLLECTION DEVICE	COLLECTION INSTRUCTIONS	SPECIMEN STORAGE & OPTIMAL TRANSPORT TIME LIMITS
Wound Abscess Cellulitis Cysts Ulcers Lesions Fistulas	Transport Swab with Amies or Stuart medium Syringe with cap *If anaerobe requested: Anaerobe Transport swab also	Cleanse surface exudates with 70% ETOH before specimen collection. For burns clean and debride before collection. Open Wound: Aspirate if possible, or pass swab deep into the lesion and firmly sample the lesion's advancing edge. Closed Wound: Aspirate abscess wall material with needle. Tissue or fluid is superior to swab specimens. If tissue specimen is possible, see section on tissue collection. If swab collection is used, 2 should be collected.	≤ 24 h, RT
Wound Decubitus ulcer	Transport Swab with Amies or Stuart medium	Cleanse surface with sterile saline, Tissue biopsy or needle aspirate is specimen of choice. See section for tissue or closed wound collection. If unable to biopsy, pass swab deep into the lesion and vigorously sample the base.	≤ 24 h, RT
Urine Clean Catch	Sterile leak-proof specimen cup Urine gray top tube (contains preservative)	Cleanse urethral area with antiseptic wipes. Women: hold labia apart Men: if necessary, hold foreskin back. Begin voiding into toilet, after the first trickle, begin to collect the urine for culture. If using gray top tubes, transfer urine aseptically from collection cup.	Unpreserved: < 2 h RT < 24 h, 4C Gray top: < 24 h, RT
Urine Foley Cath Straight Cath Nephrostomy Suprapubic	Texas catheter urine is not acceptable for culture Sterile leak-proof specimen cup Urine gray top tube with preservative	Foley and Nephrostomy: Disinfect collection port with 70% alcohol. Use sterile syringe to collect and transfer to specimen container. Straight catheter: Cleanse urethral area with soap & water then with antiseptic wipes. Aseptically insert catheter into bladder. Allow 15 ml to pass before collecting urine for culture. Suprapubic: Disinfect overlying skin with 2% iodine. Obtain specimen with sterile syringe via percutaneous needle aspiration into bladder. Transfer urine aseptically to specimen container	Unpreserved: < 2 h RT < 24 h, 4C Gray top: < 24 h, RT
Vaginal/Rectal For R/O Beta Strep B	Transport Swab with Amies or Stuart medium	Insert swabs to vagina then into anus just beyond the anal sphincter.	≤ 24 h, RT

MICROBIOLOGY SPECIMEN COLLECTION

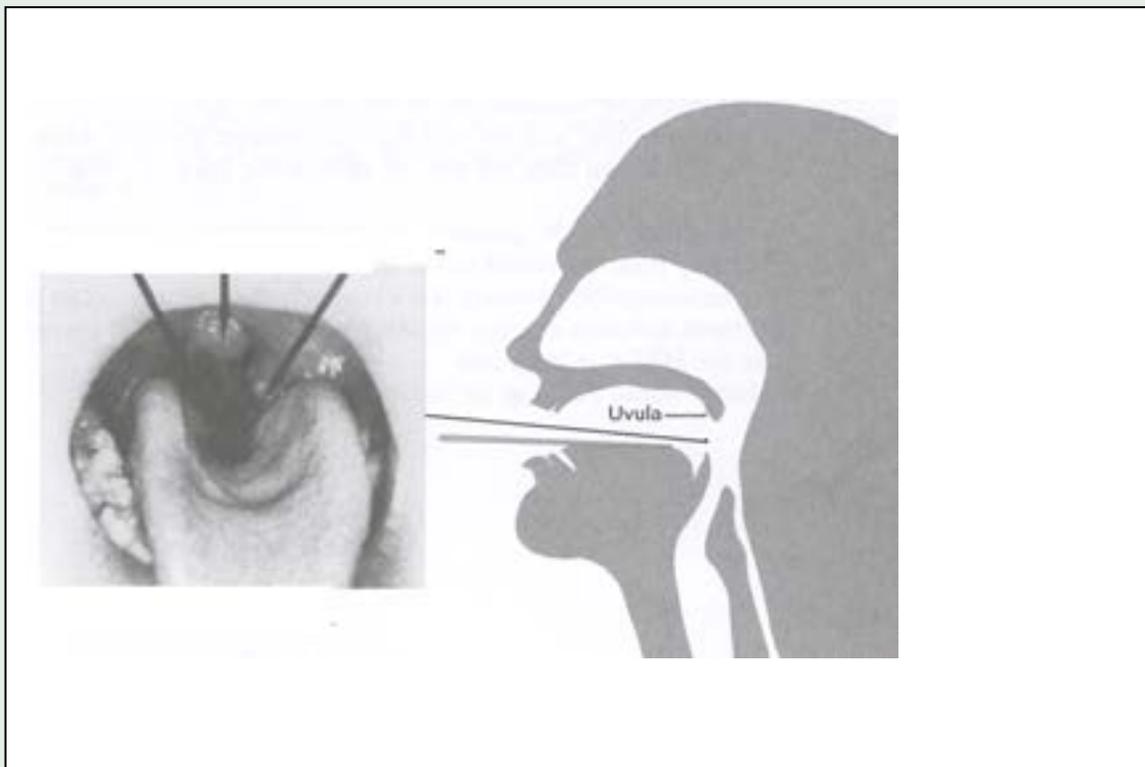
GUIDELINES FOR BACTERIOLOGY, MYCOLOGY, AND PARASITOLOGY

NOTE: The above chart is a summary of collection guidelines. For more specific collection guidelines and information on sources and tests not listed above, please refer to Specimen Management in Clinical Microbiology, tables 15-20 (pp.143-173). Reference texts can found on the reference shelf in Microbiology, above the A1 work station.

References:

1. Specimen Management in Clinical Microbiology, 2nd ed., Miller, et.al., ASM Press 1999.
2. ASM Manual of Clinical Microbiology 7th ed., Murray et.al. ASM Press 1999.

Diagram A: Proper technique for obtaining throat specimens.



CRITERIA FOR REJECTION OF UNSATISFACTORY SPECIMENS

MICROBIOLOGY

Before processing the specimen, both the specimen and the requisition form must be examined for acceptability. This prevents unnecessary workup of poor quality specimens and helps to avoid labeling errors. An uncultured specimen should never be discarded without obtaining a new specimen, consultation with the head nurse or the patient's provider.

The following is a procedural list that describes how to handle unsatisfactory specimens, the action that should be taken under those circumstances and the criteria necessary to reject a specimen as unsatisfactory.

NOTE: In the event a discrepancy or specimen problem cannot be immediately resolved (i.e. provider's office is closed for the day) every effort should be made to process the specimen off-line, and a clear description of the problem and any off-line results should be clearly documented for follow-up.

CRITERIA FOR REJECTION	ACTION TO BE TAKEN
<p>Anaerobic request for the following sources: Bronchoscopic washings (unless double catheter system used), Cervical swab, Endotracheal aspirate, Endocervical swab, Lochia, Nasopharyngeal swab, Perineum, Prostatic secretions, Sputum (expectorated and induced), Throat, Tracheostomy aspirate, Stool or rectal, Urethral, Urine (bladder, catheter, or clean catch), Vaginal or vulva</p>	<p>Do not perform anaerobic cultures without consultation with provider. Explain to provider this material is generally contaminated with normal flora anaerobes.</p>
<p>Anaerobic culture request on swab material, unless swab has been submitted in an anaerobic transport tube.</p>	<p>Notify provider: specimen not submitted under anaerobic conditions. If provider insists it is not feasible to obtain another specimen then process and add comment that results may be compromised. Otherwise specimen should be canceled and a new specimen submitted.</p> <p>Supply anaerobic collector tube for anaerobes, these are stored in microbiology.</p>
<p>Blood culture with request for viral cultures.</p>	<p>Notify nurse in charge or sender, cancel test as unsuitable specimen.</p>
<p>Discrepancy between identification on requisition form & specimen container.</p>	<p>Notify nurse in charge or sender. Request repeat specimen. If it is not feasible to obtain another specimen, the specimen should be referred to department manager or designee. If discrepancy is not resolved, the specimen will not be processed.</p>

CRITERIA FOR REJECTION OF UNSATISFACTORY SPECIMENS

MICROBIOLOGY

CRITERIA FOR REJECTION	ACTION TO BE TAKEN
Dried-out swab	Notify nurse in charge or sender, request a new specimen, cancel test as unsuitable specimen. If it is not feasible to obtain another specimen, then process and add comment that results may be compromised.
Foley catheter tip	Discard sample, notify floor or sender this is not a suitable specimen for culture.
Formed stool specimen for C. difficile toxin	Cancel test as unsuitable specimen. Use "NOFORM" comment which expands to read "Testing not performed. Formed specimen not suitable for C. difficile testing." It is not necessary to notify floor or sender.
Improperly collected sputum (i.e. saliva) if apparent by appearance, insufficient amount, etc. See criteria for expectorated sputum.	Notify nurse in charge or provider and request a new specimen. Report specimen unsatisfactory, and note reason.
Less than 1 swab per request for bacterial, mycobacterial (AFB) and fungal cultures.	Call nurse in charge or provider to request additional material. If it cannot be obtained, ask for culture priorities. If all are requested to be processed, add comment that results may be compromised.
Material from anus or rectum for gram stain request for gonococci.	Notify sender and cancel test with comment unsuitable specimen.
Multiple specimens of the following sources are not acceptable for routine culture on the same day: urine, stool, sputum or throat.	One specimen will be processed only. Notify floor or sender that multiple specimens were received from the same day, and only one will be processed unless different type of collection (i.e. aspirated and expectorated sputum).
Multiple specimens for sent for C. difficile toxin testing.	Only one specimen will be processed per diarrheal episode. Notify sender that multiple specimens were received, and only one will be processed unless a separate diarrheal episode or special circumstance exists. Repeat testing for "Test of Cure" is not recommended. Further questions may be referred to Infection Control.
No identification on container	Do not process unless labeled. Notify nurse in charge or sender. Request repeat specimen or have nurse resolve the problem.

CRITERIA FOR REJECTION OF UNSATISFACTORY SPECIMENS

MICROBIOLOGY

CRITERIA FOR REJECTION	ACTION TO BE TAKEN
Specimen leaking from container into plastic transport bag.	Notify floor or sender, explain problem immediately. Request repeat specimen.
Specimen collected in improper or non-sterile container.	Notify floor or sender, explain problem immediately. Request repeat specimen.
Specimen not identified by specific source (e.g. wound, genital, etc.)	Request additional information from floor or sender. If information is unknown, process by site.
Specimens for isolation of Neisseria gonorrhoeae not received in acceptable transport media; i.e. Amies medium, Jembec, charcoal swab, etc.	Process immediately. If it is not feasible to obtain another specimen, then process and add comment that results may be compromised.
Urine, not in gray top, held over 2 hours at Room temperature. Urine older than 24 hours, regardless of refrigeration.	Notify floor or provider, explain problem and request repeat specimen. If it is not feasible to obtain another specimen, then process and add comment that results may be compromised.
Quantity not sufficient.	Notify floor or provider, explain problem and request a new specimen. If QNS for multiple tests but have enough for some test(s), request additional material. If it cannot be obtained, ask for culture priorities, request repeat specimen for test(s) not done.
24-hour urine or sputum for mycobacteria (AFB) or fungi.	Notify provider or nurse in charge that 24h collections are unacceptable & request 3 single voided specimens or 3 consecutive early morning voided urine specimens or early morning sputum specimens.
Wet Mount collected from a male.	Cancel as "Test not performed on males." Notify provider that a urinalysis with sediment is the best method for detecting Trichomonas in a male.

PATIENT INSTRUCTIONS:

MIDSTREAM CLEAN CATCH URINE COLLECTION

PURPOSE:

To ensure collection of a sterile urine specimen for culture.

POLICY:

Sterile urine collection cup
Castile Soap towlettes

PROCEDURE:

1. Open the collection cup and place cover face up on the counter.
2. Open packet of castile soap towlettes and set aside.
3. Thoroughly wash hands with soap and water.

IF	THEN
Male	<ol style="list-style-type: none"> 4. Cleanse the end of the penis with the first castile soap towlette beginning at the urethral opening and working away from it (the foreskin of an uncircumcised male must first be retracted). 5. Repeat using the second towlette. 6. Void the first portion of urine into the toilet. 7. As you continue to void, bring the collection cup into the “midstream” to collect the urine specimen. DO NOT touch the inside or lip of the cup with the hands or any other part of the body. 8. Void remainder of urine into the toilet.
Female	<ol style="list-style-type: none"> 1. Stand in a squatting position over the toilet. 2. Separate the folds of skin around the urinary opening. 3. Cleanse the area around the opening with the first castile soap towlette. 4. Repeat using a second clean towlette. 5. Void the first portion of urine into the toilet. 6. As you continue to void, bring the collection cup into the “midstream” to collect the urine specimen. DO NOT touch the inside or lip of the cup with the hands or any other part of the body. 7. Void remainder of urine into the toilet.

4. Close the cup with the cover provided, being careful to touch only the outside surfaces of the cap and cup.

EXCEPTIONS:

None.

PATIENT INSTRUCTIONS:

COLLECTION AND TRANSPORT OF SEMEN SPECIMENS

In order to avoid delays and the possibility of repeat testing please follow these instructions for the collection of semen for analysis.

PREPARATION FOR COLLECTION:

1. You must abstain from ejaculation for a period of 2-7 days (ideally 3 days) before collecting the sample, unless otherwise instructed by your physician.
2. One day before you collect the specimen, you must notify Life Laboratories' Hematology department that you will be bringing in a specimen. Call 748-9564 to speak to a member of the technical staff. Semen analysis is performed Monday-Friday only. Your specimen must arrive before 10:00 am.
3. Just before you collect your specimen:
 - a. Urinate
 - b. Wash genital area using warm water only. Do not use soap on the genital area prior to collection. Soap may kill the sperm.
 - c. Wash your hands with warm water and soap. Rinse and thoroughly dry.
 - d. Remove the cover from the specimen cup just prior to collection. Avoid touching the inside of the cup or the inside of the container lid.

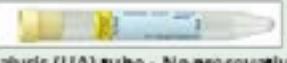
COLLECTION:

1. Obtain the semen sample by masturbation. Do not use saliva as a lubricant. The only acceptable lubricant is liquid glycerin, which is available at your local drug store. **Note:** Semen collected in a condom or by coitus interruptus is not acceptable for evaluation. If you are unable to collect by masturbation, contact your physician to discuss an alternative collection method.
2. Ejaculate directly into the specimen cup. (The penis should not touch the inside of the cup.)
3. Collect the entire ejaculation.
4. Replace the lid as soon as the specimen is collected to avoid contamination.

FOLLOWING COLLECTION:

1. Keep the sample near body temperature.
2. Label your collection container with the following information:
 - Your full name
 - Date of birth
 - Collection date
 - Exact time of collection
3. Deliver your sample to the laboratory within 30 minutes of collection.

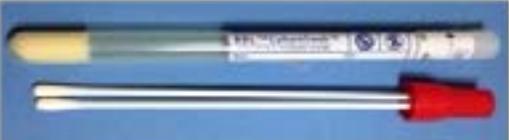
COLLECTION DEVICE BY TEST: MICROBIOLOGY

 Routine culture transport swab	A
 Anaerobic culture transport	B
 Universal Viral transport - standard viral swab	C
 Multi-collect transport tube (swab or urine)	D
 Affirm VPiii Collection tube & swab	E
 Universal Viral transport - Mini-tip NP flocked swab	F
 Urino culture transport- with culture preservative	G
 Swab in Sterile tube with 0.5ml saline	H
 Sterile specimen cup	I
 Urinalysis (UA) tube -with UA preservative	J
 Urinalysis (UA) tube - No preservatives	K
 Urino Tube- No preservatives	L

Affirm DNA Direct Probe for Candida, Gardnerella and Trichomonas (Vaginal)	E
Bacterial Culture -Aerobic	A
Bacterial Culture - Anaerobic	B
Chlamydia trachomatis Culture	C
Chlamydia trachomatis and/or Neisseria gonorrhoeae DNA - for both males and females (urine, vaginal or urethral swab).	D
CMV (Cytomegalovirus) - urine	I
Fungus culture r/o yeast (genital, oral or diaper rash)	A
Fungus culture, skin scrapings, hair, or nails	I
Fungus culture, other sources	A
HSV(Herpes Simplex Virus) Rapid Culture and Typing	C
HSV/ VZV(Varicella Zoster Virus) Rapid Culture	C
Influenza A/B	F
Mycoplasma and Ureaplasma Culture	C
RSV	F
Urine Culture	G or I
Viral Culture, general	C
Wet Mount (vaginal) with reflexed Trichomonas antigen	H
Urinalysis testing only	J
Urinalysis testing only	K
Urine- chemistry	L

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STOOL COLLECTION DEVICE BY TEST: MICROBIOLOGY

 Routine Stool culture transport (orange cap)	A
 Para-pak Clean Vial (white cap)	B
 Sterile specimen cup	C
 Para-Pak Zn-PVA/Formalin Vials (pink & gray caps)	D
 Para-Pak Formalin Vial	E
 Routine culture transport swab	F
 Patient collection kit(3 cards)	G

TEST REQUIRED	
Routine Stool Culture Includes: Salmonella, Shigella, Campylobacter, Yersinia, E. coli 0157:H7, and Shiga toxin culture assay	A
Stool Culture for Vibrio	A, B or C
C. difficile Panel (C. Diff Toxin & GDH antigen with reflex for indeterminate results to CDiff PCR) (C. diff testing- stool must be unformed)	B or C
Cryptosporidium, Rapid EIA	E or D
Giardia Antigen. Rapid EIA	E or D
Fecal Reducing Substance	
Fecal Fat, Qualitative	B or C
H. pylori	B or C
Occult Blood, Diagnostic (1 sample)	B or C
Occult Blood, Screening for Colorectal cancer (3 Patient collection cards)	G
Ova & Parasites	D
Stool for Polys	B or C
VRE surveillance culture, Rectal swab (for carrier status, not infection)	F

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SPECIMEN COLLECTION INSTRUCTIONS

RSV, Influenza A/B or Respiratory Pathogen panel

SPECIMEN REQUIREMENTS:

- Nasopharyngeal (NP) Swab with fine-tipped flocked flexible shaft swab.
Note: Wooden shaft, cotton or calcium alginate swabs not accepted.
- Place the swab into the 3 ml Universal (VTM)Viral Transport



(Do not submit samples in Remel M4 or M4RT media, as it is not recommended for these test methods)

- Store and Transport specimen refrigerated

SPECIMEN COLLECTION.....How to do a Nasopharyngeal swab

- Insert **flocked, flexible fine-shafted swab** into one nostril straight back (not upwards) into to the **Nasopharynx** and leave in place for a few seconds.
(Note: Collection from nostril alone does not provide an adequate sample)

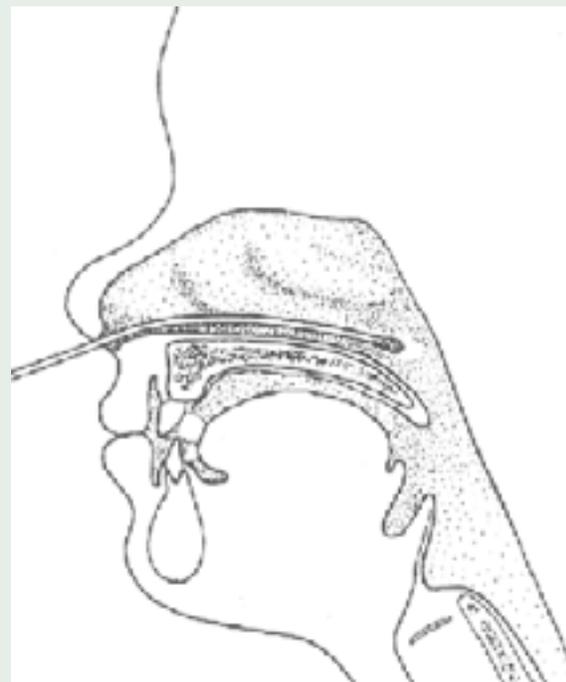


Flocked flexible swab



Incorrect swab type

- The distance from the patient's nose to the ear gives an estimate of the distance the swab should be inserted. (See diagram)
- Slowly withdraw swab with a rotating motion.
- Place swab into a vial containing 3 ml of VTM



Note: Erroneous results may occur from improper collection.

New England Journal of Medicine – Instructional video link
<https://www.youtube.com/watch?v=DVJNWefmHjE>

Storage & Transport

- Place VTM Specimen inside Specimen Biohazard bag and refrigerate until transported to Lab.

SPECIMEN IDENTIFICATION



PURPOSE:

To ensure positive specimen identification throughout collection, analysis and storage in adherence to Patient Safety goals.

POLICY:

A properly labeled patient sample submitted to Life Laboratories must contain:

- Minimum of TWO Patient Identifiers:
 1. Patient's last name and first name, printed in ink (spelling is consistent with test requisition)
 2. Unique patient identifier.
 - Date of Birth or
 - Alternate Traceable Unique Identification Number (Mercy Medical Record Number, Social Security number, Typenex® number, Meditech label with LIS generated number)
- Specimen information also required on each specimen
 1. Date of collection
 2. Time of collection
 3. Collector's initials
 4. Specimen source/site (For Microbiology specimens)

Employees will follow established procedures for pending or canceling tests.

Any exceptions not contained in this document must be approved either by a manager or, in their absence, the Medical Director or the Executive Director.

PROCEDURE A: BLOOD SPECIMEN COLLECTION

IF YOU ARE DRAWING A BLOOD SAMPLE	THEN
And have a pre-printed label generated by the LIS	<ul style="list-style-type: none">• Follow the procedure for patient identification• Before leaving the patient's side and before drawing another patient:<ul style="list-style-type: none">○ Affix the computer label to the appropriate tube○ Put the actual time of collection and your initials on the label
And a pre-printed label is not available	<ul style="list-style-type: none">• Follow the procedure for patient identification• Label the tubes with the minimum information required by laboratory policy before drawing another patient
For transfusion service testing	<ul style="list-style-type: none">• Follow the Typenex® procedure

SPECIMEN IDENTIFICATION cont.



PROCEDURE B: SPECIMEN PROCESSING

IF	THEN
<p>You are labeling original specimens that do not already have an LIS generated bar code label affixed to them</p>	<ul style="list-style-type: none"> • Use the LIS to generate a bar coded label for the specimen • Use two forms of identification to match the LIS generated bar coded label to the information on the original specimen before placing it on the specimen <p>NOTE: Do not work with more than one patient at a time to prevent mislabeling.</p>
<p>You are aliquoting a sample</p>	<ul style="list-style-type: none"> • Use the LIS to generate a bar coded label for the specimen • Use two forms of identification to match the aliquot label to the label on the original specimen • Affix the bar coded label to the aliquot tube and transfer the specimen before processing the next specimen <p>NOTE: Do not aliquot more than one specimen at a time to prevent cross contamination and mix-up of specimen.</p>
<p>You are entering manual results from a test sample, culture plates or slides</p>	<ul style="list-style-type: none"> • Use two forms of identification to match the specimen label to the specimen information in the Result entry screen and/or worksheet prior to data entry • When multiple test components are involved each culture plate, broth, slide, or result printout must identified to corresponding to specimen. <p>NOTE: Read and result one culture at a time to prevent mix-up of specimen/plates</p>
<p>You receive a specimen from the Emergency Department collected by paramedics that does not have a unique identification number but the patient name matches the name on the labels generated by the LIS</p> <p>These specimens are not acceptable for transfusion service testing</p>	<ul style="list-style-type: none"> • Affix the computer generated label to the specimen such that the original label is not covered • Receive the specimen into the LIS • Process the specimen • Enter “Collected by EMT” in the Comment field
<p>You receive a specimen from the Emergency Department collected by paramedics that does not have a unique identification number and there is a minor discrepancy between the patient name on the specimen and the name on the labels generated by the LIS</p> <p>These specimens are not acceptable for transfusion service testing</p>	<ul style="list-style-type: none"> • Affix the computer generated to the specimen such that the original label is not covered • Receive the specimen into the LIS and enter Y in the E/E field • Enter the “<i>Specimen Information Incomplete</i>” in the Comment field • Process the specimen • Annotate the results indicating that the patient name on the specimen did not match the name on the requisition <p>Examples of minor discrepancies are: Last name on the tube is “Cipryna” and the LIS label is “Czypryna” Name on the tube is Ng Tran and the LIS label is Tran, Ng</p>
<p>You receive a “STAT” specimen from either Mercy or Providence hospital that has no patient identification other than a Typenex® label</p> <p>These specimens are not acceptable for transfusion service testing</p>	<ul style="list-style-type: none"> • Receive the specimen into the LIS using under name/number transmitted from OE and enter Y in the E/E field • Enter “<i>Typenex Banded Patient: Typenex # nnnnnn</i>” in the Comment field • Notify the Director of Support Services

SPECIMEN IDENTIFICATION cont.



<p>You receive a “STAT” specimen from a client that has no patient identification other than a Typenex® label and the patient already appears to exist in the LIS</p> <p>These specimens are not acceptable for transfusion service testing</p>	<ul style="list-style-type: none"> • Use the information from the requisition to enter the patient into the LIS and enter Y in the E/E field • Enter “<i>Typenex Banded Patient TYPENEX® #nnnnnn</i>” in the Comment field • Notify the Director of Support Services
<p>You receive a “STAT” specimen from a client that has no patient identification other than a Typenex® label and the patient does not exist in the LIS</p> <p>These specimens are not acceptable for transfusion service testing</p>	<ul style="list-style-type: none"> • Use the information from the requisition to enter the patient into the LIS and enter Y in the E/E field • Enter “<i>Typenex Banded Patient TYPENEX® #nnnnnn</i>” in the Comment field • Notify the Director of Support Services
<p>You receive an unlabeled specimen that is accompanied by a requisition</p>	<ul style="list-style-type: none"> • Bring the specimen and requisition to a manager/coordinator who will: <ul style="list-style-type: none"> ○ “Receive” the specimen in to the LIS ○ Cancel the test and enter the test name with “<i>Unlabeled specimen</i>” in the Comment field ○ Notify the nursing station/facility that testing cannot be performed ○ Arrange for re-collection, if possible ○ Complete PIR ○ See “Exceptions”
<p>You receive an unlabeled specimen that is not accompanied by a requisition</p>	<ul style="list-style-type: none"> • Bring the specimen to a manager/coordinator who will: <ul style="list-style-type: none"> • Attempt to resolve the specimen source/identification • Discard the specimen • Complete a PIR • See “Exceptions”

CLINICAL SPECIMENS OTHER THAN BLOOD

- Original containers must have a label affixed to them that contains the minimum information required in the laboratory policy.

DEFINITIONS:

Requisition A valid requisition may consist of a pre-printed specimen label, an Add/Change Form, a Life Laboratories requisition, or a physician’s scrip

EXCEPTIONS:

- Specimens for HIV testing may be processed without a patient name but must have some form of identification.
- Specimens for which repeat collection is not possible, e.g. amniotic fluid, CSF, joint fluid, etc. may be processed with the addition of a disclaimer on the results that the specimen information did not match the information on the requisition.