



Specific Microbiology Collection Criteria

In Microbiology, nothing is more important than the appropriate selection, collection and transport of the specimen.

- * Obtain specimen prior to the onset of antimicrobial therapy.
- * Collect adequate volumes. Insufficient material may yield false-negative results.
- * Avoid commensal contamination from resident microbial flora to ensure representative sampling of the infectious process.
- * Collection in an appropriate container is essential to promote survival of infecting microorganisms. Of particular importance are the environmentally sensitive microorganisms such as *Neisseria gonorrhoeae*, *Neisseria meningitidis*, *Shigella* species, and *Haemophilus influenzae*.
- * To ensure the adequate detection, isolation and identification of microorganisms in the clinical microbiology laboratory the following clinical information must be provided on the requisition slip: the source of specimen – be specific, as different anatomic sites have unique processing requirements, probable patient diagnosis, any specific microorganisms suspected, date and time of collection, and the presence of antimicrobial therapy.

SPECIMEN COLLECTION AND SPECIAL INFORMATION

BLOOD CULTURE

1. **Collection:** Select a different body site for each culture drawn.
 - a.) Blood cultures vials should be labeled immediately prior to collection. Printed information should include: Patient's name, date, and time of collection, location when applicable, hospital identification number and phlebotomist's initials.
DO NOT PLACE SPECIMEN LABEL OVER BARCODE LABELS!
Remove caps on culture bottles, wipe tops with 70% alcohol prep and allow to air dry at least 15 seconds.
DO NOT WIPE BOTTLE TOPS WITH PROVIDINE IODINE.
 - b.) Avoid touching the site of venipuncture. All site locating should be done prior to cleansing the site. If it is necessary to touch the site after it has been cleansed then the finger needs to be cleaned with Cloroprep before touching the site.
 - c.) When using the Blood Collection Set ("butterfly") the phlebotomist MUST carefully monitor the volume collected by means of the 5 cc graduation marks on the vial label. Mark volume of media with pen. If volume is not monitored, the amount collected can exceed the stated maximum amount. This condition may adversely create a 'false' positive result due to high blood background from the increased cell count.
 - d.) When using a Blood Collection Set ("butterfly") to draw 1-5 ml for the pediatric population, a Peds Plus vial should be inoculated with the correct amount of blood collected.
Note: The Peds Plus Vial is intended for the Pediatric Patient only.
 - e.) Place a tourniquet on the patient's arm. Ask the patient to make a fist, and using your index finger, palpate the vein. Choose the vein that feels the fullest.



f.) Prepare the site by cleansing the selected venipuncture site.

1. Prepare the site by cleansing the selected venipuncture site.
 - a.) Clean the site with a Cloraprep swab, using friction.
 - b.) Allow the area to dry for at least 30 seconds.
2. Do not palpate or touch the site after the area has been cleaned.

g.) Butterfly Safety-lok collection system:

1. Peel apart package and remove set. Thread the luer adapter into the needle holder. Check to ensure a secure attachment. Remove needle sheath and perform venipuncture by holding wings. Do not hold by grasping the yellow safety shield. Grasp the patient's arm just below the puncture site with your non-dominant hand and pull the skin tight with your thumb.
2. Holding wings of the needle assembly penetrate the skin at the selected venipuncture site using a quick, small thrust to enter the vein in one motion. Blood should appear in the tubing. If not, repositioning of the needle by holding the wings may be necessary. When successful, the needle may be taped in place to the patient's arm.
3. Release the tourniquet and ask patient to open his hand.
4. Collect blood into blood culture vial by placing the vial neck into the holder. Then puncture the stopper of the vial by pushing the holder onto the blood culture vial. Hold the vial in an upright position lower than the patient's arm to allow gravity to fill the vial.
5. Inoculate aerobic vial first, carefully monitoring the blood volume collected using the 5cc graduation marks on the side of the vial label. If the volume is not monitored, the amount collected can exceed the stated maximum amount, creating a "false" positive result. Proceed to anaerobic vial and then to additional collection tubes as required.
6. When the final tube is filled, remove tape (if used) holding the needle to the patient's arm. Hold a 2 x 2 inch gauze just above the puncture site. Withdraw the needle, grasping the wings, by gently pulling. Apply gauze to puncture site and instruct patient to apply pressure.

h.) Central Venous (Intravenous) Catheter Method:

1. Collection of blood culture specimens from this site should be avoided. This procedure is performed by the nursing staff or physicians only. The intravenous line is a direct pathway into the patient's bloodstream. Any time this intravenous system is entered, the possibility for contamination and infection exists.
2. The patient must be placed in a position where the catheter nub is at or below the level of the patient's heart. If IV is infusing, clamp off mainline IV tubing. Close slide clamp on short microbore tubing. Aseptically disconnect IV tubing, holding IV tubing and short microbore tubing up to avoid contamination. Apply gauze to site and place bandage.



3. Transfer specimen into blood culture vials. Dispense required volume into appropriate vials. Always inoculate the anaerobic vial first so air is not introduced into the system, and then inoculate the aerobic vial.
4. Inoculate the blood gently to the blood culture vials to prevent hemolysis. The specimens in the vials should be well mixed to avoid the formation of a clot, which will trap bacteria and impair the detection of bacterial growth. Dispose of contaminated materials in designated biohazard container. Confirm that the bleeding has stopped and the patient feels normal. Gauze and bandage is applied to site to prevent any further bleeding.

2. **Quantity:**

Most cases of bacteremia are detected using two to three sets of separately collected blood cultures. More than three sets of blood cultures yield little additional information. Conversely, a single blood culture may miss intermittently occurring bacteremia and make it difficult to interpret the clinical significance of certain isolated organisms.

- * A single blood culture set may be drawn at a specified time (a set to consist of one aerobic vial and one anaerobic vial), although a single blood culture set is not recommended due to the difficulty of interpreting clinical significance.
- * Two sets of blood culture may be drawn at a specified time (one from each arm). Additional sets may be drawn within the same 24 hour period at a specified time. Paired blood cultures obtained by separate venipunctures have been recommended to help determine whether an isolate is clinically significant or if it is a contaminant. If an organism is present in only one of 2 bottles, it suggests, but does not prove contamination.
- * Two or three sets of blood cultures may be drawn at specified hour intervals.

Recommendations for children 8 years old - adults: 16-20 ml of blood per venipuncture.



Blood Volume per Venipuncture	Blood Volume in BacT/Alert Aerobic Vial	Blood Volume in BacT/Alert Anaerobic Vials
16-20 ml	8-10 ml	8-10 ml
13-16 ml	6-8 ml	6-8 ml
Difficult draws (8-13 ml)	4-7 ml	4-8 ml or none (if only 8-10 ml drawn)
Extremely Difficult draws where only 3-7 ml of blood collected	none	3-7ml
< 3 ml	unacceptable - redraw at different site.	

DO NOT USE BacT/Alert Pedi PF VIAL –IF UNABLE TO OBTAIN A MINIMUM OF 3 ML; REQUEST A RESIDENT DRAW

Recommendation for pediatric patients (neonates, infants, children) BacT/Alert Pedi PF Vial should be used for pediatric patients only.

<u>Patient weight</u>	<u>Blood Volume</u>	<u>Total volume for 2 draws</u>
4.5 – 27 lbs	Draw a minimum 2ml per vial BacT/Alert PF Vial	2-5 ml
28 – 80 lbs	5 ml of blood per vial BacT/Alert PF Vial	10 ml
≥ 80 lbs	Follow adult volume chart	

3. **Collection Device:** BacT/Alert PF Vial
4. **Transport:** Blood culture vials should be transported to the laboratory as quickly as possible. If this is not possible the vials should remain at room temperature and delivered to the laboratory within 24 hours
5. **Special information:** Blood cultures are screened for aerobic and anaerobic organism. Positive cultures are immediately relayed to the nursing unit and /or physician. Final negative reports of “No Growth” are made after 5 days of incubation.
 - * **Do not draw an in-house patient that is not wearing an ID bracelet. Notify nursing of the situation.**
 - * **Do not draw above an IV site.** In a case where the patient has an IV in both hands, request is made to the nursing staff to shut one off. Wait 3-5 minutes and then draw. Draw 30 minutes after infusion.
 - * **Do not draw from an arm with a PINK ID band: patient has fistula.**
 - * **Do not draw immediately after dialysis.** Draw 2 hours after the completion of dialysis.



EAR (Routine Culture, Fungal Culture)- Performed at WIH

1. **Collection:**

- Inner Ear* Tympanocentesis is reserved for complicated, recurrent, or chronic persistent otitis media.
- For intact eardrum, clean ear canal with soap solution, and collect fluid via syringe aspiration technique.
 - For ruptured ear drum, collect fluid on flexible-shaft swab via auditory speculum.
- Outer Ear* Use moistened swab to remove debris or crust from ear canal. Obtain sample by firmly rotating swab in outer canal. For otitis externa, **vigorous** scrubbing is required because surface swabbing may miss streptococcal cellulitis. Return swab to culturette holder and activate by crushing and squeezing ampule at squeeze mark.

2. **Quantity:** As much exudate or fluid as possible.
3. **Collection device:** Sterile tube, culturette or anaerobic transport system (i.e. Port-a-cul tube or other suitable system). If aspirate or biopsy, use anaerobic transport system.
4. **Transport:** Within 2 hours from time of collection at room temperature. If this is not possible, specimen should be maintained room temperature and deliver within 24 hours.
5. **Special information:** Throat or nasopharyngeal culture are not predictive of agents responsible for otitis media and may yield misleading results.

EYE (Routine Culture, Fungal Culture)- Performed at WIH

1. **Collection:**

- Conjunctiva* Premoistened swab with sterile saline and roll swab over conjunctiva. Inoculate medium at time of collection or submit culturette with preservative. Return swab to culturette holder and activate by crushing and squeezing ampule at squeeze mark.
- Corneal Scraping* Instill 2 drops of local anesthetic using a sterile spatula, scrape ulcers or lesions, and inoculate scrapings directly onto medium. If smear is requested, apply remaining material to a frosted edged glass microscopic slide.

2. **Quantity:** One swab for culture, one swab for smear.
3. **Collection device:** Conjunctiva - plate directly onto blood agar, chocolate agar or place swab in transport tube.
- Corneal scrapings - directly inoculate onto blood agar, chocolate agar and sabourauds slant.



4. **Transport:** Within 2 hours from the time of collection at room temperature. If this is not possible, maintain culturette at room temperature and deliver to the laboratory within 24 hours. Media must be incubated at 35-37°C and delivered to the laboratory within 24 hours.
5. **Special Information:** Media may be obtained from the Microbiology Department (Ext. 31383).

GENITAL (Bacteriology Routine Culture) – Performed at WIH

(DNA Probe for Chlamydia trachomatis and Neisseria gonorrhea) – Performed at Kent

1. **Collection:**

Female	Amniotic	–	Aspirate via amniocentesis, cesarean section, or intrauterine catheter. Transfer fluid to anaerobic transport system.
	Bartholin	–	Disinfect skin and aspirate fluid from ducts.
	Cervix	–	a.) Insert speculum, remove mucus and/or secretions from cervix with swab, and discard swab. b.) Firmly yet gently, sample endocervical canal with sterile swab.
	Urethra	–	Remove exudate from urethral orifice. Collect discharge material on swab by massaging urethra against pubic symphysis through vagina. If no discharge can be obtained, wash external urethra with betadine soap and rinse with water. Then insert urethrogenital swab 2-4cm into urethra, and rotate swab for 2 seconds.
	Vaginal	-	Wipe away excessive amount of secretion or discharge. Obtain secretions from mucosal membrane of vaginal vault with sterile swab. If smear is also requested, obtain it with second swab.
Male	Urethra	–	Insert urethrogenital swab 2-4 cm into urethral lumen, rotate swab, and leave it in place for at least 2 seconds.
Lesions	(Male or Female)		
			a.) Clean lesions with sterile saline and remove lesion's surface with sterile scalpel blade.
			b.) Allow transudate to accumulate.
			c.) While pressing base of lesions firmly sample exudate with sterile swab.



2. **Quantity:** Fluid ≥ 1 ml
1 swab for culture
2 swabs for culture and gram stain
3. **Collection Device:** Fluid - Sterile containers
Swabs - Culturette or anaerobic transport system (i.e. Port-a-cul tube).
4. **Transport:** Within 2-3 hours from time of collection at room temperature.
If delivery is not possible, specimen should be maintained at room temperature and delivered within 24 hours.
5. **Special information:**
 - a.) Viral and Chlamydia/GC DNA Probe tests require separate collection and transport systems.
 - b.) For intrauterine devices, place entire device into sterile container, and submit at room temperature.

IV CATHETER TIP (Bacteriology Culture) – Performed at WIH

1. **Collection:**
 - Materials needed: alcohol wipe, sterile gloves, suture removal set and a sterile specimen container.
 - Open suture set, alcohol wipe and dry sterile container. Put on sterile gloves. Cleanse the skin around the puncture site with an alcohol wipe prior to removal of IV catheter. Grasp catheter with forceps at site of puncture, remove catheter and clip off tip with sterile scissors and drop directly into the sterile container.
2. **Quantity:** N/A
3. **Collection Device:**
Sterile container without preservatives. Do not submit in anaerobic transport media.
4. **Transport:** Transport immediately at room temperature. If delivery is delayed the integrity of the specimen will deteriorate.
5. **Special information:**
 - a.) Acceptable IV catheters for semiquantitative culture (Maki method): central, CVP, Hickman, Broviac, peripheral, arterial, umbilical, hyperalimination, Swan-Ganz
 - b.) Catheter tips submitted in anaerobic transport media compromise the recovery of organisms. The fluid on the outside of the tip is used to obtain the colony count and culture, placing it in anaerobic transport media removes the fluid from the outside of the tip.



NASAL (Routine Bacteriology Culture, Infection Control MRSA Screen)

1. **Collection:** Insert swab approximately 2 cm into nares. Rotate swab against nasal mucosa. Return swab to culturette holder
2. **Quantity:** One swab
3. **Collection device:** Culturette with Stuart's or Amies media.
4. **Transport:** Within 2-3 hours from time of collection at room temperature. If this is not possible, maintain specimen at room temperature and deliver within 24 hours.
5. **Special information:**
 - Infection Control Requests use only for screening admitted patients from hospital or nursing homes.
 - Follow-up cultures on previous (flagged) positive patients Require a physician's order.

NASAL (MRSA DNA)- Performed at Kent

1. **Collection:** Insert swab approximately 2 cm into nares. Rotate swab against nasal mucosa.
2. **Quantity:** Dual Swab
3. **Collection Device:** Red Capped Copan Swab
4. **Transport:** Within 2-3 hours from time of collection at room temperature. If this is not possible, maintain specimen at room temperature and deliver within 24 hours.
5. **Special Information:** Specimens collected from all admitted patients.

NASOPHARYNGEAL (Routine Bacteriology Culture, Bordetella pertussis Culture, Respiratory Syncytial Virus DFA and Culture)- Performed at WIH or sent out

BORDETELLA PERTUSSIS CULTURE AND DFA SMEAR

1. **Collection:**

Nasopharyngeal specimen must be collected by physician or nursing staff.
Materials Needed: Calgi Swab (2), Regan Lowe Transport Medium

Gently insert Calgi II (Calcium alginate) swab into posterior nasopharynx (through right and anterior nares until it reaches the pharynx). Rotate swab slowly for 5 second to absorb secretions. Remove swab and place in Regan Lowe transport medium. Repeat procedure using second calgi swab for left anterior nares

Culture: Insert swab directly into the medium of the Regan Lowe transport tube. Bend Calgi Swab wire over outside of tube. Replace and tighten cap over wire.



2. **Quantity:** 2 calgi swabs for culture and/or PCR
3. **Collection device:**
Regan Lowe transport medium
4. **Transport:** Within 2 hours from time of collection at room temperature.
5. **Special information:**
Specimens are sent to Rhode Island Department of Health for culture and/or PCR.

RECTAL (VRE DNA)

1. **Collection:** Insert swab approximately 2 cm into rectum.
2. **Quantity:** Dual Swab
3. **Collection Device:**
Red Capped Copan Swab
4. **Transport:** Within 2-3 hours from time of collection at room temperature. If this is not possible, maintain specimen at room temperature and deliver within 24 hours.
5. **Special Information:**
Specimens collected from all admitted patients.

ROUTINE BACTERIOLOGY CULTURE

1. **Collection:**
Nasopharyngeal specimen must be collected by physician or nursing staff.
Materials Needed: Calgi Swab and anaerobic transport tube

Gently insert Calgi II (Calcium alginate) swab into posterior nasopharynx (through both right and left anterior nares until it reaches the pharynx). Rotate swab slowly for 5 seconds to absorb secretions. Remove swab and place in appropriate transport medium.

Culture: Insert swab directly into the medium of the Port-a-cul transport tube.
Bend Calgi Swab wire over outside of tube. Replace and tighten cap over wire.
2. **Quantity:** 1 calgi swab for culture only
3. **Collection device:**
Anaerobic Transport system
4. **Transport:** Within 2-3 hours from time of collection at room temperature. If this is not possible, maintain the Port-a-cul transport tube at room temperature for a maximum of 24 hours.



SPUTUM (Routine Bacteriology, Fungal, AFB and Legionella culture)- Performed at WIH

1. **Collection:**

The patient should be instructed to rinse mouth or gargle with water before sputum is collected. To obtain an adequate sample with minimal contamination of oropharyngeal flora the patient should be instructed to cough *deeply* and expectorate into proper container.

Sputum induction may be used to obtain pulmonary secretions if patient is unable to raise sputum. Sputum specimens may also be collected by aspirating the patient via suctioning using a mucus trap. Mucus trap specimen – connect female port of specimen trap to suction catheter and male connector to tracheal suction tubing. When trap is disconnected, insert male connector into female connector. This specimen may be submitted in a sterile cup or mucus trap.

2. **Quantity:** 2-5 ml undiluted sputum.

If systemic fungal or mycobacterium infection is strongly suspected, multiple early morning specimens collected over successive days should be obtained.

3. **Collection device:** Sterile container without preservatives.

4. **Transport:** Within 2 hrs from time of collection at room temperature.

If this is not possible, the specimen must be refrigerated at 2-8°C and delivered within 24 hours.

5. **Special information:** Every sputum is evaluated for quality. Specimens that do not meet acceptable standards (consistent with oropharyngeal flora) are not processed. The following result will be reported – This sputum has been evaluated by gram stain and determined to be inadequate for culture. The predominance of squamous epithelial cells is consistent with oropharyngeal secretions. Processing of this specimen may recover organisms unrelated to infection. Submission of a better quality sputum is advised.

STOOL (Bacteriology Culture Exam)- Performed at WIH

1. **Collection:**

Material for bacteriology examination should be handled with care as it represents a potential source of infection.

Use the fecal collection transport kit. Place a small amount of stool (about the size of a walnut) into the Cary Blair Vial.

Using the collection spoon attached to the cap, add enough specimen (walnut size portion) until the liquid reaches the *Arrow* on the label and stir.

If stool collection kit is not available, place directly into clean container. Transfer to Microbiology Laboratory within 1 hour of collection, or transfer into stool/enteric transport system.

2. **Quantity:** Minimum sample size is 3-5 grams (size of a small walnut)

3. **Collection device:**

Fecal transport kit (Cary Blair Vial). **(DO NOT REFRIGERATE!)**



4. **Transport:** Specimen should be maintained at room temperature and transported to the laboratory within 48 hours from collection
5. **Special information:**
 - a.) Stools routinely cultured for Salmonella species, Shigella species, Campylobacter species, E. coli 0157, Yersinia species, Plesiomonas species, Vibrio species, Aeromonas species and predominance of Staph aureus.
 - b.) Inpatient: Stool culture may be ordered once/day for up to 3 consecutive days, after the third hospital day, authorization is required.

STOOL (Parasitic Exam)- Performed at WIH or sent out

1. **Collection:**

Special patient preparation: Avoid recent antibiotics or x-ray contrast material, antidiarrheal mediations, mineral oil, bismuth and nonabsorbable antidiarrheal preparation. Parasites may not be recovered from one to several weeks after administration of any of these compounds.

Specimens collected via colonoscopy must be delivered immediately to laboratory; specimen must be examined within 1 hour of collection.

Collect stool specimen in a container, bag or bedpan. The patient or nursing staff should be instructed to use any method that does not allow the specimen to become contaminated with water or urine since this could lyse any trophozoites present. Open the vial(s) carefully. Using the collection spoon attached to the cap, add enough specimen (walnut size portion) until the liquid reaches the *Arrow* on the label and stir. Fill only one vial at a time and replace the cap onto the same vial. DO NOT mix caps. If you are using an empty vial, fill to one-half full with stool specimen. Repeat for each container (PVA fixative and 10% formalin). If stool is watery, use 1 part watery stool to 3 parts of PVA and/or 10% Formalin. **Place name, date, and number on each vial (i.e. stool #1, stool #2).**

IMPORTANT: Sample areas of the specimen, which appear bloody, slimy, or watery.
If the stool is hard, sample from each end and from the middle of the specimen.

2. **Quantity:** Minimum sample size is 1 gram (size of a marble)
Optimum sample size is 5 grams (size of a small walnut)

A series of three specimens is considered a *minimum* for an adequate examination, due to the intermittent passing of certain parasites from the host.
3. **Collection device:**
Fecal transport kit (PVA Fixative and 10% Formalin).
4. **Transport:**
Maintain specimen at room temperature and deliver to the laboratory within 1-5 days from collection.
5. **Special information:** In addition to the routine parasite exam, other diagnostics techniques



for the recovery and identification of parasitic organisms are available.

- a.) Giardia – antigen detection by immunofluorescence
- b.) Cryptosporidium - antigen detection by immunofluorescence
- c.) Pinworm – swab paddle or scotch tape method (refer to Pinworm collection procedure)
- d.) Cyclospora – direct fluorescence

STOOL (Clostridium Difficile Toxin/DNA Amplification Assay)- Performed at Kent

1. Collection:

Collect stool specimen in a container, bag or bedpan. The patient or nursing staff should be instructed to use any method that does not allow the specimen to become contaminated with water or urine.

Place liquid or soft stool directly into a clean, dry container or into a stool collection/transport system. Formed stool specimens are not acceptable

2. Quantity: Minimum sample size 1 gram)

3. Collection device:

Sterile container or stool collection/transport system

4. Transport:

Within one hour from time of collection at room temperature.

If this is not possible, specimen must be refrigerated (2-8°C) and should be delivered within 24 hours. Greater than 24 hours, specimen must be frozen at –20°C or lower.

5. Special information: Clostridium difficile culture performed on stool specimens submitted with a separate accession number.

STOOL (Fecal leukocytes)- Performed at Kent

1. Collection:

Collect stool specimen in a container, bag or bedpan. The patient or nursing staff should be instructed to use any method that does not allow the specimen to become contaminated with water or urine since this could lyse any trophozoites present.

Place liquid or soft stool directly into a clean, dry container. **DO NOT USE** stool or enteric collection/transport system.

2. Quantity: Minimum sample size is 1 gram (size of a marble)

3. Collection device: Sterile container without preservatives or transport fluid.

4. Transport: Within two hours from time of collection at room temperature.

5. Special information: Specify Wright stain or Gram stain

THROAT (Bacteriology, Fungal Culture)- Performed at WIH**1. Collection:**

Instruct the patient to tilt head back and say “ahhhh”.

Using a sterile tongue depressor and culturette, depress tongue and swab posterior pharynx, especially red areas or white patches. If exudate is present or white patches are visible on tonsils, swab tonsillar area as well. A well-collected specimen may elicit a gag reflex and be unpleasant to the patient. Return swab to culturette holder

- 2. Quantity:** Throat culture only – 1 swab
Rapid strep test/throat culture – 2 swabs

3. Collection Device:

Silica gel-dry swab
Culturette with Stuart’s or Amies media.

- 4. Transport:** Within 2-3 hours from time of collection at room temperature.
If this is not possible, the specimen should be refrigerated at 2-8°C and delivered within 48 hours.

- 5. Special Information:** Throat cultures routinely screened for the presence of Beta Strep Group A, C and G.

Antimicrobial susceptibility testing performed on Beta Strep Group A isolates.

Pathogens other than Group A strep (*Strep. pyogenes*) require special media to isolate these organism; therefore, the requisition must specify the possible etiologic agent, i.e. *Corynebacterium diphtheroids*, *Candida albicans*.

Throat cultures are contraindicated for patient with inflamed epiglottitis.

URINE (Bacteriology, Fungal, AFB Culture) – Performed at WIH**(Streptococcus pneumoniae antigen) – Performed at Kent****1. Collection:**

Cleaning and proper collection of the urine specimen is very important to insure accurate and meaningful results.

Female, midstream: Wash your hands. Open the urine collection kit and remove wipes from specimen container. With one hand spread the labial skin open with your fingers and clean yourself. Using one wipe at a time, begin to wash gently, wiping only the front to the back between the folds of your skin.

Very important - spread the labial skin open with your fingers throughout the collection process. Start urinating, don’t stop urinating, put the cup in the middle of the stream of urine and collect a sample of urine.. After collection of sample, remove protective holder and replace cap.



****If you are helping your small child, you may have her sit on the toilet backwards to help hold the labia open while she urinates.**

Male, midstream: Clean the glans with soap and water. Rinse area with wet gauze pads, paper towels or other suitable item

While holding foreskin retracted, begin voiding. After several ml have passed, collect midstream portion without stopping flow of urine

Straight catheter: Thoroughly clean urethral area with soap and water. Rinse area with wet gauze pads, paper towels or other suitable item.

Aseptically insert catheter into bladder. Allow 15 ml to pass: then collect urine to be submitted in sterile container.

2. **Quantity:** Minimum sample size is 1 ml.
3. **Collection device:** Urine collection kit. Sterile, wide-mouth container.
4. **Transport:** Within 2 hours from time of collection at room temperature.
If this not possible, specimen must be refrigerated at 4-8°C and delivered within 24 hours.
5. **Special information:**
IMPORTANT: Please specify urine type (i.e. Catheter, Void, Cystoscopy), as different collection practices have unique processing requirements.

WOUND/FLUID (Bacteriology, Fungal, AFB Culture)- Performed at WIH

Lesions, nodules, abscess, and ulcers can be cultured in various manners. Optimal specimens are aseptically obtained fresh pus or fluid that is rapidly and safely transported to the laboratory. Direct aspiration into a syringe is often the most convenient and satisfactory means of collection. The specimen may be submitted in a sterile container without preservatives or in a syringe with the needle removed.

1. **Collection:**
 - a.) Mechanically clean the area around and over the site. Remove surface exudate by wiping with sterile saline or alcohol.
 - b.) The specimen must be material from the actual site of infection. Obtain specimen from within the depths of the wound or draining sinus without touching the adjacent skin. Firmly sample lesions advancing edge. (CELLULITIS – sample center of inflamed area)
 - c.) Tissue or fluid is always superior to swab specimen. Obtain fluids specimen via percutaneous needle aspiration or surgery.
If swabs must be used, collect 2, 1 for culture and 1 for Gram stain.
Fluids (i.e. joint, ascites, peritoneal, synovial) - always submit as much fluid as possible in sterile container; **never submit swabbed dipped in fluid.**
2. **Quantity:** Tissue or fluid – submit as much sample as possible.
Swabs – 2 swabs for culture and Gram stain.



3. **Collection device:** Tissue - sterile container with sterile saline
Fluid - sterile container
Swabs - inoculate into anaerobic transport system

For anaerobic transport tube inoculation:
 - Obtain specimen and quickly insert the swabs into the tube within approximately 5-mm from the bottom of the media.
 - Break the shaft of the swab evenly with the lip of the tube to allow easy removal of swabs for processing.
 - Replace and tighten cap.
4. **Transport:** Specimen should be transported to the laboratory within 2-3 hours from time of collection at room temperature. If this not possible, place in transport media and deliver within 48 hours.
5. **Special information:**
Sampling of surface area can introduce colonizing bacteria not involved in infection process.