



Policy #:	611 (PLH-611-06)	Effective Date:	9/30/2004	Reviewed Date:	8/1/2016
Subject:	SPECIMEN COLLECTION FOR CULTURE OF BACTERIAL PATHOGENS QUICK REFERENCE				
Approved by: Laboratory Director, Jerry Barker (electronic signature)					
Approved by: Laboratory Medical Director, Mark P. Burton, MD (electronic signature)					
Approved by: Affiliate Lab Medical Director, Chris Giampapa, MD (electronic signature)					
Approved by: Affiliate Lab Medical Director, Paul J. Sims, MD (electronic signature)					
Approved by: Affiliate Lab Medical Director, F.E. Williamson, MD (electronic signature)					

SPECIMEN COLLECTION FOR CULTURE OF BACTERIAL PATHOGENS QUICK REFERENCE

Send a separate specimen for each procedure request to ensure sufficient quantity for culture.

*If tissue is collected, keep specimen moist with dampened saline gauze		
Surgical Site Infections		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Tissue (3-4mm ² per culture) or aspirate (0.5ml per culture)	Sterile container*
Misc anaerobe culture		Sterile container
AFB culture/smear		Sterile container
Fungus culture/smear		Sterile container
Skin and Soft Tissue Infections		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Tissue (3-4mm ² per culture) or aspirate (0.5ml per culture)	Sterile container*
Misc anaerobe culture		Sterile container
AFB culture/smear		Sterile container
Fungus culture/smear		Sterile container
<p>Tissue (3-4mm² per culture)</p> <div style="display: flex; justify-content: center; gap: 20px;"> <div style="text-align: center;">  3mm² </div> <div style="text-align: center;">  4mm² </div> </div>		

**Intra-abdominal Infections
(peritonitis, intraperitoneal abscess, hepatic/splenic abscess, pancreatitis, biliary tract infections)**

Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Tissue (3-4mm ² per culture) or aspirate (0.5ml per culture)	Sterile container*
Misc anaerobe culture		Sterile container
AFB culture/smear		Sterile container
Fungus culture/smear		Sterile container

Sterile Abdominal Fluids (peritoneal, ascities, pancreatic, PD fluid)

Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	50ml of fluid	Sterile container/bag
Fluid anaerobe culture		
AFB culture/smear		
Fungus culture/smear		

Trauma Associated Cutaneous Infections

Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Tissue (3-4mm ² per culture) or aspirate (0.5ml per culture)	Sterile container
Misc anaerobe culture		Sterile container
AFB culture/smear		Sterile container
Fungus culture/smear		Sterile container


Bone Infections


Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Intact bone, shavings or excised necrotic tissue (3-4mm ² per culture)	Sterile container*
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		

Burn Wound Infections

Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Tissue (3-4mm ² per culture) or aspirate (0.5ml per culture)	Sterile container*
Misc anaerobe culture		Sterile container
AFB culture/smear		Sterile container
Fungus culture/smear		Sterile container

Tissue (3-4mm² per culture)


 3mm²


 4mm²

Joint Infections		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	Synovial fluid; at least 0.5ml per culture , if possible	Sterile container
Fluid anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Prosthetic Joint Infections		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Tissue (3-4mm ² per culture), synovial fluid or removed prosthesis with attached tissue	Sterile container*
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Interventional Radiology & Surgical Drains		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Drainage; 0.5 ml per culture , if possible	Sterile container*
Misc anaerobe culture		Sterile container
AFB culture/smear		Sterile container
Fungus culture/smear		Sterile container
Pelvic Inflammatory Disease & Endometritis		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Endometrium, tubo-ovarian abscess and/or fallopian tube contents (0.5ml per culture)	Sterile container
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Subdural Empyema, Epidural Abscess, Suppurative Intracranial Thrombophlebitis		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Aspirate of purulent material (0.5ml per culture)	Sterile container
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		

Focal Infection of Brain Parenchyma		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Aspirate of abscess contents (0.5ml per culture) or Tissue (3-4 mm ² per culture)	Sterile container*
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Vascular Catheters		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	5 cm of the distal catheter tip	Sterile container
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
CNS Shunt Infections		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	≥ 1 ml CSF	Sterile container
Fluid anaerobe culture		
AFB culture/smear	≥ 5ml CSF	
Fungus culture/smear	≥ 5ml CSF	
Cryptococcal Antigen	0.5- 1 ml CSF	
HSV by PCR	0.1 ml CSF	
Infective Endocarditis		
Diagnostic Test	Optimal Specimen	Transport Device
Blood culture	20-30 ml blood per set	Inoculated blood culture vials (preferably 2 sets collected sequentially over a short time interval)
AFB/Fungus	1-5 mL per bottle	Mycolytic blood culture vial
Infected (mycotic) Aneurysms & Vascular Grafts		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	lesion, biopsy or resected graft material	Sterile container*
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		

Pericarditis/Myocarditis		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	50ml Pericardial fluid or pericardial biopsy	Sterile container/bag
Fluid anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Meningitis/Encephalitis		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	0.5-1 ml CSF	3 or 4 Sterile tubes by lumbar puncture
Fluid anaerobe culture		
AFB culture/smear	>5 ml CSF	
Fungus culture/smear	>5 ml CSF	
Cryptococcal Antigen	0.5- 1 ml CSF	
HSV by PCR	0.1 ml CSF	
Infections of the Pleural Space (pleural fluid, thoracentesis fluid,etc)		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	50ml Pleural Fluid and/or pleural biopsy	Sterile container/bag
Fluid anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Respiratory-epiglottis		
Diagnostic Test	Optimal Specimen	Transport Device
Blood culture	20-30 ml blood per set	Inoculated blood culture vials (preferably 2 sets collected sequentially over a short time interval)
Comments: Swabbing the epiglottis can precipitate complete airway closure.		
Respiratory-throat		
Diagnostic Test	Optimal Specimen	Transport Device
Respiratory culture	Swab area of inflammation; collect exudate if present. Avoid contact with saliva; can inhibit recovery of Group A strep.	Culturette or transport media

Respiratory-sinus			
Diagnostic Test	Optimal Specimen	Transport Device	
Misc culture & smear	1-5 ml collected with needle and syringe.	Sterile container	
Misc anaerobe culture			
AFB culture/smear			
Fungus culture/smear			
Comments: Culture of nasopharynx or oropharynx has no predictive value for specific diagnosis.			
Respiratory-lower airways (Bronch Lavage/wash)			
Diagnostic Test	Optimal Specimen	Transport Device	
Respiratory culture & smear	1-2 ml from protected collection	Sterile container	
Misc anaerobe culture			
AFB culture/smear			5-10 ml
Fungus culture/smear			1-2 ml
Comments: Specimens need to be transported ASAP for anaerobic culture.			
Respiratory-lower airways (Bronch brush)			
Diagnostic Test	Optimal Specimen	Transport Device	
Respiratory culture & smear	1-2 ml : note that sterile water should be used if Legionella testing will be performed	Sterile container	
Misc anaerobe culture			
AFB culture/smear			
Fungus culture/smear			
Comments: Specimens need to be transported ASAP for anaerobic culture.			
Respiratory-lower airways (Transtracheal or direct lung aspirate)			
Diagnostic Test	Optimal Specimen	Transport Device	
Respiratory culture & smear	1-2 ml	Sterile container	
Misc anaerobe culture			
AFB culture/smear			5-10 ml
Fungus culture/smear			1-2 ml
Comments: Specimens need to be transported ASAP for anaerobic culture.			
Respiratory-lower airways (Expectorated sputum)			
Diagnostic Test	Optimal Specimen	Transport Device	
Respiratory culture & smear	1-2 ml	Sterile container	
AFB culture/smear	5-10 ml		
Fungus culture/smear	1-2 ml		
Comments: Patient should rinse first with sterile water. AFB should be minimum of 3 early morning specimens on 3 different consecutive days.			

Respiratory-ear		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	Whatever fluid that can be collected	Capped, needle-less syringe or Sterile container
Comments: Culture of external ear has no predictive value for otitis media.		
Eye-superficial infections		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Swab or corneal scrapings	Sterile container for corneal scrapings/ culturette for swab
Fungus culture/smear	Swab or corneal scrapings	
Comments: Delays in transport will result in significant loss of organisms. Additional swab should be collected for smear.		
Eye-deep-seated infections (aqueous or vitreous fluid)		
Diagnostic Test	Optimal Specimen	Transport Device
Fluid culture & smear	Whatever fluid that can be collected	Sterile container
Fluid anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Comments: Delays in transport will result in significant loss of organisms.		
Catheter (Venous, arterial)		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	Aseptically removed catheter tip	Sterile container
Misc anaerobe culture		
AFB culture/smear		
Fungus culture/smear		
Comments: No foley cath tips will be accepted.		
Exudates (transudates, drainage, ulcers)		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	1-5 ml aspirate	Sterile container
AFB culture/smear	3-5 ml aspirate	
Fungus culture/smear	1-5 ml aspirate	
Comments: Avoid contamination with surface material; generally unsuitable for anaerobic culture.		

Wounds (abscess, pus)		
Diagnostic Test	Optimal Specimen	Transport Device
Misc culture & smear	1-5 ml aspirate	Sterile container
Misc anaerobe culture		
AFB culture/smear	3-5 ml aspirate	
Fungus culture/smear	1-5 ml aspirate	
Comments: Swabs are suboptimal and should be avoided; if used collect at base of wound.		
Urine (midstream)		
Diagnostic Test	Optimal Specimen	Transport Device
Urine culture	1-10 ml	Sterile container
AFB culture/smear	> 10 ml	Sterile container
Fungus culture/smear	1-10 ml	Sterile container
Comments: Avoid contamination of specimen with bacteria in the urethra or vagina. Discard the first portion of voided specimen. It is best to submit early morning specimen and transport ASAP to lab. If specimen cannot be transported quickly, use bacteriostatic preservative or refrigerate.		
Urine (catheterized)		
Diagnostic Test	Optimal Specimen	Transport Device
Urine culture	1-10 ml	Sterile container
AFB culture/smear	> 10 ml	Sterile container
Fungus culture/smear	1-10 ml	Sterile container
Comments: First portion of collected specimen is contaminated with urethral bacteria. It is best to submit early morning specimen and transport ASAP to lab.		
Urine (suprapubic aspirate)		
Diagnostic Test	Optimal Specimen	Transport Device
Urine culture	1-10 ml	Sterile container
Misc anaerobe culture		
AFB culture/smear	> 10 ml	
Fungus culture/smear	1-10 ml	
Comments: It is best to submit early morning specimen and transport ASAP to lab.		
Genital Culture (Routine, perinatal, post-natal and STD other than GC and Chlamydia)		
Diagnostic Test	Optimal Specimen	Transport Device
Genital culture	Swab or aspirate	Sterile container
Misc anaerobe culture (If endocervical collected by aspiration)	Aspirate	Sterile container
Fungus culture/smear	Swab or aspirate	Sterile container
Comments: The area of inflammation or exudate should be sampled.		

GC Culture		
Diagnostic Test	Optimal Specimen	Transport Device
Genital culture	Swab or aspirate	Sterile container
Comments: Transport ASAP to lab. NOTE: It is recommended to perform testing for GC and Chlamydia trachomatis by PCR methodology. Refer to policy PLH 650 for specimen collection and transport information.		
Wet prep for yeast, trichomonas, and clue cells		
Diagnostic Test	Optimal Specimen	Transport Device
Wet prep	Swab in < 1cc saline	Sterile container
Comments: Transport ASAP to lab.		
Feces (stool)		
Diagnostic Test	Optimal Specimen	Transport Device
Atypical stool culture	Fresh or preserved stool	Sterile container/ preservative (Orange top)
VRE Screen	Fresh or preserved stool	Sterile container/ preservative (Orange top)
Ova and Parasite screen	Fresh or preserved stool	sterile container/ preservative (Green top)
Pinworm	Clear scotch tape prep, pinworm paddle or early morning feces	Glass slide, pinworm paddle, or sterile container)
Comments: Rapid transport to lab is required unless in preservative as specified. Swabs are sub-optimal specimens and should not be collected. NOTE: For routine stool pathogens testing is performed by PCR methodology. Refer to policy PLH 650 for specimen collection and transport information.		