



# Clinical Laboratory Department POLICY AND PROCEDURE

POLICY NUMBER: 1228  
VERSION: 3

## SUBJECT: Microbiology Test Menu

Test Name	Abbrev	Test Information	Patient Preparation	Specimen Requirements	Testing Lab	TAT (min.)	Reference Range
Acid Fast Bacilli Culture or Mycobacteria Culture	AFB culture or TB Culture	Specimens are cultured on appropriate media for the recovery of mycobacterium. Suspected organisms are identified by DNA probe. If organism other than <i>M. tuberculosis</i> is suspected, the request must state that identification of all AFB organisms is needed.		<p><b>Sputum</b></p> <ul style="list-style-type: none"> <li>Expectorated – 1st morning specimen is best.</li> <li>Induced/aerosolized</li> <li>Submit in container without preservative or diluent.</li> <li>Refrigerate if delay in delivering to lab is over 30 minutes.</li> <li>No more than one specimen per day.</li> <li>24 hour sputum NOT acceptable.</li> </ul> <p><b>Bronchial washes</b> May be collected any time.</p> <p><b>Urine</b></p> <ul style="list-style-type: none"> <li>Voided urine – 1st morning specimen is best.</li> <li>Entire collection if bladder or cystoscopy urine.</li> <li>Refrigerate if delay in delivering to lab is over 30 minutes.</li> <li>No more than one urine per day.</li> <li>24 hour urine NOT acceptable.</li> </ul> <p><b>Gastric washes</b></p> <ul style="list-style-type: none"> <li>Specimens MUST be obtained before breakfast and be less than 30 minutes old when received in the lab.</li> <li>Neutralize with 100mg sodium bicarbonate immediately.</li> <li>Refrigerate if delay in delivering to lab is over 30 minutes.</li> </ul> <p><b>Blood</b></p> <ul style="list-style-type: none"> <li>SPS (yellow top) vacutainer.</li> <li>Keep at room temp.</li> </ul> <p><b>Bone Marrow</b></p> <ul style="list-style-type: none"> <li>Heparinized sterile tube.</li> <li>Keep at room temp.</li> </ul> <p><b>Wound</b></p> <ul style="list-style-type: none"> <li>Aspirates are specimen of choice.</li> <li>If swab - minimum of 3 Culturette swabs (i.e. 6 swabs total) collected from the <b>SAME</b> site.</li> <li>Best if swab specimens collected from leading edge.</li> </ul> <p><b>Stool</b></p> <ul style="list-style-type: none"> <li>Submit in a clean, dry container.</li> </ul>	Quest	6-8 weeks for No growth  Positive Results typically 2-8 weeks	No growth after 8 weeks.
Acid Fast Bacilli smear	AFB smear	AFB Smear is routinely done when culture ordered.		<ul style="list-style-type: none"> <li>Same as above.</li> </ul>	PHL	1 day M-F	No AFB seen.
Anaerobic culture	ANA	Culture to recover and identify anaerobic organisms known to cause infections in the site from which specimen is taken. Susceptibility testing done on specific organisms only by special request of physician.		Must come from an anaerobic site and be put immediately in an anaerobic specimen container.	MLK	48 hrs for Gram Stain  Identification may take longer	Depends on site cultured.
Blood Culture, Routine	BC	CO2 produced by microorganisms is monitored by the blood culture system. Cultures are incubated for 5-6 days.	Venipuncture site must be aseptically cleaned. See blood culture policy.	8-10 ml blood in each of 2 bottles (1 aerobic and 1 anaerobic). A pediatric bottle requiring <4 ml is also available. Optimally 3 cultures should be collected at 10-30 minute intervals from different venipuncture sites.	MLK	6 days	No growth after 6 days.

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Blood Culture, Fungal	Fungal BC			Use Bact/Alert Fungal Culture Bottles	Quest	4 weeks	No growth after 4 weeks.
<i>Bordetella pertussis</i> / <i>parapertussis</i>  aka: whooping cough		PCR or EIA or Culture	Contact lab for media prior to collecting specimen to ensure media is available.	2 NP swabs in Regan Lowe media is specimen of choice.  Contact lab for media prior to collecting specimen to ensure media is available.	PHL	Culture = 2 weeks  EIA = 2 days M-F	No growth  Negative
<i>Clostridium diphtheriae</i> culture  aka: diphtheria		Culture on special media.  <b>Laboratory must be notified if this organism is suspected.</b>	Contact lab for media prior to collecting specimen to ensure media is available.	Nasal swab is placed in a Culturette.	Quest	Culture = 1 week	No growth
<i>Chlamydia trachomatis</i> by amplification		Detection of <i>Chlamydia</i> antigen by nucleic acid (DNA) amplification.  <b>Not to be used for Sexual abuse cases or for test of cure.</b>  <b>MUST indicate source.</b>	Female = use cleaning swab before swabbing endocervix  <b>Urine</b> NO cleaning before collection NO urinating at least ONE hour before	Swab of <b>urethra</b> or <b>endocervix</b> placed in transport system ("purple print" packaging).  <b>Urine</b> = "dirty" catch, first void; must be at least one (1) hour since last void. <b>Deliver to laboratory day of collection.</b> Must be placed in Aptima Combo 2 specimen collection kit within 24 hours of collection. See Aptima poster.  <b>Throat, Rectum, NON-urethra, NON-endocervical</b> = swab placed in transport system (orange)	PHL	2-7 days	Presumptive negative
<i>Chlamydia trachomatis</i> culture		Detection of <i>Chlamydia</i> spp. by culture.  <b>Used only for medical-legal cases or for test of cure</b>		Swab placed in M4 transport system.  Refrigerate once received in the lab.	Quest	1-2 weeks	No growth
<i>Clostridium difficile</i> toxin	C. diff			5 gm frozen feces	Quest	2-4 days	Negative
Cryptococcal Antigen		CSF or serum is tested for the presence of <i>Cryptococcus neoformans</i> antigen by agglutination technology.		CSF Serum	Quest	2 days.	Negative
<i>Cryptosporidium parvum</i> , <i>Cyclospora</i> , <i>Isospora</i>		Feces are concentrated and then stained using DFA technique. Preparations are examined using fluorescent microscopy to detect the presence of <i>Cryptosporidium</i> .		O&P stool collection kit.	Quest	1 week	No <i>Cryptosporidium</i> seen.
CSF Bacterial antigens or Ag Titers, CSF PCR for TB, Herpes, West Nile, Toxoplasmosis, Lyme, & Coccidioides	CSF	CSF is tested for antigens organism listed.			Quest	2 days.	Negative
<i>Neisseria gonorrhoea</i> by amplification  aka: GC  GC, cont.	Gen Probe	Detection of GC antigen by nucleic acid (DNA) amplification.  <b>Not to be used for Sexual abuse cases or for test of cure.</b>  <b>MUST indicate source.</b>	Female = use cleaning swab before swabbing endocervix  <b>Urine</b> NO cleaning	Swab of <b>urethra</b> or <b>endocervix</b> placed in transport system ("purple print" packaging).  <b>Urine</b> = "dirty" catch, first void; must be at least one (1) hour since last void. <b>Deliver to laboratory day of collection.</b> Must be placed in Aptima Combo 2 specimen collection kit within 24 hours of collection. See Aptima poster.  <b>Throat, Rectum, NON-urethra, NON-endocervical</b> = swab placed in transport system (orange)	PHL	2-7 days	Presumptive negative

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			Before collection Must be at least ONE hour since last void				
Culture for <i>Neisseria gonorrhoea</i>	R/O GC	Specimens from appropriate sites are cultured for the presence of <i>N. gonorrhoea</i> only.  <b>Used only for medical-legal cases or for test of cure.</b>  <b>MUST indicate source, date of collection.</b>		Swab of culture site plated directly to Martin-Lewis or Modified Thayer-Martin media which has been warmed to RT. <b>The plate must be delivered to the lab immediately.</b>	HDHS	48 hrs	No <i>N. gonorrhoea</i> recovered.
Culture & Sensitivity (Aerobic)	C&S	Aerobic culture to recover and identify organisms known to cause infections in the site from which specimen is taken. Susceptibility testing performed on organisms when recovered in significant quantities as appropriate based on site cultured and organism.		Culturette II swab of site, body fluid in sterile container, tissue in sterile saline.	MLK	48 hrs for no growth	Depends on site cultured
Culture for MRSA	R/O MRSA	Specimens are cultured for recovery of <i>S. aureus</i> only. <i>S. aureus</i> isolates are tested for susceptibility to methicillin.		Culturette II swab of site, body fluid in sterile container, tissue in sterile saline.	MLK	48 hrs	No MRSA recovered.
Exam for Ova and Parasites	O&P	A concentrated feces specimen and a trichrome stained slide preparation are examined microscopically for the presence of intestinal ova and parasites. Identification of organisms is based on morphological details.		O&P stool collection set -1 specimen per day for 3 days	Quest	1 wk	No ova or parasites seen.
Fecal Fat (Qual)		A feces specimen is screened for the presence of fat.		Feces in a clean, dry container.	Quest	1-4 days	<10 fat droplets.
Fungal Culture or Yeast Culture		Culture of specimen on appropriate mycology media for recovery of yeast and other fungi. Culture is maintained for 4 weeks to allow recovery of slowly growing fungi.		Culturette II swab of site, body fluid in sterile container. Tissue in sterile saline.	HDHS	1-4 wks	No growth in 4 weeks.
Gram Stain	GS	When ordered by provider, Gram Stain of direct specimen smear is performed. EXCEPTIONS: urine, feces, blood and throat specimens.		Culturette II swab of site, body fluid in sterile container, tissue in sterile saline.	MLK or HDHS for Genital GS	1 day	Depends on source
India Ink Prep, Protein, Glucose, Gram Stain, Routine Culture, Fungal Culture for CSF	CSF	The microscopic examination of CSF mixed with India Ink to determine the presence of <i>C. neoformans</i> .		CSF	OVMC	1-2 days.	No encapsulated yeast seen.
KOH prep/Fungal Stain		KOH is added to the specimen to digest proteinaceous components. The specimen is examined microscopically for fungal elements.		Skin scraping or hair -can be sent in labeled sterile container.	Quest	24 hrs	No fungal elements seen.
<i>Legionella pneumophila</i>		Culture or DFA smear.  Urine specimen for <i>Legionella</i> antigen is specimen of choice.		Collect specimen in a labeled, sterile, leak proof container without holding medium, buffers or salt. Transport at 2-8 °C.	PHL or Quest	Culture = 1 wk  DFA = 2-3 days	No growth or none detected.
Occult Blood	FIT	The presence or absence of blood in feces specimen.		FIT kit given to patient by clinic. Instructions inside kit.	MLK	1-4 days	Negative

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		ONE sample.					
Pinworm Prep		Clear cellophane tape preparations or equivalent are examined microscopically for the presence of <i>Enterobius vermicularis</i> .		Clear cellophane tape applied to the anus in the early A.M. Place tape on a labeled microscope slide or use kit for transport to the lab.	MLK or Quest	1-7 days	No <i>Enterobius vermicularis</i> seen.
Respiratory Syncytial Virus	RSV	Nasopharyngeal swabs are tested by EIA technique for the presence of RSV antigen.		Nasopharyngeal transported at room temperature.	HDHS	2 hr	Negative
Screen for Bacterial vaginosis	BV	Gram stain of a vaginal direct smear.		Culturette II swab of the vagina.	HDHS	1 day	Normal
Strep Screen Beta Strep grp A	SS	All routine throat swabs are cultured only for Beta Strep group A. Direct Strep antigen testing is performed when requested STAT.		Culturette II swab of peritonsillar area.	HDHS	24 hr	No Beta strep recovered.
Strep Screen Beta Strep grp B	BSB	Prenatal specimens for Beta Strep grp B screen will be cultured to recover only this organism to determine the mother's risk for transmitting BSB to the infant.		A single Culturette II swab of the vagina, cervix and rectum.	HDHS	48 hr	Negative for Beta Strep group B.
Viral Culture		Specify which viruses.		Appropriate clinical specimen placed in viral transport medium (M4). Store at 2-8°C.	Quest	2 wks	No viruses recovered.
WBC (Stool)		A feces specimen is examined microscopically for the presence of WBCs.		Feces in O&P collection kit.	OVMC	2 days	No WBCs seen.
Wet Mount	WM	Microscopic exam of unstained specimen for the presence of motile <i>Trichomonas</i> , budding yeast and/or other fungal elements depending on the source.		Specimen of choice: Swab in Diamond's medium  Must be kept at body temperature if vaginal swab for r/o <i>Trichomonas</i> .	HDHS	1 day	No budding yeast, fungal elements or motile <i>Trichomonas</i> seen.

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<b>Approved By:</b> Brian Yee (PHYS SPEC PATHOLOGY)	
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