

# WVU Medicine

## Specimens Submitted for Microbiology Testing

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- a. Adult Routine
- b. Pediatric Routine
- c. Neonatal
- d. Endocarditis
- e. Determine Line Sepsis (aka time to positivity)
- f. Mycobacterial (AFB) and Mold

## UPPER RESPIRATORY SPECIMENS

### Anterior Nares



Standard Culture Swab



E-swab (white)- Preferred collection device



Method of Collection – Anterior nares

Test Name	Epic Number	Acceptable Specimen
MRSA SURVEILLANCE CULTURE	LAB234	nasal standard swab or E-swab
MRSA PCR, Rapid	LAB1938	nasal E-swab

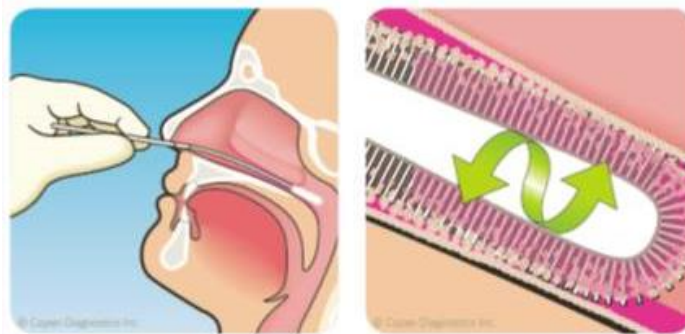
## Nasopharyngeal Sites



**BD Universal Transport Kit**  
preferred specimen



eSwab NP (blue or green)



Method of Collection

Test Name	Epic Number	Acceptable Specimen
SARS-CoV2 (COVID19), FLU A/B, RSV BY PCR	LAB1230890	Nasopharyngeal swabs
INFLUENZA VIRUS TYPE A AND B, PCR	LAB3041050	Nasopharyngeal swabs or aspirates
HUMAN METAPNEUMOVIRUS	LAB3041230	Nasopharyngeal swabs or aspirates
PARAINFLUENZA VIRUS 1,2,3 RNA QL	LAB3041231	Nasopharyngeal swabs or aspirates
BORDETELLA PERTUSSIS/PARAPERTUSSIS, PCR	LAB3041041	Nasopharyngeal swabs
RESPIRATORY VIRUS PANEL BY BIOFIRE FILM ARRAY	LAB1897	Nasopharyngeal swabs
SARS-CoV2 (COVID19)	Varies	UTM, saline, eSwab

# Throat



General use Dual shaft Culture swab



eSwab (white)



APTIMA Multitest swab

Test Name	Epic Number	Acceptable Specimen	Comment
THROAT CULTURE	LAB236	General culture swab or eSwab	Culture for groups A, C, F and G streptococci, posterior pharynx/throat
Streptococcus pyogenes, PCR	LAB1237500	eSwab	Detects only Group A Streptococci
THROAT CULTURE-GC	LAB304868	General culture swab	Culture for Neisseria gonorrhoeae – Preferred method is by nucleic acid amplification (see below)
N. gonorrhoea/C. trachomatis, RNA NAAT	LAB123303	Throat/Pharyngeal	APTIMA Multitest swab
Neisseria gonorrhoea, RNA NAAT (only)	LAB123301		
Chlamydia trachomatis, RNA NAAT (only)	LAB123300		

## LOWER RESPIRATORY SPECIMENS

### Sputum, tracheal aspirates, bronchial washes, BALs, etc.

All containers labeled with contents and collection site



Trap



Sterile cup

Test Name	Epic Number	Acceptable Specimen
RESPIRATORY CULTURE & GRAM STAIN	LAB1230009	Tracheal aspirates, bronchial washes, sputum
Quantitative Culture/Gram Stain for BAL	LAB304845	BAL, protected specimen brush
CF SPUTUM CULTURE & GRAM STAIN	LAB304859	Sputum or throat swab from CF patients
PEDIATRIC EXTENDED RESPIRATORY CULTURE AND GRAM STAIN	LAB1708	Sputum or throat swab from pediatric patients with immunosuppression and/or chronic lung diseases
INFLUENZA VIRUS TYPE A AND B, PCR	LAB3041050	BALs only
HUMAN METAPNEUMOVIRUS	LAB3041230	BALs only
PARAINFLUENZA VIRUS 1,2,3 RNA QL	LAB3041231	BALs only
SARS-CoV-2 (COVID19)	LAB1230656	BALs only
Mycobacterium tuberculosis Complex, Molecular Detection, PCR	LAB123475	Sputum or BAL
Fungus Culture	LAB240	Sputum or BAL
AFB (Mycobacterial) Culture and Stain	LAB304905	Sputum or BAL

## STERILE FLUIDS and ASPIRATED SPECIMENS (Non-Tissue)

### Cerebrospinal Fluid (CSF)

Specify whether sample is from ventricles or lumbar puncture



CSF Fluid Tubes



Red top Vacutainer Tube

CSF CULTURE (INCLUDES GRAM STAIN)	LAB268	
INDIA INK FOR CRYPTOCOCCUS	LAB3041156	
FUNGUS CULTURE	LAB240	
STREPTOCOCCUS PNEUMONIAE ANTIGEN, CSF	LAB304860	Must also order CSF culture (LAB268)
CRYPTOCOCCAL ANTIGEN, CSF	LAB304790	Must also order fungal culture (LAB240)
ENTEROVIRUS, PCR, CSF	LAB1679	
HSV1/ HSV2, PCR, CSF/SWAB	LAB1792	
VARICELLA ZOSTER VIRUS (VZV), PCR, CSF	LAB1793	

## Pleural, pericardial, peritoneal, synovial fluids; Aspirates of abscesses or cysts

All containers labeled with contents and collection site



Syringe chamber, capped with needle removed



Sterile cup



Evacuated Container



BacT Alert Blood bottles  
(peritoneal and joint fluids ONLY)

STERILE SITE CULTURE AND GRAM STAIN AEROBIC	LAB1230008	Specimens collected from normally sterile site, EXCLUDING CSF and urine (see separate tests/collection devices for these)
STERILE FLUID (IN BLOOD CULTURE BOTTLES)	LAB304844	5-10mL of synovial or peritoneal fluid inoculated into aerobic (green) and anaerobic (orange) blood culture bottles. If <5mL volume, use pediatric (yellow) bottle
STERILE FLUID (IN 1 BLOOD CULTURE BOTTLE)	LAB304843	5-10mL of synovial or peritoneal fluid inoculated into aerobic (green) blood culture bottle. If <5mL volume, use pediatric (yellow) bottle.
ANAEROBIC CULTURE	LAB233	Sterile container. Test will be automatically added to tissues and aspirates meeting specific transport criteria.
PROSTHETIC JOINT CULTURE	LAB1833	Synovial fluid or peri-prosthetic tissue (includes anaerobic culture)



## Sterile Sites – Tissue (Non-OR)

### Resected tissue, biopsies, curretage material or scrapings, etc.

All containers labeled with contents and collection site



Sterile cup

TISSUE CULTURE & GRAM STAIN	LAB271	Resected tissue or biopsy in sterile container. May moisten with sterile saline and/or gauze for small specimens.
ANAEROBE CULTURE	LAB233	Test will be automatically added to tissues and aspirates meeting specific transport criteria.
AFB (MYCBACTERIAL) CULTURE & STAIN	LAB304905	
FUNGUS CULTURE	LAB240	

## URINE SPECIMENS



Sterile urine cup (In-patients)



Gray-top Vacutainer (Out-patients)



APTIMA Urine Collection Device

URINE CULTURE, ROUTINE	LAB239	Urine
URINALYSIS WITH CULTURE REFLEX	LAB1230154	Urine
URINE CULTURE (PEDIATRIC/NEUTROPENIC/NEPHROLOGY)	LAB304950	Urine
URINE CULTURE (OUTPATIENTS ONLY)	LAB304938	Urine
NEPHROSTOMY CULTURE	LAB304831	Urine - Labeled "Nephrostomy"
LEGIONELLA URINE ANTIGEN	LAB304824	Urine
STREPTOCOCCUS PNEUMONIAE, URINE AG	LAB304861	Urine
N. gonorrhoea/C. trachomatis, RNA NAAT	LAB123303	Aptima Urine Collection Device urine)

## GENITAL SPECIMENS

### Cervical, vaginal, urethral, etc.



General use culture swab



E-swab



BD Universal Transport Kit



Swab in Sterile Saline



M4 Transport Media



APTIMA UniSex Swab



APTIMA Multitest Swab



APTIMA Urine Collection Device

GROUP B Streptococcus (GBS), PCR	LAB1230003	Anal/Vaginal General culture swab. For antenatal colonization assessment.
GROUP B Streptococcus (GBS), PCR, with Reflex to Susceptibility Testing	LAB12300031	Anal/Vaginal General culture swab. <b>For women with penicillin allergy only.</b>
N. gonorrhoea/C. trachomatis, RNA NAAT	LAB123303	APTIMA Multitest swab (vaginal), UniSex swab (urethral, endocervical), or Urine Collection Device (urine)
Neisseria gonorrhoea, RNA NAAT (only)	LAB123301	
Chlamydia trachomatis, RNA NAAT (only)	LAB123300	
Mycoplasma genitalium, PCR	LAB1231403	
GENITAL CULTURE	LAB465	General culture swab or E-swab
HSV1/ HSV2, PCR, CSF or SWAB	LAB1792	General culture swab or BD Universal Transport kit
Ureaplasma species, PCR	LAB304707	APTIMA Multitest swab
Vaginitis Pathogen DNA Panel by PCR	LAB1231400	APTIMA Multitest swab (vaginal only)
Mycoplasma hominis, PCR	LAB15254	APTIMA Multitest swab
Ureaplasma species, PCR	LAB15255	APTIMA Multitest swab
Vaginal Wet Mount	LAB252	Swab in Sterile saline
FUNGAL CULTURE	LAB240	General culture swab or BD E-swab

## MISCELLANEOUS SPECIMENS

### Wounds, superficial skin/mucosal sites, orifices, and other specimens not amenable to biopsy/resection

Requires decontamination prior to swabbing



E-swab (white)



General use culture swab (single\* or double)

Wound, Superficial/Non-sterile site, Culture and Gram stain	LAB503	Swab MUST BE labeled with the collection site <b>*Gram stain requires E-swab or double swab</b>
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### If anaerobic culture is indicated:



E-swab (white)

Anaerobic Culture	LAB233	Specific site of location
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\*The following sites are NOT accepted for anaerobic culture: **Call laboratory (7-4234) or medical director (7-4802) for questions or exceptions.**

- Expectorated sputum
- Throat/Nasopharyngeal swabs
- Nasotracheal or endotracheal suction
- Bronchial washing or other respiratory specimens
- Gingival or any other oral surface swabs
- Vaginal or cervical swabs
- Pilonidal sinuses, and other sinus tracts
- Gastric, small or large bowel contents, including ileostomy or colostomy effluents or feces
- Voided or catheterized urine
- Vaginal or cervical swabs
- Surface swabs from decubitus ulcers, perirectal abscesses, foot ulcers, exposed wounds, eschars, sinus tracts
- Superficial gangrenous lesions

## Stool



SAF (yellow) and Carey Blair (Orange) Para-Paks  
**Outpatients**



Wide-mouth leak-proof container  
**Inpatients**

GI Panel by Biofire FilmArray	LAB1231416	Outpatients - Carey Blair Transport (Orange Cap) Inpatients - Fresh stool in a sterile container or Carey Blair
Routine Stool Culture (includes Shiga-toxin testing)	LAB304849	Outpatients - Carey Blair Transport (Orange Cap) Inpatients - Fresh stool in a sterile container or Carey Blair
Clostridium Difficile Toxin Detection	LAB253	Fresh stool in a sterile container
Ova and Parasite Screen	LAB258	Outpatients – SAF (Yellow Cap) Inpatients - Fresh stool in a leak-proof container or SAF
Giardia/Cryptosporidium	LAB259	Outpatients – SAF (Yellow Cap) Inpatients - Fresh stool in a leak-proof container or SAF
Rotavirus	LAB264	Fresh stool in a leak-proof container
Fecal WBCs	LAB265	Fresh stool in a leak-proof container
Fecal Lactoferrin	LAB1752	Fresh stool in a leak-proof container

## RECTAL SWAB



Aptima Multitest Swab

N. gonorrhoea/C. trachomatis, RNA NAAT	LAB123303	APTIMA Multitest swab
Neisseria gonorrhoea, RNA NAAT (only)	LAB123301	
Chlamydia trachomatis, RNA NAAT (only)	LAB123300	

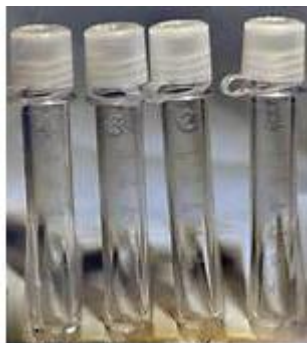
## Operating Rooms

**Preferred Specimen Type:** Resected tissue in a sterile container or Fluid/aspirate in sterile tube or syringe chamber

**Acceptable Specimen Type:** E-swab



**Sterile Container**



**Sterile Tube**



**Syringe chamber**

(capped with needle removed)



**E-swab**

Test Name	Epic Number	Acceptable Specimen	Comment
OR CULTURE (AEROBIC AND GRAM STAIN)	LAB304710	Tissue/ fluid in sterile container, or E-swab	Does NOT include anaerobic culture
TISSUE CULT (AEROBIC CULT & GRAM STAIN)	LAB271	Resected tissue in sterile container	
ANAEROBIC CULTURE	LAB233	Tissue/fluid in sterile container, or E-swab	Test will be automatically added to tissues and aspirates meeting specific transport criteria.
FUNGUS CULTURE (OTHER)	LAB240	Tissue/fluid in sterile container, or E-swab	If E-swab submitted: (1) must be dedicated for fungal culture (2) mold recovery is compromised
AFB CULTURE WITH STAIN (MYCOBACTERIUM CULTURE)	LAB304905	Tissue/fluid in sterile container	Swabs are NOT accepted for AFB culture
Prosthetic Joint Culture	LAB1833	Tissue/fluid in sterile container, or Explanted hardware	Reserved for orthopedic surgery

**Unacceptable Specimen Type:** All other swab types



Standard culture swab (single)



Standard culture swab (double)



Wooden shaft swab

## Blood Cultures (Bacteria and Yeast)



BacT Alert FA Plus (aerobic)



BacT Alert FN Plus (anaerobic)



BacT Alert PF Plus (pediatric)

Test Name	Epic Number	Notes
Routine Adult Blood Culture	LAB304747	Two separate collections (venipuncture preferred), each including two bottles (FA and FN) filled 8-10mL
Routine Pediatric Blood Culture	LAB304748	One or separate two collections (venipuncture preferred), each including 1-2 bottles (FA and/or PF), with variable volumes (goal 8-10mL for FA, 3-5mL for PF) <sup>1</sup>
Neonatal Blood Culture	LAB1231	One or two separate collections (venipuncture preferred), each including 1 bottle (PF), with variable volumes (goal 1-5mL for PF) <sup>1</sup>
Endocarditis Blood Culture	LAB304796	Two or three separate collections (venipuncture preferred), each including two bottles (FA and FN) filled 8-10mL <sup>2</sup>
Blood Culture, Determine Line Sepsis	LAB304871	Two separate collections (one venipuncture and one central line) drawn <15 min apart, each including two bottles (FA and FN) filled 8-10mL <sup>3</sup>

1. Refer to Pediatric weight-based collection guidance document for additional details and specific instructions
2. Up the 3 sets accepted within a 24hr period. All cultures incubated 10 days. For follow-up testing on patients with confirmed endocarditis, routine blood culture is adequate.
3. A differential time to positivity will automatically be determined provided that one venipuncture and one central line are sampled within 15min of each other and bottles/culture sets are clearly labeled with draw site.

## MYCOBACTERIAL & MOLD BLOOD CULTURES



Adult Isolator Tube (10mL)



Pediatric Isolator Tube (1.5mL)

MOLD BLOOD CULTURE, Adult	LAB1712	10mL Isolator Tube (LAWSON 50059)
AFB (MYCOBACTERIAL) BLOOD CULTURE, Adult	LAB1711	
MOLD BLOOD CULTURE, Pediatric	LAB1710	1.5mL Isolate Tube (located in Microbiology lab – call 74234)
AFB (MYCOBACTERIAL) BLOOD CULTURE, Pediatric	LAB1709	