

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY

Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

CULTURE ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
<u>Systemic / CNS</u>				
<u>Blood Culture</u>	Blood; 8-10 mL blood to each aerobic & anaerobic bottle of set. 1-3 mL blood to a pediatric bottle.	Set of blood culture bottles with resin (Plus Aerobic & Lytic Anaerobic). Pedi bottles are reserved for pedi pts. Adults must have full sets of bottles drawn. Note site of draw or line draw on bottles.	Transport immediately to lab. Bottles must be loaded to blood culture instrument within 2 hours of draw (acceptable up to 4 hours). Longer: incub@35°C with note left for Micro techs.	See specific procedure for timing and number of sets of blood cultures to be collected. Line draw bottle set must have a venous draw set collected at the same time.
<u>IV Catheter Tip Culture</u>	Intravenous catheter: central line, port, PICC, etc = aerobic culture	Submit tip in sterile screw top container. No preservative.	Transport immediately to the lab so that the tip does not dry out.	Acceptable catheters: central, CVP, Swan-Ganz, Hickman, peripheral, arterial. Roll to plant culture.
<u>Body Fluid Culture</u> - for sterile site body fluids	Pleural fluid, Peritoneal fluid, Pericardial fluid, Ascitic fluid, Synovial fluid, Amniotic fluid, etc. Includes aer & ana culture and Gram stain	Sterile screw top container, capped syringe without the needle.	Must be received in the lab within 24 hours of collection, held at room temperature.	At least 1 ml for bacterial culture, at least 3 mls for bacterial, fungal and TB culture. Syringes with needles will NOT be accepted.
Do not place fluids into a swab transport system, blood culture bottle, anticoagulant tube, or clot activator tube.				
<u>Cerebral Spinal Fluid</u> Order CSF Culture for lumbar tap Order Body Fluid Culture for Shunt source	Lumbar tap = aerobic culture and Gram stain Shunt = aerobic & anaerobic culture and Gram stain	Sterile screw capped tube, preferably 3 rd tube collected.	Must be delivered to the lab immediately after collection.	Never refrigerate CSF collected for culture.
CULTURE ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
<u>Gastrointestinal System</u>				
<u>Stool Culture</u>	Stool; screens for Salmonella, Shigella, Campylobacter, Enterohemorrhagic E.coli, Aeromonas, Plesiomonas. and other pathogens	Unpreserved stool submitted in a screw top container, refrigerated; or place stool in preservative (Orange Para-Pak C&S preservative vial.)	For unpreserved stool, submit within 2 hrs of collection, held refrigerated. For preserved stool, submit within 48 hrs refrigerated or ≤ 24 hrs at RT.	One specimen submitted in a 24-hour period is acceptable. For inpatients, spec for culture and/or O&P should be submitted within 3 days of admission.
<u>Vibrio Culture</u>	Stool; screens for Vibrio			
<u>Yersinia Culture</u>	Stool; screens for Yersinia			
<u>Full Ova & Parasite Exam</u> - Fecal (Use for Immuno-compromised patient or patient with Travel History only)	Stool; exam for Ova & Parasites. Recommended collection: 3 separate stool specimens 24 hours apart within a 5-7-day period.	AlcorFix (green covered transport vial) Transfer 2 g of stool within one hour of collection into AlcorFix. Fill container to red line. Hold at Room Temp.	Stability: Ambient 9 months; Refrigerate: 9 months; Frozen: Unacceptable. For unpreserved spec, submit w/in 1 hour of collection, must be added to AlcorFix within the hour.	Full Ova & Parasite is Ref Lab test (LAB1159) #3001662. Send Out Dept will forward to Ref Lab.

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY
Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

CULTURE ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
<u>Gastrointestinal System</u>				
<u>Ova & Parasite screen</u> Routine O&P screen	Stool; screens for Giardia and Cryptosporidium antigen	Orange Para-Pak C&S preservative vial or sterile cup.	O&P Screen from unpreserved stool is stable refrigerated for 48 hours.	Do not over- or under-fill the parapak device. Use red fill line on side of device to measure.
<u>Gram stain only</u> (Stool for White Blood Cells)	Stool	Unpreserved stool only submitted in a screw top container, refrigerated.	Submit unpreserved stool within 2 hours of collection, held refrigerated.	Swab is not acceptable for stool culture or O&P screen.
<u>Pinworm Prep</u>	Pinworm preparation collected from anal opening.	Must submit Pinworm paddle; first morning collection best.	Submit as soon as possible.	Paddle should be obtained from the laboratory. Do not use tape prep for collection.
<u>Genital Tract</u>				
<u>Gonorrhoeae (GC) Culture</u>	Anal/rectal; throat/oral; eye swab; or genital: Endocervical, cervical, vaginal, male urethral -screen for N. gonorrhoeae only	Copan Aerobic (red) swabs or Mini-tip culturette Do NOT cut swab shafts.	≤ 12 hours at room temp. Most organisms will survive for 24-48 hours, but fastidious orgs may only survive for 24 hours.	Swab submission is for the recovery of gonorrhea only. <i>N. gonorrhoeae</i> may not survive longer than 24 hrs in transport. Best to submit within 12 hrs.
<u>Genital Tract, Female</u>				
<u>Genital Culture</u> (Vaginal source includes Nugent score Gram stain for BV diagnosis) If genital wound is present, order Deep Wound Culture	Endocervical, cervical, vaginal = aerobic culture & Gram stain	Copan Aerobic (red) swabs Do NOT cut swab shafts.	≤ 12 hours at room temperature. Most organisms will survive for 24-48 hours, but fastidious orgs may only survive for 24 hours.	Swab submission is for the recovery of gonorrhea only. <i>N. gonorrhoeae</i> may not survive longer than 24 hrs in transport. Best to submit within 12 hrs.
<u>Wet Prep</u>	Endocervical, cervical, vaginal	Copan Aerobic (red) swabs; looking for Trichomonas and yeast Do NOT cut swab shafts.	Trichomonas may not survive > 24 hours; due to loss of organism mobility, submit spec w/in 1 hour, optimal ≤ 10 min.	
<u>KOH Prep</u>		Copan Aerobic (red) swabs; looking for fungal elements / yeast Do NOT cut swab shafts.		
<u>Prenatal Group B Strep Screen</u> OR <u>Prenatal Grp B Strep Screen- Penicillin Allergy</u>	Vaginal/Rectal swab	Copan Aerobic (red) swabs for Group B Streptococcus only. Do NOT cut swab shafts.	≤ 24 hours at RT°	For prenatal screen of GBS @ 36-38 weeks gestation.

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY

Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

<u>Genital Tract, Male</u>				
<u>Genital Culture</u> If wound is present, order Deep Wound Culture.	Rectal swab, urethral swab, penile drainage, penis, semen = aerobic culture & Gram stain	Mini-tip culturette (green) or aerobic (red) swabs for culture & Gram stain. If mini-tip swab is collected, submit 2 swabs for culture <i>and</i> Gram stain.	Most organisms will survive for 24-48 hours, but fastidious organisms may only survive for 24 hours.	<i>N. gonorrhoeae</i> may not survive longer than 24 hours in transport. Optimal, submit within 12 hours of collection.
<u>Wet Prep</u>	Male Urethral	Mini-tip culturette (green) ; looking for Trichomonas and yeast.	Trichomonas may not survive > 24 hours; due to loss of organism mobility, submit spec within 1 hour, optimal ≤ 10 min.	
CULTURE ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
<u>Respiratory Tract</u>				
<u>Respiratory Culture</u>	Expectorated sputum, induced sputum, tracheal or endotracheal aspirate, bronchial washing, bronchial brush, lavage, lung aspirate = aerobic culture and Gram stain	Sterile screw capped container or trap. Submit brush in sterile container.	For expectorated sputum, best to collect first morning deep cough specimen <i>after</i> mouth wash or saline gargle. Sputum, aspirates, and washings should be delivered within 2 hours of collection. Can be stored in refrigerator for ≤ 24 hours.	Legionella culture is a Reference Lab test. <i>Mycoplasma pneumoniae</i> and <i>Chlamydia pneumoniae</i> are Reference Lab tests and must be submitted in specified M5 media, which is supplied by the laboratory.
<u>Tissue Culture</u> For Lung Biopsy	Lung biopsy = aerobic & anaerobic culture and Gram stain.	Sterile screw capped container with tissue in sterile saline in a few ccs to keep tissue moist.	Deliver ASAP to Lab. Can be held ≤ 24 hours at RT°.	
<u>Group A Strep Screen Culture</u>	Throat swab collected at client office. Can also submit rectal swab from pediatric pt.	Copan Aerobic (red) swabs. Do NOT cut swab shafts.	≤ 24 hours at RT°	Culture is screened for β-hemolytic strep, primarily Group A Streptococcus.
<u>Culture of Ear, Eye*</u> , or <u>Comprehensive Throat</u> -Order Respiratory Culture for swab -Order Deep Wound Culture for wound, abscess, nasal sinus contents -Order Tissue Culture for tissue -Order Body Fluid Culture for ear fluid (behind ear drum) by tympanocentesis.	Superficially swabbed area from eye or ear = aerobic culture and Gram stain.	Sterile tube or Aerobic (red) swabs ; can use a mini-tip (green culturette) for pedi specimens.	≤ 24 hours at RT°	
	Swabbed throat = aerobic culture Scraping/wound, tissue, sterile body fluid = aerobic & anaerobic culture and Gram stain.	*Aptima GenProbe for Chlamydia trachomatis in eye, use orange Multi-test Aptima tube with pink swab .	Aptima swab: 60 days @ 2-30°C	Chlamydia NAAT DNA test from eye is a Reference Lab test.

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY
Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

CULTURE ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
Urinary Tract				
<u>Urine Culture</u> Order suprapubic needle aspiration of the bladder as a Body Fluid Culture.	Clean catch, straight catheter (in and out), nephrostomy tube (inserted directly into kidney), Ileal conduit, cystoscopic, pedibag = colony count & aerobic culture	Optimal specimen is urine placed in boric acid preservative within one hour after collection. Urine culture tube with preservative must be minimally half full. If unable to fill, refrigerate urine immediately. Do not freeze urine.	Preserved urine is acceptable ≤ 48 hours at room temp. Refrigerated urine is acceptable ≤ 24 hours. Unpreserved urine must reach lab w/in 2 hours of collection. If urine cannot reach lab w/in 2 hrs, spec must be refrig'd ≤ 24 hours	Must submit specific request for TB culture. Foley catheter, urine catheter tips and indwelling bagged urine collections are <u>NOT</u> acceptable for culture.
<u>Urine Culture, Pregnancy Protocol</u>	Clean catch, straight catheter (in and out), nephrostomy tube (inserted directly into kidney), Ileal conduit, cystoscopic = colony count & aerobic culture	<u>Unrefrigerated</u> urine must be processed by lab within 1 hour, or it is unacceptable. Do not freeze urine.	Preserved urine is acceptable for up to 48 hours at room temperature. Refrigerated urine is acceptable ≤ 24 hours. Unpreserved urine should reach the lab within 2 hours of collection. If urine cannot reach the laboratory within 2 hours, spec must be refrigerated for up to 24 hours during holding and transport.	Urine Culture, Pregnancy Protocol is for pregnant women only; looking for Group B Strep in addition to other pathogens.
Wounds / Tissue				
<u>Superficial Wound Culture</u>	Skin lesions, lacerations, superficial lesions, sores = aerobic culture and Gram stain	Copan Aerobic (red) swabs. Do NOT cut swab shafts.	Most organisms will survive for 24-48 hours, but fastidious organisms may only survive for 24 hours	Clean/debride area around superficial wound, then touch the infected area only with the swab to avoid contamination by skin flora.
<u>Deep Wound Culture</u> Typically, wounds on the inside the body are classified as “Deep” and outside of the body as “Superficial”.	Abscess, deep lesion, cyst, wound, boil, carbuncle, inner eye swab, inner ear swab, nasal sinus contents = aerobic & anaerobic culture and Gram stain	Tissue, fluid, or aspirated pus are superior to a swab. Aerobic (red) swabs are acceptable although not preferable. Must specify the anatomical site where the abscess is located.	Most organisms will survive for 24-48 hours, but fastidious organisms may only survive up to 24 hours.	Clean and debride area before specimen collection. Must request fungus culture separately.
<u>Tissue Culture</u>	Tissue from any body site: Site <u>must be specified</u> or specimen cannot be processed. Soft tissue biopsy, autologous skull flap bone, bone or cartilage, punch biopsy, etc = aerobic & anaerobic culture and Gram stain	Sterile screw capped container for culture. Submit tissue in a few ccs sterile saline to keep tissue moist.		Submit to lab as soon as possible to avoid drying out. Always submit as much tissue as possible. Must request TB or fungus culture <u>separately</u> . Deliver brain tissue directly and immediately to Microbiology after collection.

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY
Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

TEST ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
PCR or TMA Nucleic Acid Amplification (NAAT)				
<u>MRSA screen by PCR</u>	For nares screening only. Detects colonization not infection.	COPAN Aerobic (red) swabs. Do NOT cut swab shafts.	Transport immediately to lab for processing.	Swab both nares with both swabs. Approx 1 hour turn-around time.
<u>SA Nasal Complete (MRSA and SA)</u>	Primarily for pre-op nares screening on patients ≥ 21 years of age. Detects colonization not infection.	COPAN Aerobic (red) swabs. Do NOT cut swab shafts.	Transport immediately to lab for processing.	Swab both nares with both swabs. 1 hour turn-around time. Specs on patients ≤ 21 years of age will be sent to Reference Lab.
<u>C. difficile by PCR</u> (Positive Cdiff PCR will auto-reflex to Cdiff EIA which is performed twice per day.) Cdiff EIA is not a separate orderable test.	Unformed, loose, or liquid stool <u>only</u> .	Refrigerated stool specimen in sterile screw capped container. Preserved specimens are not acceptable.	Specimen may be stored refrigerated (2-8°C) for up to 5 days or ≤ 24 hours at RT°	Formed stools are unacceptable. Submit only 1 stool for testing. Colon washings not acceptable. Patient must be > 2 yrs old or spec will be sent to Reference Lab. Approx 1 hour turn-around time if PCR test is not reflexed to EIA.
<u>Group A Strep by PCR</u>	Throat (pharyngeal) swab	Only COPAN E-swab will be accepted.	Transport immediately to lab for processing.	≤ 60 min turn-around time.
<u>Group B Strep by PCR</u>	Vaginal/rectal swab	COPAN Aerobic (red) swabs. Do NOT cut swab shafts.	Transport immediately to lab for processing.	For patients in L&D with no prenatal GBS status. Not to be used for prenatal screen @36-38 weeks. Negatives reflex to GBS culture. Approx 75 min turn-around time.
<u>SARS-CoV-2 by PCR (COVID)</u>	Nasopharyngeal swab in UTM or saline.	UTM or saline with NP swab	Transport immediately to lab for processing.	< 1 hour turn-around time.
<u>Influenza A & B, RSV, SARS-CoV-2 by PCR (FLUVID)</u>	Nasopharyngeal swab in UTM or saline.	UTM or saline with NP swab	Transport immediately to lab for processing.	< 1 hour turn-around time.
<u>High Risk HPV (TMA); females only</u>	Endocervical, ectocervical, cervical, vaginal, etc	ThinPrep papvial; Transfer to APTIMA Specimen Transfer tube (green) within 105 days of collection.	APTIMA Specimen Transfer tube may be stored at 2°C to 30°C for up to 60 days.	Run once daily M-F

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY
Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

TEST ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
PCR or TMA Nucleic Acid Amplification (NAAT)				
<u>HPV 16, 18/45 Genotype*</u> (TMA); females only *Will only be performed as a requested reflex on a positive High-Risk HPV (TMA)	Endocervical, ectocervical, cervical, vaginal, etc	APTIMA Specimen Transfer tube (green)	Testing will be performed on the positive High Risk HPV specimen already stored in lab.	Run once per week
<u>Chlamydia and GC DNA NAAT</u> (TMA) (“STD”) <u>Chlamydia trachomatis DNA NAAT</u> (TMA) <u>Neisseria gonorrhoeae DNA NAAT</u> (TMA)	Use Aptima specimen collection kits		Aptima swabs: Store up to 60 days @ 2-30°C.	If no swab is submitted or 2 swabs are placed in Aptima transport, the sample is not acceptable. If white cleaning swab is submitted, spec will be rejected.
	Endocervical, cervical	Endocervical, cervical: use white swab to clean mucosa, then blue swab to collect. Insert blue swab to white Aptima tube.		
	Male urethral	Male urethral: use blue swab to collect. Insert blue swab to white Aptima tube.		
	Vaginal	Vaginal: use orange Multi-test Aptima tube with pink swab . (Clinician or self-collect in clinician’s office)		
	ThinPrep Pap Vial	ThinPrep Pap vial	Pap vial transport: 14 days @ 15-30°C.	
	First void urine (dirty)	First void (dirty) urine (20-60mL)	Urine in Aptima yellow transport: 30 days @ 2-30°C. First void urine in original urine collection cup: ≤ 24 hrs at RT°	Over- or under-filled first void urine is not acceptable. Clean void urine is not acceptable.
	Miscellaneous sources: rectal, throat, eye*	Rectal, throat, eye: use Aptima orange Multi-test collection tube with pink swab .	Aptima swabs: 60 days @ 2-30°C.	*Eye source Aptima swabs will be sent to Reference Lab for testing.
<u>Trichomonas vaginalis DNA NAAT</u> (TMA)	Endocervical, cervical	Endocervical, cervical: white swab to clean mucosa, then blue swab to collect specimen. Insert blue swab to white Aptima tube.	Aptima swabs: 60 days @ 2-30°C.	If no swab or 2 swabs are placed in Aptima transport, the sample is unacceptable. If white cleaning swab is submitted, spec will be rejected. -Urine is not acceptable for T.vaginalis detection performed at the Elliot. First void urine for T.vag will be sent to ref lab.
	Vaginal	Vaginal: use orange Multi-test tube with pink swab	Aptima swabs: 60 days @ 2-30°C.	
		ThinPrep Pap vial	Pap vial transport: 14 days @ 15-30°C.	

ELLIOT HOSPITAL MICROBIOLOGY LABORATORY
Collection Requirements and Acceptability for Microbiology Specimens

Revised: May 2023

TEST ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
Meningitis/Encephalitis BioFire FilmArray NAAT (PCR) <i>Hospital inpatient only</i>	Unspun lumbar puncture CSF only.	Minimum lumbar puncture CSF sample volume required for testing is: 0.2 mL (200 µL).	CSF should be processed and tested ASAP but can be stored for up to one day at RT° (15-25 °C) or refrigerated (2-8 °C) for up to 7 days.	Specs below min volume, specs not stored or transported as required, centrifuged CSF specs, or specs collected from indwelling shunt will be rejected for testing. Approx 1.5 hours turn-around time.
Respiratory Panel 2 BioFire FilmArray NAAT (PCR) <i>Hospital inpatient only</i>	Nasopharyngeal Swab (NP)	Unspun Nasopharyngeal Swab (NP) collected and immediately placed in 1-3 mL of UTM or saline. Minimum Sample Volume: 0.3 mL (300 µL)	Specs should be processed and tested ASAP. If storage is required, specs can be held at RT° for up to 4 hours (15-25 °C), refrigerated for up to 3 days (2-8 °C). or frozen (≤-15 °C or ≤-70°C) for up to 30 days.	Specs below min volume, specs not stored or transported as required will be rejected for testing. Approx 1 hour turn-around time.
Pertussis DNA Detection by NAAT	Nasopharyngeal swab (NP) in Liquid Amies with gel transport	Swab / collection device must be yellow topped BD BBL Culture swab Liquid Amies with gel (no charcoal) #220126	Specs stored in transport should be tested ASAP but may be held at RT° (15-25 °C) for up to 5 days or refrigerated (2-8°C) for up to 7 days prior to testing. Do not freeze samples.	Test run once per day M-F. Specs not stored or transported as required or frozen will be rejected for testing.
TEST ORDER NAME	SPECIMEN DESCRIPTION SOURCE INFORMATION	COLLECTION DEVICE	TRANSPORT	SPECIAL INSTRUCTIONS
<u>Rapid Tests</u>				
Rapid <i>Strep pneumoniae</i> Antigen	Urine or CSF <u>Must specify source</u>	Urine in sterile screw capped container or ≥ 1 mL CSF in sterile screw capped container.	Transport urine ≤ 24 hours at RT or 14 days refrigerated. Transport CSF ≤ 24 hours at RT or 7 days refrigerated.	≤ 1 hour turn-around time. Rapid <i>Strep pneumoniae</i> antigen performed on CSF will be automatically reflexed to a CSF culture if not already ordered.
Rapid <i>Legionella pneumophila</i> Serotype 1 Antigen	Urine only	Urine in sterile screw capped container	Transport urine ≤ 24 hours at RT or 14 days refrigerated.	≤ 1 hour turn-around time.