### Table 1 Microbiology Transport Systems for Bacteria, Viruses, Yeast, Fungi and AFB

<table>
<thead>
<tr>
<th>Transport System</th>
<th>Information on Use</th>
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| **Bactiswab**  
System (aerobic only) example: swab for throat  
culture or culture for yeast  
*example: swab for throat*  
*crush ampoule* to moisten swab after collection. |                                                                                                                                                                                                                     |
| Nasopharyngeal flocked swab                            | Flexible shaft and small tips provide easier specimen collection for nasopharyngeal specimens submitted for **viruses**.                                                                                                                                                 |
| Sterile screw-cap cups                                 | Useful for collection of **sputum, bronchoaveolar lavage** and **biopsy** specimens. If biopsy specimen is small, add small amount of sterile 0.85% saline to cup. **Never** place biopsy specimen in formalin or wrap in gauze.              |
| Sterile screw-cap tubes                                | Use for collection of sterile body fluids including **CSF**.                                                                                                                                                              |
| **Urine** transport tube (boric acid)                  | Use for preserving urine during transport to lab. This is the preferred method to send urine for culture.                                                                                                                                                                |
| E-swab transport tube for **aerobic** and **anaerobic** bacteria | Use the E-swab for **aerobic** and **anaerobic** culture requests. Place tissue or sterile fluid directly into E-swab transport. Alternatively, use the swab to sample the fluid and place in transport. Send large volumes of sterile body fluids to lab along with E-swab in sterile container (cup or tube) for concentration by centrifuging and for additional requests for AFB or Fungi. E-swab transport contains liquid Aimes medium to maintain the viability of fastidious bacteria including *N. gonorrhoeae*. If additional tubes are sent to the lab, **AFB, yeast and fungi** can also be cultured. |
| **Aptima genital swab**  
collection tube  
**Aptima urine collection tube**  
Detection of **Neisseria gonorrhoeae** and **Chlamydia trachomatis** by the gene probe technique requires the Aptima collection kit for swab specimens and urine transport for urine specimens. This is the most sensitive method to detect these pathogens. |                                                                                                                                                                                                                     |
| **Viral** Transport Media with **flocked collection swab** | Submit flocked swab specimens for **virology culture** in Viral transport media to maintain viability of virus and prevent bacterial overgrowth. Stool specimens also require use of Viral transport media.                                                                                      |
| EDTA lavender top tube, 4 or 6 mL  
Submit blood for quantitative **molecular testing for viruses** in this tube. Blood parasite exam (Malaria) is also performed from an EDTA blood specimen. |                                                                                                                                                                                                                     |
<p>| <strong>Para Pak pink and blue vials for parasite detection</strong> | Fill each vial to the line with stool and mix. Giardia and Cryptosporidium antigens and other parasites are detected in this system.                                                                                                                                 |
| <strong>Bactec aerobic, anaerobic and pediatric blood</strong> culture bottles | Aseptically transfer blood to Bactec bottles; 10 mL per bottle for aerobic/anaerobic adult set yields best sensitivity of detection. For 5-9 mL use the aerobic bottle only. Pediatric patients (age 11 or less) require use of Peds Plus F bottle and volume of 0.5-5 mL of blood. |</p>
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<th>Source or Type of Specimen</th>
<th>Transport Instructions</th>
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| Blood                     | • Bactec aerobic and anaerobic blood culture bottles; 10 mL blood/40 mL adult bottle; 0.5-5 mL blood/20 mL pediatric bottle  
• MB-Bottle (black top) for AFB  
• 4 or 6 mL EDTA lavender tube for PCR; EBV & CMV  
• Pedi-isolator tube for dimorphic fungus, AFB |
| Bone Marrow               | • MB-Bottle (black top) for AFB  
• Pedi isolator tube: 1 tube for bacterial culture, 1 tube for AFB, 1 tube for fungal |
| CNS: CSF                  | • Sterile screw-cap tube, tube #2  
• Sterile screw-cap tube, non-specified |
| CNS: CSF                  | Brain abscess  
CNS biopsy                  | • E-swab transport  
• Viral transport (never place in formalin) |
| Ear                       | • E-swab transport  
Eartube                      | • Sterile tube |
| Ear                       | • Send prepared smears and directly inoculate media for bacterial, fungi  
• Viral transport for scrapings, sterile tube if fluid  
• Aptima swab for GC/Chlamydia detection |
| Gastrointestinal system   | • Clean cup for C. diff, WBC, Norovirus  
• C & S transport medium for bacterial culture  
• Viral transport medium for viral culture  
• Use Aptima swab for rectal GC/Chlamydia  
• Para Pak vials for parasitology (pink/blue) |
| Gastrointestinal system   | Gastric lavage or washings  
Duodenal aspirate  
Sigmoidoscopy specimen    | • Sterile screw-cap cup  
• Viral transport media |
| Pinworm request           | • Use Pinworm Paddle, obtain from Client Response |
| **Genital Tract, female** | • Aptima swab; GC/Chlamydia molecular method  
  • Chlamydia culture: Viral transport media with flocked swab (pediatric medicolegal only)  
  • Yeast: Bactiswab  
  • *N. gonorrhoeae*: E-swab for culture  
  • BV detection; dry swab submitted in a sterile container  
  • Trichomonas; BD culture swab- sterile or with Stewarts transport medium |
|---|---|
| Cervical  
 Urethra  
 Vaginal | Bartholin fluid, Endometrial, Fallopian tube, Vulval  
• E-swab transport  
• Viral transport media with flocked swab |
| **Genital Tract, Male** | • Aptima swab for GC, Chlamydia by molecular method, most sensitive  
  • Chlamydia culture: Viral transport media  
  • E-swab transport for bacterial culture including  
  • *N. gonorrhoeae*  
  Epididymis  
 Prostatic massage  
 Semen | • Sterile screw-capped tube or cup  
• E-swab transport |
| Urethral  
 Anal swab  
 Penile Lesion | Lower Respiratory Tract  
 Lung Biopsy  
 Expectorated sputum  
 Induced sputum Tracheal aspirate  
 Bronchoalveolar lavage (and mini-BAL)  
 Bronchial washings  
 Bronchial brush | • Sterile, screw-cap cup  
• E-swab transport  
• For multiple requests send additional material |
| **Upper Respiratory Tract** | • Bactiswab (aerobic) for bacteria, yeast  
• Viral transport media with flocked swab for viruses  
• Use Aptima swab for GC in throat specimen  
 Throat swab  
 Nasal swab  
 Nasopharyngeal swab  
 Oral culture | Nasopharyngeal aspirate  
 Nasal washings | • Viral transport media  
• Sterile screw cap cup |
| Sinus aspirate  
 Tympanocentesis fluid  
 Ear | Sinus aspirate  
 Tympanocentesis fluid  
 Ear | • E-swab transport  
 Viral transport |
| **Sterile Body Fluids** (excluding CSF, urine, blood)  
 Pleural, peritoneal, ascites, joint, synovial, Pericardial, amniotic | • E-swab transport  
• Sterile tube for Virology  
• Send additional volume in sterile cup |
| Skin and subcutaneous tissue | • E-swab transport  
|                            | • Viral transport  
|                            | • Sterile cup for skin, hair, nails for fungus  
| Biopsy or punch-biopsy     | • E-swab transport for normal sized specimen  
|                            | • Tiny specimen, send in sterile, screw-cap cup, moistened with sterile saline  
|                            | • Multiple requests require additional specimen  
| Deep wound, aspirate, tissue | • E-swab transport  
| Abscess                    | • Viral transport with flocked swab  
| Deep wound                | • Send additional material for multiple requests; i.e. fungus, AFB  
| Soft tissue aspirate      |  
| Bone                       | • E-swab transport  
| Punch-biopsy              | • Sterile cup for very small specimens, moisten with sterile saline  
|                            | • Send additional material for multiple requests  
| Urine, all sources         | • Urine transport tube for bacterial culture, for small volume place in sterile screw-cap cup  
|                            | • Aptima urine transport tube for GC/Chlamydia  
|                            | • Virology culture use sterile screw-cap cup  
