

TABLE 150e-2 INSTRUCTIONS FOR COLLECTION AND TRANSPORT OF SPECIMENS FOR CULTURE

Note: It is absolutely essential that the microbiology laboratory be informed of the site of origin of the sample to be cultured and the infections that are suspected. This information determines the selection of culture media and the duration of culture.

Type of Culture (Synonyms)	Specimen	Minimal Volume	Container	Other Considerations
Blood				
Blood, routine (blood culture for aerobes, anaerobes, and yeasts)	Whole blood	10 mL in each of 2 bottles for adults and children; 5 mL, if possible, in aerobic bottles for infants; less for neonates	See below. ^a	See below. ^b
Blood for fungi (not yeasts)/ <i>Mycobacterium</i> spp.	Whole blood	10 mL in each of 2 bottles, as for routine blood cultures, or in Isolator tube requested from laboratory	Same as for routine blood culture	Specify "hold for extended incubation," since fungal agents may require 4 weeks to grow.
Blood, Isolator (lysis centrifugation)	Whole blood	10 mL	Isolator tubes	Use mainly for isolation of fungi, <i>Mycobacterium</i> , and other fastidious aerobes and for elimination of antibiotics from cultured blood in which organisms are concentrated by centrifugation.
Respiratory Tract				
Nose	Swab from nares	1 swab	Sterile Culturette or similar transport system containing holding medium	Swabs made of calcium alginate may be used.
Throat	Swab of posterior pharynx, ulcerations, or areas of suspected purulence	1 swab	Sterile Culturette or similar swab specimen collection system containing holding medium	See below. ^c
Sputum	Fresh sputum (not saliva)	2 mL	Commercially available sputum collection system or similar sterile container with screw cap	<i>Cause for rejection:</i> Care must be taken to ensure that the specimen is sputum and not saliva. Examination of Gram's stain, with numbers of epithelial cells and polymorphonuclear leukocytes noted, can be an important part of the evaluation process. Induced sputum specimens should not be rejected.
Bronchial aspirates	Transtracheal aspirate, bronchoscopy specimen, or bronchial aspirate	1 mL of aspirate or brush in transport medium	Sterile aspirate or bronchoscopy tube, bronchoscopy brush in a separate sterile container	Special precautions may be required, depending on diagnostic considerations (e.g., <i>Pneumocystis</i>).
Stool				
Stool for routine culture; stool for <i>Salmonella</i> , <i>Shigella</i> , and <i>Campylobacter</i>	Fresh, randomly collected stool (preferably) or rectal swab	1 g of stool or 2 rectal swabs	Plastic-coated cardboard cup or plastic cup with tight-fitting lid. Other leakproof containers also are acceptable.	If <i>Vibrio</i> spp. are suspected, the laboratory must be notified, and appropriate collection/transport methods should be used.
Stool for <i>Yersinia</i> , <i>Escherichia coli</i> O157	Fresh, randomly collected stool	1 g	Plastic-coated cardboard cup or plastic cup with tight-fitting lid	<i>Limitations:</i> Procedure requires enrichment techniques.
Stool for <i>Aeromonas</i> and <i>Plesiomonas</i>	Fresh, randomly collected stool	1 g	Plastic-coated cardboard cup or plastic cup with tight-fitting lid	<i>Limitations:</i> Stool should not be cultured for these organisms unless also cultured for other enteric pathogens.
Urogenital Tract				
Urine	Clean-voided urine specimen or urine collected by catheter	0.5 mL	Sterile, leakproof container with screw cap or special urine transfer tube	See below. ^d
Urogenital secretions	Vaginal or urethral secretions, cervical swabs, uterine fluid, prostatic fluid, etc.	1 swab or 0.5 mL of fluid	Vaginal and rectal swabs transported in Amies transport medium or similar holding medium for group B <i>Streptococcus</i> ; direct inoculation preferred for <i>Neisseria gonorrhoeae</i>	Vaginal swab samples for "routine culture" should be discouraged whenever possible unless a particular pathogen is suspected. For detection of multiple organisms (e.g., group B <i>Streptococcus</i> , <i>Trichomonas</i> , <i>Chlamydia</i> , or <i>Candida</i> spp.), 1 swab per test should be obtained.
Body Fluids, Aspirates, and Tissues				
Cerebrospinal fluid (lumbar puncture)	Spinal fluid	1 mL for routine cultures; ≥5 mL for <i>Mycobacterium</i>	Sterile tube with tight-fitting cap	Do not refrigerate; transfer to laboratory as soon as possible.
Body fluids	Aseptically aspirated body fluids	1 mL for routine cultures	Sterile tube with tight-fitting cap. Specimen may be left in syringe used for collection if the syringe is capped before transport.	For some body fluids (e.g., peritoneal lavage samples), increased volumes are helpful for isolation of small numbers of bacteria.