

**Department of Microbiology
Body Fluid Culture Procedure**

I. Specimen Types

Abdominal	Synovial (joint fluid)
Ascites	Thoracentesis
CAPD	Ventricular
Cerebral Spinal Fluid	Paracentesis
Culdocentesis	Peritoneal
Effusions	Pleural
Subdura	Semen

II. Potential Pathogens

All isolates are considered potential pathogens.

III. Work-up and Reporting

- A. Sterile plates or blood culture bottle
 1. At 24 h incubation:
 - a. Report: **No Growth to Date.**
 - b. Re-incubate the plates.
 2. At 48 h incubation:
 - a. Discard the plates.
 - b. Check with the blood bench to verify that the bottles (if inoculated) are sterile. Add **[BRO5]** comment if inoculated.
 - c. Report: **No Growth.** Finalize culture.
- B. Positive culture of CSF, ventricular fluid, or subdural fluid
 1. Note whether bacteria were seen in the direct smear.
 2. Identify organism(s) as expediently as possible using serotyping and rapid identification systems. Speciate and report the isolate(s) according to the identification charts. A complete biochemical work-up must be performed to confirm the identity of all organisms.
 3. Perform susceptibility testing on organisms, if appropriate.
 4. Release a preliminary report as soon as possible.
 5. Notify Rounds.
 6. Notify the patient care area and physician.
 7. If *Neisseria meningitidis* or *Listeria monocytogenes* is isolated:
 - a. Notify DOH.
 - b. Send *Neisseria meningitidis* isolates to the DOH.
- C. Positive culture of all other fluids
 1. If the number of organisms is ≤ 3 :
 - a. Speciate and report the isolate(s), according to the identification charts. Record work-ups in the computer.
 - b. Perform susceptibility testing on organisms, if appropriate.
 - c. Do a gram stain on the blood culture bottle if positive, and record results in the computer.
 - i. If organisms seen in the bottle are not on the original plates, subculture the bottle.
 - a) Fluids with ≤ 3 isolates
 - 1) Speciate and report the isolate(s) according to the

- identification charts.
 - 2) Perform susceptibility testing, if appropriate.
 - 3) Follow **III.C.1.d.**, if appropriate.
 - b) Fluids with >3 isolates
 - 1) Bring the culture up on Rounds before performing additional work-up.
 - ii. Do not transfer the broth if the smear correlates with the growth on the plates.
 - d. If *Neisseria gonorrhoeae*, *Neisseria meningitidis*, or *Listeria monocytogenes* is isolated:
 - i. Notify DOH.
 - ii. Send *Neisseria meningitidis* isolates to the DOH.
 - 2. If the number of organisms is >3, bring the culture up on Rounds.
- D. Positive blood culture bottle but plates are sterile:
 - 1. Gram stain the broth and document the results in workload.
 - 2. Do NOT issue a preliminary report based on the Gram stain results of the blood culture bottle.
 - 3. Subculture the bottle.
 - 4. After 24 h incubation of the broth transfer plates:
 - a. Fluids with ≤ 3 isolates:
 - i. Speciate and report the isolate(s) according to the identification charts, and record in the computer.
 - ii. Perform susceptibility testing, if appropriate.
 - iii. Follow **III.C.1.d.** if applicable.
 - b. All other fluids with > 3 isolates:
 - i. Bring culture up on Rounds before performing additional work-up.

Document Control

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Revisions & Updates: 12/17/2010 Updated for positive fluids in blood bottle only. Gram stain should be documented in workload, but not part of the report per AR.