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Sterile Body Fluid and CSF Cultures	Effective: 08/2004 Version 2

POLICY STATEMENT	Infection of normally sterile body fluids and CSF often results in severe morbidity and mortality. Therefore rapid, accurate identification of the infecting agents is of great importance. These specimens should be transported to the laboratory and set up immediately. Because the organism concentration may be low in these specimens, concentration of the Gram stain by cytocentrifugation can increase the sensitivity 100-fold compared to direct specimen Gram stains.
PURPOSE	This procedure provides technical instruction for the performance of the Body Fluids culture.
SCOPE	This procedure applies to testing personnel authorized to perform testing. This group includes, but is not limited to Laboratory Technologists as well as leads and supervisory personnel.
RESPONSIBILITY	All the above personnel are responsible for following the Body Fluids culture procedure without exception. In addition, testing personnel are also responsible for evaluating the results and taking proper remedial action.
RELATED DOCUMENTS	MICR 6140 R Specimen Processing MICR 6305 R Bacterial Cultures

SPECIMEN HANDLING

See *MICR 6140 R Specimen Processing*

If there is insufficient volume, call the physician to prioritize requests.

CULTURE WORK UP

1. Examine all plates for macroscopic growth every 24 hours.
2. If no visible growth, reincubate plates until final at 72 hours. For shunt specimens, hold the Thio for 7 days to rule out anaerobes.

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3. Correlate the Gram stain with the culture results.
4. Identify all organisms and perform antimicrobial susceptibility testing (AST) if appropriate.
 - For peritoneal specimens that contain mixed gastrointestinal flora and no predominant organism report as “Enteric Flora” and identify no further.
 - Do not disregard aerobic Gram positive rods as diptheroids before ruling out Listeria.
 - Gastric fluids should be worked as respiratory specimens.
5. Fluids received in Blood culture bottles
 - Make a Gram stain and document results in the workcard. Do not change the original Gram stain
 - Subculture the bottle to the appropriate plates. Place the plates in the Reader incubator with the original plates.
 - If the fluid culture has not been reported as positive, notify the LIP that the broth culture only is positive and document in Meditech
 - If the same organism grows from the bottle and the original plates, document in the workcard and do not work up from the broth culture. Work up should be performed on the original plates.
 - If the original plates were no growth:
 - If a pathogen grows (gnr, staph coag pos, etc) work up from the blood bottle. Do not quantitate.
 - If a skin contaminant grows, do minimal ID all isolated, save plates, transport and enter the comment – NGPFL = “Organism isolated from broth culture only; probable contaminant. Susceptibility testing will not be performed. Call Microbiology Lab within 72 hours for further work up if required.”

REPORTING

- Enter preliminary report of “No growth after X hours” daily until final at 72 hours.
- If growth is detected report each isolate identification with quantitation and AST.

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- Enter all results in the appropriate spot in the Meditech workcard.
- Since positive culture results are not part of the Electronic Notification system, all positive cultures with negative Gram stains or that do not correlate with the Gram stain must be called to a LIP (Licensed Independent Provider) and the call documented in Meditech.

REFERENCES

- Garcia, Lynne, *Clinical Microbiology Procedure Handbook*, 3rd Edition, 2010, Volume 1,
- Section 3.5 Body Fluid cultures
 - Section 3.7 CSF cultures