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**Lab Dept:** Microbiology

**Test Name:** PERITONEAL DIALYSIS FLUID CULTURE AND GRAM STAIN

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***General Information***

**Lab Order Codes:** BF

**Synonyms:** Culture, Peritoneal fluid; Culture, PD fluid; PD fluid culture

**CPT Codes:** 87070 – Culture, bacterial; any other source except urine, blood or stool, with isolation and presumptive identification of isolates  
87205 - Smear, primary source with interpretation; Gram or Giemsa stain for bacteria, fungi or cell types

The following testing may be added if appropriate based on the specimen submitted, findings for organism identification (multiple additions are possible if more than one organism is identified) and to aid in patient treatment management.

87015 - Concentration (any type), for infectious agents  
87076 – Anaerobic isolate, additional methods required for definitive identification of isolates  
87077 – Aerobic isolate, additional methods required for definitive identification, each isolate (if appropriate)  
87106 – Culture, fungi, definitive identification, each organism, yeast (if appropriate)  
87107 – Culture, mold, definitive identification, each organism, mold (if appropriate)  
87206 – Smear, primary source with interpretation, fluorescent and/or acid fast stain for bacteria, fungi or cell types (if appropriate)  
87184 – Susceptibility studies, disk method, per plate (if appropriate)  
87186 – Susceptibility studies, microdilution or agar dilution, each multi-antimicrobial, per plate (if appropriate)

**Test Includes:** Culture from spun sediment and BACTEC® 5 day protocol which includes Gram stain, culture for aerobes and less fastidious anaerobes if appropriate. Susceptibilities will be performed if requested.

**Lab Testing Sections:** Microbiology

**Phone Numbers:** MIN Lab: 612-813-5866

STP Lab: 651-220-6555

**Test Availability:** Daily, 24 hours

**Turnaround Time:** Preliminary report available at 1 day, final report within 5 days.

**Special Instructions:** Specimen site and date/time of collection are required for processing.

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***Specimen***

**Specimen Type:** Peritoneal dialysis fluid

**Container:** Sterile container

**Volume:** 10 – 50 mL fluid

**Collection:** Aseptically collect 10 – 50 mL of peritoneal dialysis fluid. Place in a sterile container.

**Storage/Transport:** Transport to the Microbiology Laboratory immediately at room temperature.

**Special Processing:** Place 3 – 5 mL of fluid into each of 2 bottles, BACTEC™ PEDS PLUS/F aerobic medium (pink cap) and Lytic/10 Anaerobic/F Medium (purple cap).

Centrifuge remaining fluid for culture and Gram stain.

**Sample Rejection:** Specimen with a transit time exceeding 2 hours after collection; specimen not submitted in appropriate transport container; improperly labeled specimen; insufficient volume; external contamination. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

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***Interpretive***

**Reference Range:** No growth

**Critical Values:** Positive results will be called to the physician or the patient's nurse.

**Methodology:** Culture

**References:** Cook, JH, and M Pezzlo (1992). Specimen receipt and accessioning. Section 1. Aerobic bacteriology, 1.2.1-4. In HD Isenberg (ed) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington DC

Miller, J Michael (1999) A Guide To Specimen Management in Clinical Microbiology, American Society for Microbiology, Washington DC

Miller, J Michael, and HT Holmes (1999) Specimen Collection, Transport, and Storage In PR Murray et al, (ed), Manual of Clinical Microbiology, 7<sup>th</sup> edition, American Society for Microbiology, Washington DC, pp 33-104

**Updates:**

3/22/2010: CPT Updates

11/30/2011: Bactec protocol changed from 7 to 5 days