



Laboratory Service Manual

Lab Dept: Microbiology/Virology

Test Name: BLOOD CULTURE, AFB (ACID-FAST BACILLI)

General Information

Lab Order Codes: BCAF

Synonyms: Blood Culture, *Mycobacteria*; Acid-Fast Blood Culture; Culture, Blood for AFB (Acid-Fast Bacilli); AFB Culture, Blood; AFB Culture, Bone Marrow; Bone Marrow Culture, AFB (Acid-Fast Bacilli); Culture, Bone Marrow for AFB (Acid-Fast Bacilli); *Mycobacteria* Culture, Blood; *Mycobacteria* Culture, Bone Marrow; BC, Acid Fast

CPT Codes: 87116 – Culture, tubercle or other acid-fast bacilli any source, with isolation and presumptive identifications of isolates
87118 – Culture, mycobacterial, definitive identification, each isolate
87149 – Culture typing; identification by nucleic acid probe

Test Includes: Culture and identification of mycobacteria, drug resistant studies if appropriate. Susceptibilities will be performed at National Jewish upon request. All positive results are reported immediately by phone to the physician or patient's nurse and Infection Control.

Logistics

Lab Testing Sections: Microbiology

Referred to: Hennepin County Medical Center

Phone Numbers: MIN Lab: 612-813-5866

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours

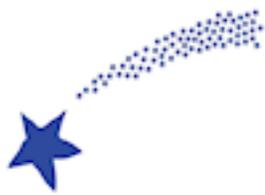
Turnaround Time: 1 - 6 weeks, results are reported when received.

Special Instructions: **Specific site and date/time of collection** are required for specimen processing. **Do not** submit more than 1 or 2 blood cultures per acute illness.

Specimen

Specimen Type: Whole blood or bone marrow

Container: Isolator™ 10 yellow cap tube (blood) or Isolator™ 1.5 yellow cap tube (bone marrow)



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Volume: Blood: 5 - 10 mL
Bone Marrow: 1.5 mL

Collection: **BLOOD:**
Venipuncture for patients greater than 26 weeks gestation OR greater than 2 weeks of age:

Prep with CloraPrep Sepp® Applicator with 2% CHG

1. Disinfect the stopper of the Isolator™ 10 tube with 70 % alcohol and allow to dry.
2. Break the Sepp® ampule to release the 2% CHG.
3. Apply the CloraPrep® solution using a back-and-forth friction scrub for 30 seconds.
4. Allow the area to dry for 30 seconds.
5. If the site must be touched during venipuncture, disinfect the gloved fingers.
6. Collect 5-10 mL of blood and aseptically inoculate the Isolator™ 10 tube using a needleless system.

Prep with CloraScrub™ Swab with 3.15% CHG

1. Disinfect the stopper of the Isolator™ 10 tube with 70 % alcohol and allow to dry.
2. Open the Chlorascrub™ Swab package, do not unfold wipe.
3. Apply the Chlorascrub® wipe using a back-and-forth friction scrub for 15 seconds.
4. Allow the area to dry for 30 seconds.
5. If the site must be touched during venipuncture, disinfect the gloved fingers.
6. Collect 5-10 mL of blood and aseptically inoculate the Isolator™ 10 tube using a needleless system.

Venipuncture for patients less than 26 weeks gestation AND less than 2 weeks of age:

Prep with 2% tincture of iodine:

1. Disinfect the stopper of the Isolator™ 10 tube with 70 % alcohol and allow to dry.
2. Scrub venipuncture site with 70% alcohol for 1 minute using the Frepp® applicator. Allow to dry.
3. Using the Sepp® applicator, apply 2% tincture of iodine to site starting at the center and moving outward in concentric circles. Allow to dry, approximately 30 seconds.
4. If the site must be touched during venipuncture, disinfect the gloved fingers.
5. Collect 5-10 mL of blood and aseptically inoculate the Isolator™ 10 tube using a needleless system.

6. Following collection, remove the iodine using the Frepp® applicator or an alcohol pad.



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Line Draw (All ages):

1. Prep catheter port by scrubbing the hub for 30 seconds using chlorhexidine gluconate (CHG) and allowing to dry.
2. Aseptically collect 5-10 mL of blood through the injection port. Blood may be collected without first drawing a discard.
3. Aseptically inoculate the Isolator™ 10 tube using a needleless system.

BONE MARROW:

1. Prepare puncture site as for surgical incision.
2. Collect 1.5 mL of bone marrow and aseptically inoculate the Isolator™ 1.5 tube using a needleless system.

Transport/Storage:

Onsite collections: Transport to the laboratory immediately.

Offsite collections: Specimens must be promptly transported to the laboratory, with the next available courier, not to exceed 24 hours from the time of collection.

Children's laboratory will ship to HCMC at room temperature. If transport is delayed, incubate the Isolator™ at 35°C until the specimen can be shipped.

Special Processing:

Once delivered to the laboratory, incubate at 35°C until specimen can be shipped.

Sample Rejection:

Improperly labeled specimen; specimens with prolonged transit time (see [Transport/Storage](#) for requirements); specimen not submitted in appropriate transport container; 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.

Interpretive

Reference Range:

No *Mycobacterium* (AFB) isolated

Critical Values:

Positive cultures will be called to the physician or patient's nurse and Infection Control.

Limitations:

A single negative culture does not rule out infection.

Methodology:

BD® Midget system

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



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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, 7th edition, American Society for Microbiology, Washington DC, pp 33-104

Updates:

5/4/2006: Method and specimen container, volume requirement changes.

10/31/2006: Added alternate tube for collection when Isolator tubes are not available.

4/24/2008: Removed the use of alternate green top tube when Isolator tubes are unavailable.

3/2/2009: Updated collection information for venipuncture options.

6/16/2010: Line draw preparation update

11/10/2014: Added offsite collection