

LABORATORY COLLECTION MANUAL	BONE MARROW CULTURE SPECIMEN COLLECTION
Effective Date: 6/96	Page 1 of 2

I. GENERAL PRINCIPLE

The collection of bone marrow is performed primarily for the results that can be obtained through a pathology department examination. It is a difficult procedure for the patient, but essential for diagnosis of some hematological disorders. Some pathological findings benefit by confirmation with culture results. So, often, a battery of cultures is ordered at the time of specimen collection, including, but not limited to, culture for aerobic and anaerobic bacteria, acid-fast bacilli, and fungus.

II. SPECIMEN COLLECTION

- A. Laboratory personnel must be notified prior to time of collection, so they will be available to assist physician in the performance of the procedure.
- B. Obtain the bone marrow tray from central supply with the attached instruction sheet and physician checklist for tests to be ordered. The laboratory will provide 1.5 ml Isolator blood culture tubes if cultures are desired. The physician's order checklist and the Isolator tubes **must** be available at the bedside if cultures are desired on the specimen.
- C. Collection Procedure:
 1. Bone marrow is collected by a physician.
 2. If bone marrow draw is of sufficient volume, fill multiple Isolator tubes. Three tubes will yield the best results, providing adequate specimens for all orderable cultures as defined on the Bone Marrow Checklist. Additional orders may require additional specimens.
 3. Use the same iodine solution to disinfect the top of the yellow stopper of the Isolator tube(s) that is used to cleanse the patient's skin. Do not allow the iodine to pool in the stopper(s). Set aside to dry while physician performs the procedure. Do not touch the stopper(s) once it has been cleaned.
 4. **Immediately** after obtaining bone marrow in the syringe and before handling it for any other testing:
 - a. Change to a clean 20- or 21-gauge needle and add up to 1.5 ml of specimen to each Isolator tube by puncturing the yellow stopper.
 - b. **Do not force blood into the tube.** It will pop the top and expose specimen to contamination.
 - c. If total volume is less than 1.5 ml and must be shared for additional procedures, hold backpressure on plunger when injecting marrow into tube to prevent vacuum from pulling whole specimen into the tube.
 - d. **Once the specimen is placed in the isolator tube, it cannot be used for any other testing.** Never withdraw specimen from the tube.
 - e. Remove needle and syringe from the tube. Immediately and vigorously, mix contents by inversion 4-5 times.
 6. Place both ends of the patient label on the tube and pinch the excess together, forming a tab. Do this so as not to completely cover the tube and obscure the fluid level.

LABORATORY COLLECTION MANUAL	BONE MARROW CULTURE SPECIMEN COLLECTION
Effective Date: 6/96	Page 2 of 2

7. Review the physician's checklist for completeness. Make sure the proper specimens are available for the tests requested before the physician leaves the bedside.
8. Label all specimens with a patient label in the presence of the patient.

III. TRANSPORT

- A. Transport all specimens at room temperature to the laboratory as soon as possible.
- B. Make sure all requests for tests have been ordered and send physician checklist form to the laboratory with the specimen.

WRITTEN BY: D'Ann Spinks, MT(ASCP) DATE: 6-96

APPROVED BY: Martin F. Belli, M.D. DATE: 6-96

REVISED BY: D'Ann Spinks, MT(ASCP) DATE: 6-98, 4-99, 5-2000, 2-2006, 4-2010

APPROVED BY: Martin F. Belli, M.D. DATE: 6-98, 4-99, 5-2000, 2-2006, 4-2010

See original policy in the Laboratory for all documented annual reviews.

REFERENCES

- Clinical Microbiology Procedures Handbook; 1992; Isenberg; American Society for Microbiology.
- Laboratory Test Handbook; 1994, 3rd edition; Jacobs, et al; Lexi-Comp Inc.
- Package inserts.