

Sterile technique should always be used. Please follow your facility's Standard Operating Procedure for the collection of blood cultures. Standard precautions should be practiced when collecting a blood culture with particular emphasis on avoiding needle-stick injuries.



Aerobic

Anaerobic

A blood culture set consists of two Bactec Culture Bottles (1 aerobic and 1 anaerobic). Current guidelines recommend that 2 – 3 sets be collected for optimal detection of bacteremia. If more than one set of blood cultures is ordered, the ordering physician must indicate where or how the additional specimens are to be obtained. Sterile technique should be used. It is recommended that each facility has a Standard Operating Procedure for the collection of blood cultures.

1. *Disinfection of venipuncture site and various access sites (arterial port from blood line, arterial line from fistula needles and catheter port).* All sites should be cleansed and disinfected for 30 seconds with a 70% Alcohol Prep Pad and another 30 seconds using iodine (e.g., Betadine). Adequate disinfection is mandatory to minimize contamination from skin and environmental organisms.
2. *Volume of Blood for Culture.* The recommended volume for **each** Bactec Culture Bottle is 10 mL. The use of lower or higher volumes may adversely affect recovery and/or detection times.
3. *Preparation of Bactec Culture Bottles.* The rubber top of the Bactec Culture Bottle is not sterile and requires wiping the tops of the bottles with a 70% Alcohol Prep Pad and then allowing the tops to dry. **Do not use any form of iodine** to disinfect the tops of the bottles. It may affect the integrity of the rubber top of the culture bottle, causing false positive results.
4. *Labeling and Shipping of Blood Cultures.* Bottles should be properly labeled with all pertinent patient information. Do not cover the Bactec Blood Culture Bottle bar code with patient's bar code label. Label each set with a separate order number. Blood cultures should be held and shipped at room temperature, **not refrigerated**. Place the labeled specimen in a plastic transport bag. They should be received by the laboratory no later than 48 hours after collection to ensure optimal conditions for recovery of microorganisms.

