

Origination Date	5/19/2021	Owner	Patricia Maypole: Supv Laboratory
Last Approved	2/17/2025	Document Area	Lab - Phlebotomy
Version Effective Date	2/17/2025	Applicability	Piedmont Athens Regional
Last Revised	2/16/2023	Document	Laboratory
Next Review	2/17/2027	Groups	

Lab Specimen Collection Manual - Blood Culture

(Biomerieux) Blood Culture Collections

- 1. Confirm Patient Identity & gather all required materials before beginning collection process.
- 2. Wash/Disinfect hands & don gloves & appropriate PPE before procedure in patient room. Wash/Disinfect hands & remove gloves/PPE in patient room after procedure.
- 3. Each Blood Culture Set contains both an Aerobic & Anaerobic BC bottle, and each Set is to be drawn from a different site. A Set of Blood Culture Orders are typically ordered X2. There is no specified time interval in between the draw orders, so the Blood Culture Sets / Orders can be drawn back to back, but each set must be collected from a different site.
- 4. Do not use Blood Culture Bottles that are damaged or expired.
- It is recommended to identify the Fill-To Mark (or mark the Target Fill-Level) on the Blood culture Bottle Label: 10 ml above the media level for Aerobic & Anaerobic BC Bottles; 4ml for pediatric/difficult draw BC Bottle.
- 6. Blood Culture Bottle Volumes:
 - · Aerobic BC Bottle: 10ml optimal volume. 5ml Minimum Volume.
 - Anaerobic BC Bottle: 10ml optimal volume. 5ml Minimum Volume.
 - Pediatric (Difficult Draw) BC Bottle: 4ml optimal volume. 0.5ml Minimum Vol.
- 7. Remove Plastic Cap from BC Bottle. Cleanse BC bottle septum for 15 seconds with new alcohol pad & leave the clean alcohol pad on top of the blood culture bottle until ready to use. Repeat this process for the 2nd BC bottle.
- 8. **Patients 2 months old or less**, do not use Chlora-Prep/Chlorhexidine. Use Iodine and alcohol instead.

- Cleanse: site thoroughly with Alcohol pad
- Cleanse site thoroughly with 1st Beta-dine pad for 30 seconds (to 60 sec)
- Cleanse site thoroughly with 2nd Beta-dine pad 30 seconds (to 60 sec)
- Allow site to dry a minimum of 30 seconds or until dry. It is not fully clean until the disinfectant has fully evaporated. Remove Plastic Cap from BC Bottle. Disinfect the rubber stopper with 70% Alcohol. (Chlorhexidine
- 9. Adults & children greater than 2 months old: Wipe/Cleanse Draw Site with 70% Alcohol. Then cleanse Draw Site for 30 Seconds with Chlora-Prep Applicator. Allow to Dry Completely. (The Venipuncture site is not fully clean until the disinfectant has fully evaporated.)
- 10. Chlora-prep Applicator usage:
 - Cleanse: Cleanse site with alcohol pad First before using chlora-prep applicator
 - **Pinch**: Pinch the wings on the applicator to break the ampule and release the antiseptic. Do not touch the sponge. When using the Chlora-Prep 1 ml applicator, pinch wings only once to activate the ampule and release the antiseptic.
 - **Press**: Wet the sponge by gently (repeatedly) pressing and releasing the sponge against the site of draw area of the arm until the liquid is visible on the skin.
 - Prep: Cleanse the draw site with Chlora-Prep applicator for 30 seconds, scrubbing back and forth in different directions. Allow the area to dry for a full 30 seconds and until completely dry. (The venipuncture site is not fully clean until the disinfectant has fully evaporated.) Discard Prep Kit after single use.
- 11. To prevent contamination of puncture site, do not re-touch the prepared draw site before inserting the needle. If you need to re-touch site, then you must perform the full disinfecting process of the draw site all over again as mentioned above.
- 12. Attach Blood Collection Set (Butterfly) to the BC Adapter Cap. Insert needle for blood draw. Draw Aerobic BC Bottle first.
- 13. Place Adapter Cap over the "Aerobic" Bottle and press straight down to pierce the stopper. Blood will begin to flow into the BC Bottle. Hold the bottle upright (& below) the level of the Draw Site and fill Adult Aerobic BC Bottle with 5 to 10ml of blood. Ensure each BC bottle is correctly filled to the Fill-To Mark or Target-Fill Level. Repeat the procedure for the Adult Anaerobic BC bottle. For Pediatric/Difficult-Draws fill the *Pediatric/*Difficult-Draw BC Bottle with 0.5 to 4ml of blood.
- 14. If you need to draw Vacutainer Tubes, place the Insert into the adapter cap. The insert is used to help guide vacutainer tubes onto the needle. Blood Cultures are always collected first. If additional blood tests (vacutainer tubes) are needed, collect in correct order of draw. (Refer to Order-of-Draw procedure/chart.)
- 15. Discard butterfly in Sharps container. Cover draw site with appropriate bandage.
- 16. Labeling BC Bottle: Patient's label must be placed in the exact outlined space provided on the Blood Culture Bottle. Do not cover the bottle barcodes or area showing fill volume. Do not remove the tear-off barcode labels. Assure collector, date/time of draw, and site of draw is recorded on each Blood Culture Bottle.
- 17. Transport to Lab as quickly as possible (preferably within 2hrs). Place Bottles in sealed

- biohazard transport bag.
- 18. Phlebotomist can collect blood cultures during blood transfusion or dialysis, if stat collection is needed due to critical patient situation.
- 19. Nurses follow their established protocols. Nurses are not to collect Blood Cultures from Central Line, Dialysis Line, or Port.

All Revision Dates

2/16/2023, 2/8/2023, 9/29/2021, 5/19/2021

Approval Signatures

Step Description Approver Date

Raford Rogers: MD 2/17/2025

Applicability

Piedmont Athens Regional