

Cayuga Medical Center - Blood Culture Collection Quick Guide

Two sets are to be collected on all patients. One pediatric bottle is acceptable for pediatric patients. Ideally, blood culture sets should be collected from two different venipuncture sites. If the patient only has one access site, wait 10 minutes and perform a separate venipuncture on the same site.

1. Identify the patient to be drawn by confirming the patient's full name and date of birth.
2. Select appropriate bottles and volumes to be used. If the patient is a difficult draw, fill the aerobic bottle only (green bottle) or use a pediatric bottle (yellow).

	Bottle(s) to Collect	Volume Required (per bottle)
Routine Draw (Patient with or without Antibiotics)	Green	5-10 mL
	Orange	5-10 mL
Pediatric Patient	Yellow	0.5-4 mL
Fungal Culture	Green	5-10mL

3. Fungal Cultures may be ordered in addition to or instead of routine blood cultures, which requires a green bottle. If the physician orders both a regular and fungal blood culture, collect the green and orange bottles. Both tests can be performed on the same bottles.
4. Remove plastic protective cap of each bottle. Wipe top with alcohol prep. Leave alcohol pad on the top of each bottle until ready to place the blood culture bottle into the blood culture adapter.
5. Place a tourniquet on the patient's arm and locate a suitable vein. Vein can be marked by putting a dot of ink above and below site of draw. Remove tourniquet. Don disposable gloves.
6. Using a Chloraprep one-step swab applicator, swab the area using a back and forth friction scrub for at least 30 seconds. (Povidine-Iodine scrub should be used for infants <2 months of age.)
7. Allow area to dry for 30 seconds.
8. **DO NOT TOUCH THE SITE OF VENIPUNCTURE AFTER PREPARATION.** It is critical that the phlebotomy site remain sterile.
9. Put tourniquet on arm. Perform venipuncture using a butterfly assembly or a sterile syringe. Do not use a straight needle for collection, as this may cause reflux into the patient.

If butterfly needle is used, please attach adapter and insert blood directly into bottles. Inoculate aerobic bottle first. Routine blood draws can be collected after blood culture collection, using the same adapter.

If sterile syringe is used: draw 20 ml of blood (maximum of 10 ml/bottle or 4mL for pediatric patients). Remove the alcohol wipe from each bottle and place 5-10 ml. of blood in each bottle, being careful to use sterile technique. Inoculate anaerobic bottle first.

10. DO NOT OVERFILL – FILL LINE ON BOTTLES IS AT MAXIMUM DRAW

The most important factor related to the sensitivity of blood cultures is the volume of blood drawn. Aim for the maximum amount of blood, which is indicated by the fill line on the bottle, without going over.

11. Remove filled bottle(s) from blood culture adapter. Rotate bottles gently a few times to mix the blood with the culture media.
12. Release tourniquet and gently remove needle from venipuncture site, applying safety mechanism on needle to prevent an accidental needlestick. Apply gauze to venipuncture site until patient has stopped bleeding. Bandage area. Discard alcohol wipes and all other supplies in appropriate receptacles. Dispose of needles and syringes in appropriate sharps container.
13. Label bottles at the patient's bedside with the patient's first and last name, patient's date of birth along with legible collector's initials, date and time of collection, and venipuncture site. If collected from a line, please notate. Use an LIS label if available.
14. Transport bottle(s) to the laboratory immediately for processing (may use pneumatic tube). If the bottles are collected in an outpatient setting, please store the bottles at ROOM TEMPERATURE and transport to the laboratory as soon as possible after collection.