

BLOOD CULTURES

GENERAL INFORMATION

A blood culture is a microbiological culture of blood. It is employed to detect infections that are spreading through the bloodstream, e.g. bacteremia, septicemia. The bloodstream is usually a sterile environment and should NOT contain microorganisms.

When a patient shows signs or symptoms of a systemic infection, results from a blood culture can verify that an infection is present, and they can identify the type (or types) of microorganism that is responsible for the infection. For example, blood tests can identify the causative organisms in severe pneumonia, puerperal fever, pelvic inflammatory disease, neonatal epiglottitis, sepsis, and fever of unknown origin. However, negative results do not exclude infection.

If a blood culture is positive, a gram stain will be performed on the blood and rapid identification/susceptibility testing performed, as applicable. From the time the bottle is positive, the identification is usually available within 1-2 hours and the susceptibility within 8 hours. However, some culture results can take up to 3 days to identify the appropriate antibiotics for treatment.

Results on inpatients are called to the pharmacy. For all other patients, results are called to the provider.

KEY POINTS

- Do NOT collect blood culture bottles “just in case”. Only collect when provider places an order.
- **Do NOT collect blood culture from existing line or new IV start when possible. If sample collected from IV start, document in LIS.**
- Remove bottle caps and wipe rubber septums with alcohol pad.
- Disinfect venipuncture site by cleaning with Chloraprep One-Step applicator sponge. Use gentle repeated back-and-forth strokes for 30 sec. Allow area to dry. **Do not blot, wipe, waft or blow on site.** Do not touch venipuncture site at this point unless sterile gloves are worn.
- **Do not use Chloraprep on children less than 2 months of age.** Use povidine-iodine or other infant approved antiseptic instead.
- **Aim for the maximum amount of blood as this makes the test more sensitive.** Fill bottles as close to the fill line without going over.
- **Second set of BC must be drawn from a separate site. If only one site is available, perform a separate venipuncture on the same site 10 minutes later.**

COLLECTION

Refer to the *Blood Culture Collection Quick Guide*, available in Lab Test Catalog.

LABELING

Refer to *Blood Culture Fill Line & Labeling Cheat Sheet*, available in Lab Test Catalog.



Use an LIS label.

If LIS label unavailable, manually record the following information on each bottle:

- Patient Name & Date of Birth
- MRN (if available)
- Date & Time of draw
- Site of draw e.g. RAC
- Legible initials of collector
- Place label vertically on the side of bottle so as not to obscure the barcode on the bottle.

