

Blood Culture Collection Guide

Proper collection of blood cultures is vital to the optimal usage of our limited supply during this worldwide shortage. Adequate collection and disinfection is crucial for patient care and conservation of supplies as we move forward.

Prevent Contamination

Blood cultures contaminated with skin flora could prevent detection of true bacteremia.

Contamination can compromise quality of care and lead to unnecessary antibiotic exposure and prolonged length of hospitalization.

Special care and awareness MUST be employed to avoid contamination. The most common contamination in blood cultures results from inadequate skin preparation and blood drawing techniques that allow contact with the technicians' skin or dirty glove with the venipuncture site and/or needle.

Disinfection for the blood culture collection includes:

- Preparing the venipuncture site using an antiseptic agent (alcohol-based chlorhexidine such as Prevantics swabs are preferred; if contraindicated, use an iodophor [such as povidone-iodine] or 70% alcohol). Apply using a single-use sterile applicator or wipes. Allow the solution to dry completely without fanning, wiping, or blowing.
 - For alcohol-based chlorhexidine (e.g. Prevantics swabs), apply with an applicator or swab using a vigorous side-to-side motion; 30 seconds for applicators and 15 seconds for swabs. Allow the area to dry for 30 seconds.
 - For povidone-iodine solution, apply using a swab. Begin at the intended venipuncture site and move outward in concentric circles. Allow the solution to dry completely (typically at least 2 minutes).
 - Don't palpate the site again to *avoid transferring microorganisms to the venipuncture site*. If palpation is required, put on a sterile glove.

Draw Adequate Volume

Low volume collections reduce sensitivity of detection of bacteremia. Inadequate volumes of blood for blood cultures can result in misdiagnosis, delay therapy, and put patients at heightened risk of morbidity and mortality from bacteremia.

Adequate blood volume

- A blood culture set from an adult patient should consist of 20-30 mL of blood collected through venipuncture, or at least 10 mL per blood culture bottle.

Lippincott Procedure - [Blood Culture Sample Collection](#)

