

Collection of Blood Cultures by Venipuncture: DO IT RIGHT

WHY?

Diagnosis of septicemia is one of the most important functions of the microbiology laboratory.

Inadequate volumes result in higher contamination rates of blood cultures and result in false negative blood cultures.

Samples collected with proper technique and blood volume lead to accurate laboratory results and appropriate patient care.

Volume is the KEY to proper blood collection:

Blood Volume per one BC ordered						
Patient Weight (kg)	Total Volume	First site (fs) Second site (ss)	1 st blood culture set		2 nd blood culture set	
			Orange top	Green top	Orange top	Green top
<4 kg	1 ml	1 ml	0.5	0.5	Repeat within 48 hours if positive for skin contaminant	
4-7.9 kg	3 ml	3 ml	1.5	1.5	Repeat within 48 hours if positive for skin contaminant	
8-13.9 kg	6 ml	3 ml fs / 3 ml ss	1.5	1.5	1.5	1.5
14-18.9 kg	12 ml	6 ml fs / 6 ml ss	3	3	3	3
19-25.9 kg	16 ml	8 ml fs / 8 ml ss	4	4	4	4
26-39.9 kg	20 ml	10 ml fs / 10 ml ss	5	5	5	5
40-53.9 kg	32 ml	16 ml fs / 16 ml ss	8	8	8	8
>54 kg	40 ml	20 ml fs / 20 ml ss	10	10	10	10

1.



- One blood culture set is one anaerobic bottle (orange label) and one aerobic bottle (green label).
- Remove caps from bottles.
- Use individual alcohol wipes to wipe top of bottles.
- Cover each bottle with an alcohol pad.

2.



- Vigorously scrub venipuncture site with alcohol prep to remove oils and dead skin cells.

3.



- Vigorously scrub venipuncture site with Chloraprep Sepp® for 30 seconds.
- Dry completely. (minimum 30-60 seconds).

4.



- Perform venipuncture, inserting butterfly needle into vein. Using syringe, obtain desired blood volume.
- Alternate venipuncture collection method: Syringe with safety needle.



5.



- Remove syringe from tubing and attach blunt transfer needle.
- First:** Transfer half the blood into the anaerobic (orange) bottle
- Second:** Transfer remainder into the aerobic (green) bottle.
- Invert bottles 3-5 times to mix.

6.



- Label bottles using computer generated patient ID label.
- Do not cover bottle bar codes or lot numbers.
- Include time/date/phlebotomist initials, volume and site.