

Optimum Blood Culture Volume

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- As recommended by accreditation agencies the laboratory should monitor blood volumes and provide feedback.
- Optimal blood fill volumes critically determine the diagnostic yield of your blood cultures. Each mL of blood, up to 10 mL, can increase the sensitivity of the blood culture by 3-5%. While **overfilling** of bottles may cause false-positivity, **underfilling** reduces the sensitivity of blood cultures.

Step 1:

- Mark the starting liquid level in each bottle —

Step 2:

- Draw a line where the optimum fill level is (10mL or 3mL) —

Step 3:

- Fill to optimum fill line —

Aerobic	Anaerobic	PEDS
Minimal fill: 8 mL	8 mL	0.5 mL
Optimal fill: as close to 10 mL as possible		3-5 mL
Underfill and Overfill: <8 mL and >10 mL		<0.5 and >5mL