

MICROBIOLOGY

COLLECTION OF BLOOD CULTURE SAMPLES

INFORMATION SHEET

Q-Pulse No	MWS13
Version	2
Site	HUB Microbiology

Before venepuncture, wash your hands and wear disposable gloves. Disinfect both the patient's skin and the septum of the blood culture bottles with 2% chlorhexidine in 70% isopropyl alcohol, and **allow to dry**. For adults, inoculate 7.5 - 10 ml blood into each bottle - one aerobic (blue cap, grey lid) plus one anaerobic (purple cap and lid) bottle in each set. Please inoculate the aerobic bottle first. Special (single / pink cap, silver lid) paediatric blood culture bottles are available for neonates and very small children (i.e. small volume blood sample; note that the optimal volume is 2 - 4 ml blood per bottle). For your own safety, do not change needles when inoculating bottles.

In adults and older children, the volume of blood sampled is very important to increase the likelihood of confirming a bacterial diagnosis of sepsis; at least 20 ml blood is preferred. Normally this equates to two sets which, time permitting, should be taken at different sites/times. For investigation of endocarditis three separate sets are required. Multiple sets will also help us to determine the significance of any contaminating organisms.

Do not use intravascular cannulae to take blood cultures, unless you are investigating a possible cannula infection - in which case you should take another set by peripheral venepuncture at the same time.

If you are requesting blood cultures, unless your patient may be septic and therefore at a higher risk of death: you, must prove they do not have severe sepsis, or complete Sepsis 6 in 60 minutes.

*In MAU, ED or SAU complete the sepsis 6 on the proforma.
If requested from other areas, the sepsis for is available on the intranet under "Sepsis".*

When labelling the bottles, ensure labels are placed vertically on the bottle. Do not cover or remove the bottle barcode labels or the lot numbers - these are required for laboratory use.

Use the pneumatic air tube system to send blood cultures to the laboratory. There is no need to call a microbiologist when blood cultures are taken.

Blood cultures are normally incubated for 5 days, with continuous monitoring for bacterial growth. Prolonged culture after this time gives no additional benefit. Positive blood culture results will be phoned to the clinical staff by a Consultant Microbiologist (or Biomedical Scientist).

For more detailed information on how and when to take blood cultures refer to relevant Trust protocol

[YDH Trust Protocol](#)
[MPH Trust Protocol – adults](#)
[MPH Trust Protocol – paediatric and neonates](#)