BLOOD CULTURE PROCEDURE

Key steps (refer blood culture guideline for detailed description)

- Blood for blood culture should be obtained before other blood specimens.
- Assemble the necessary equipment
  - Sharps disposal container within easy access
  - A dressing pack containing sterile gauze, sterile sheet and cover sheet
  - Sterile gloves
  - Chlorhexidine Gluconate (0.5% Biotaine in 70% alcohol)
  - Blood culture bottle(s) (BacT/Alert Paediatric or BacT/Alert Standard Aerobic bottles)
  - Appropriate size syringe (5, 10 or 20 ml)
  - Butterfly or straight needle (24 gauge in a neonate, 22 gauge or more in an older infant)
- An assistant should help with the procedure
- Create a sterile field using the dressing-pack, empty the syringe and needle onto the field and cleaning solution into the holding vessel.
- Wash hands with soap and water and don sterile gloves.
- Remove the dust cap from the blood culture bottle, disinfect the septum of the blood culture bottle with a chlorhexidine soaked gauze. Allow to dry.
- Ensure optimal skin decontamination: Clean the phlebotomy site with gauze soaked in chlorhexidine in a circular motion outwards. Allow the site to dry for at least 30 seconds.
- Place the sterile sheet with the opening over the site for the blood culture.
- Withdraw an appropriate volume of blood for inoculation into the blood culture medium (see below).
- Apply pressure with dry gauze to the phlebotomy site to prevent further bleeding.
- Insert the blood drawn into the blood culture bottle without changing the needle.
- Dispose of the needle in the sharps container.
- Rotate (not shake) the blood culture to mix the blood with the culture medium.
- Place the patient label lengthwise on the culture bottle, ensuring the barcode is not obscured. Provide adequate information on the laboratory request form, including diagnosis, site of venipuncture and previously administered antibiotics.
- Transport specimens as soon as possible to specimen reception. Do not refrigerate specimens while awaiting transport.

Recommended blood volume

<table>
<thead>
<tr>
<th>Weight of patient (kg)</th>
<th>Recommended volume of blood for culture (mL)</th>
<th>Blood culture bottle used</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 1 - 2</td>
<td>1 - 2</td>
<td>Paediatric (yellow top)</td>
</tr>
<tr>
<td>2.1 – 13</td>
<td>4</td>
<td>Paediatric (yellow top)</td>
</tr>
<tr>
<td>13 – 36</td>
<td>8 - 10</td>
<td>Adult (green top) or x 2 Paediatric (yellow top)</td>
</tr>
<tr>
<td>&gt;36.1</td>
<td>20</td>
<td>Adult (green top) x 2</td>
</tr>
</tbody>
</table>

Max volume into specimen bottle: BacT/Alert Paediatric 4ml, BacT/Alert Standard Aerobic (adult) 10ml