ROUTINE BLOOD CULTURES

Each culture will consist of an aerobic and anaerobic bottle set. For each episode of bacteremia, blood should be collected from two separate sites (i.e., blood culture x2). Thus, a total of 2 cultures or 4 bottles (2 sets) will be collected per episode of bacteremia. More than three sets yields little additional information. Conversely, intermittent bacteremias may be missed and positive results will be difficult to interpret if only a single set is drawn.

VOLUME: The single most important variable in detecting bacteremia and fungemia is adequate volume. Recommended volumes of whole blood:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Culture Media</th>
<th>Number of Cxs</th>
<th>Volume per Bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults (&gt;16 yrs)</td>
<td>aerobic &amp; anaerobic</td>
<td>2 separate sites</td>
<td>8 to 10 mls</td>
</tr>
<tr>
<td>Children (&lt;10 yrs)*</td>
<td>(see below or per prescriber)</td>
<td>2 separate sites</td>
<td>minimum 1 ml; up to 5 mls preferred</td>
</tr>
<tr>
<td>Children (&gt;10 yrs)*</td>
<td>(aerobic &amp; anaerobic or per prescriber)</td>
<td>2 separate sites</td>
<td>5 to 8 mls</td>
</tr>
</tbody>
</table>

*Kits consisting of only the aerobic bottle will be supplied to the NICU and kits with aerobic and anaerobic bottles will be supplied to the PICU. Orders of the prescriber will be most important for pediatric bacteremia because the volume collected should not exceed 1% of the patient's total blood volume. Indications for anaerobic infection should be considered along with clinical status and weight of the child.

FOR ACUTE SEPSIS, MENINGITIS, OSTEOMYELITIS, UNTREATED ACUTE PNEUMONIA OR PYELONEPHRITIS

Draw 2 samples consecutively from separate sites before therapy for adults. Follow MD order for pediatrics.

FOR FEVER OF UNKNOWN ORIGIN, SUBACUTE BACTERIAL ENDOCARDITIS, OR CONTINUOUS BACTEREMIA OR FUNGEMIA

Draw 3 samples at least 15 minutes apart.

FOR DOCUMENTATION OF CURE

Draw cultures when levels of antibiotics are lowest (trough levels).

MYcobACTERIAL BLOOD CULTURES

Draw 5 mls of whole blood into a BacT/Alert MB bottle. Only one culture bottle is necessary. Mycobacterial blood culture bottles are available in the microbiology laboratory.

FUNGAL BLOOD CULTURES

For adults draw 10 mls of blood into Isolator™ tubes. Collect 2 tubes.
For pediatric patients draw 1.5 mls into pediatric™ Isolator tubes. Collect 2 tubes, if possible. Isolator tubes are available in the microbiology laboratory.