First-hour care bundle for severe sepsis

Address simultaneously; target time is: [HH:MM] (i.e. 1 hour from arrival in ED) [Time] [Initials]

**IV fluids**
If initial SBP <90, MAP <70 or lactate ≥4, rapidly infuse a 30mL/kg bolus of crystalloid (i.e. Hartmann’s solution or 0.9% NaCl); otherwise give only 500mL-1L. Use Octopus connector to allow simultaneous drug administration. **NB**: Putting up fluids yourself can help minimise delays. Further boluses of 250-500mL every 15min (involving ED senior) if SBP falls to <90 or MAP to <70 again as long as further hemodynamic improvement is seen († pulse pressure, ↑ BP, ↓ heart rate or ↓ IVC collapsibility).

**Blood cultures**
Take a minimum two sets, including at least one from a fresh venepuncture. Place sputum culture / wound swabs etc. as needed.

**IV antibiotics**
Ensure cultures have been taken first. Prescribe in compliance with local antimicrobial guidelines; contact microbiologist if in doubt. Inform nurses of target time (‘to be given by’-time); record time on drug chart. **NB**: Giving at least one antibiotic yourself can help avoid delays.

**Blood tests**
Ensure FBC, U&E, LFT, INR, aPTT and venous blood gas (**NB**: arterial if SpO₂ on air <92%) have been obtained and recorded in boxes 6 and 7.

Repeat blood gas after first-hour care bundle has been completed.

**Haemoglobin**
Transfuse if Hb falls to <70 (<90 if acute cardiac ischaemia, known severe CAD or ongoing low SpO₂).

**Urine output**
Perform dipstick urinalysis; send for C&S as appropriate. Monitor hourly urine output (by catheter, serial bladder scans or collecting voided urine).

Record post-first-hour care bundle variables (box 6) and discuss further management with ED senior

All first-hour goals carried out?
☐ Yes
☐ No (give details)

Print name
Signature
Role

Vital signs & acid-base status

<table>
<thead>
<tr>
<th></th>
<th>HH:MM on arrival</th>
<th>HH:MM post-1h bundle</th>
</tr>
</thead>
<tbody>
<tr>
<td>SpO₂</td>
<td>on air</td>
<td></td>
</tr>
<tr>
<td>Resp rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systolic blood pressure (SBP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean arterial pressure (MAP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diastolic blood pressure (DBP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lactate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pCO₂</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Blood results

- WBC
- Hb
- Plat
- INR
- aPTT
- Na
- K
- Urea
- Crea
- Bili
- ALT
- AP
- Alb

ITU rationale when critical care is declined

*please record the name of the ITU consultant responsible for the decision*

ITU staff print name
Signature
Role