Somerset Partnership NHS
NHS Foundation Trust

Sepsis and the Deteriorating Patient

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Sepsis

- The UK sepsis trust estimate that 44,000 people die of sepsis every year
- High profile cases of children who died where sepsis want recognised
- Red flag sepsis
- Early treatment is critical – sepsis 6

Sepsis Screening & Action Pathway

Somerset Partnership NHS

To be applied to all non-pregnant adults and young people over 12 years of age who have a suspected infection, are immunocompromised, or for whom staff or relatives are concerned.

Important: Is an end of life care plan or a patient specific management plan in place? e.g. TEP treatment escalation plan. Is escalation clinically inappropriate? (if no, discontinue pathway)

↓ Yes, appropriate to escalate

1. Are you worried your patient is sick? Tick if applicable

e.g.
- Temperature high (>38 °C) or low (<36 °C)
- Sudden deterioration / change in condition
- Unusually drowsy, confused or delirious
- NEWS ≥ 3? AND/OR patient looks sick?

No →
- Low risk of sepsis *Consider other diagnoses.*
- Consider removing cannula / catheter
- Use clinical judgement and/or standard protocols

↓ Yes, if 1 or more ticks

2. Are there signs / symptoms of infection? Tick if applicable
- Yes but source not obvious / unclear signs present
- Pneumonia / likely chest source
- Urinary Tract Infection
- Abdominal pain or diarrhoea
- Cellulitis / septic arthritis / infected wound
- Device - related infection
- Meningitis
- Other (specify.....)

Yes →
- Give sepsis safety netting advice.
- Call 999 if patient deteriorates rapidly or call 111 / arrange to see GP if condition fails to improve or gradually worsens.
- Signpost to available resources as appropriate.

↓ Yes, if 1 or more ticks

Perform full set of NEWS physiological observations

↓ Yes

3. Is any ONE RED FLAG present? Tick if applicable
- New deterioration in GCS/AVPU or sepsis confusion
- Systolic BP ≤ 90 mmHg (or drop ≥ 40 mmHg from normal)
- Heart Rate (HR) ≥ 130 per minute
- Respiratory Rate (RR) ≥ 25 per minute
- Need oxygen to keep SpO2 ≥ 92% (88% in COPD)
- Non-blanching rash, mottled / ashen / cyanotic
- Not passed urine in 18 hours
- Urine output low than less than 0.5 ml/kg/hr (if catheterised)
- Recent chemotherapy (within last 6 weeks)

No ↓

4. Is any ONE AMBER FLAG present? Tick if applicable
- Relatives concerned about mental status/behaviour
- Acute deterioration in functional ability
- Immunosuppressed (within recent chemotherapy)
- Trauma, surgery or procedure in last 6 weeks
- Respiratory Rate 21 – 24 *OR* breathing hard
- Systolic BP 91 – 100 mmHg
- Heart Rate 91 – 130 *OR* new irregular pulse
- Not passed urine in 12 – 18 hours
- Tympanic temperature < 36 °C
- Clinical signs of wound, device, or skin infection

If under 17 and immunity impaired treat as Red Flag sepsis

yes ↓

At Risk of Sepsis Tick if applicable
1. Same day assessment by GP / Medical Practitioner / ENP
2. An urgent referral to hospital required
3. Agree and document ongoing management plan (including observation frequency, plan for further review if required and agreed
4. Monitor urine output
5. Consider life threatening mimics, stroke, asthma

Yes ↓

Red Flag Sepsis! This is a time critical condition, immediate action is required (see reverse)

Sepsis Pathway

Somerset Partnership NHS

To be applied to all non-pregnant adults and young people over 12 years of age with suspected or confirmed Red Flag Sepsis

Patient details (affix label):

Staff member completing form.
- Date/Time:
- Name (print):
- Role &Team:
- Signature:

IMMEDIATELY inform a Medical Practitioner (use S.B.A.R.) OR if appropriate dial 999. Request a "time critical" ambulance transfer to an acute hospital with an ambulance pre-alert of "Red Flag Sepsis"

Time appropriate above | Initials

Action (Time critical)	Time	Initials	Comments / Variances
1. Administer Oxygen If available administer emergency oxygen, titrating rate, to aim to keep oxygen saturations greater than +94% (88 – 92% if at risk of CO2 retention e.g., known COPD)			
2. Investigations If available skills and competencies allow, take blood cultures or at least a peripheral blood series (FBC, WBC, CRP & Creatinine). Undertake urinalysis on all. Consider & chase CSU, sputum, wound swabs and chest x-ray			
3. Cannulate If available skills and competencies allow			
4. Administer IV fluids and IV Antibiotics According to Trust protocol, if available skills and competencies allow. Note any current antibiotic treatments? Note any likely infection source?			
5. Monitoring Commence hourly fluid balance. May require urinary catheter. NEWS monitoring at least ½ hourly commenced. Stay with patient.			
6. Communicate Inform Next of Kin. Provide a copy of this, sepsis pathway, MAR and NEWS charts to medic / ambulance crew when they arrive. Advise them of known, or suspected, infection sources. Update patient EPR notes			

If patient continues to deteriorate re-escalate patient via 999 or if immediately available the ward doctor.

Contact Medical Microbiologist for advice on empirical antibiotic choice.
IV Antibiotic Monographs can be accessed via Trust Intranet, via Yeovil District Hospital Intranet Y CLOUD

Sepsis 6

- IV antibiotics
- IV fluids
- Oxygen
- Lactate
- Bloods
- Measure urine output

The challenges

- Lack of prescribers
- Lack of clinical skills
- Bloods have to go in a taxi

- We can do the sepsis 3 – oxygen/take blood/ measure urine output

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‘Is it possible to deliver effective sepsis 6 treatment for patients in a community hospital?’

A debate between the Orange Party and the Pessimistic Party