

Appendices

Appendix 1:Sepsis Trust telephone Assessment Infographic⁷

Your logo

GP/ OOH Telephone Triage Sepsis Tool

To be applied to non-pregnant adults and children **12 years or over** with infection symptoms

N.B: there is no systems substitute for clinical experience & acumen, but Red Flag Sepsis will help with early identification of children with systemic response to infection



1. Are there clues that the patient might be seriously ill?

Consider screening in:

- patients for whom you are considering antibiotics
- patients with "flu"
- patients with possible gastroenteritis
- the unwell patient without clear cause

Particular risk factors: immunosuppression, age over 75, recent trauma or surgery (last 6 weeks), invasive devices

N

Y

Low risk of sepsis. If concerned, schedule a review. Consider other diagnoses. Use clinical judgement to determine urgency.

Give safety netting advice: call 999 if develop any of:

- Slurred speech or confusion
- Extreme shivering or muscle pain
- Passing no urine (in a day)
- Severe breathlessness
- 'I feel I might die'
- Skin mottled, ashen, blue or very pale

Call 111 again if condition changes or deteriorates. Signpost to available resources as appropriate

N

2. Is the history suggestive of infection?

Yes, but source not obvious ☐

Pneumonia/ likely chest source ☐

Urinary Tract Infection ☐

Abdominal pain or distension ☐

Skin or soft tissue infection ☐

Other (specify): ☐

N

Y

4. Is any ONE Amber Flag present?

Behavioural change or reduced activity ☐

Immunosuppressed ☐

Recent trauma/ surgery/ procedure (last 6 weeks) ☐

Patient reports breathing is harder work than normal ☐

Reduced urine output ☐

Temperature < 36°C ☐

Signs of potential infection (e.g. pus described) ☐

If under 18 & immunity impaired treat as Red Flag Sepsis

Y

3. Is ONE Red Flag present?

Objective change in behaviour or mental state ☐

Unable to stand/ collapsed ☐

Unable to catch breath, barely able to speak ☐

Very fast breathing ☐

Skin that's very pale, mottled, ashen or blue ☐

Rash that doesn't fade when pressed firmly ☐

Not passed urine in last 18 h ☐

Recent chemotherapy ☐

N

Y

Arrange urgent GP face-to-face assessment at base or home visit using clinical judgment to determine urgency. Ensure decision documented to continue community-based care or transfer. Brief written handover to colleague.

Red Flag Sepsis!

This is time-critical, immediate action is required!

Immediate actions:

Dial 999, arrange blue light transfer

Communication:

Fax a brief, clear handover (including observations and antibiotic allergies where present) to receiving Emergency Department

Ensure crew pre-alert as 'Red Flag Sepsis'

Sepsis Six and Red Flag Sepsis are copyright to and intellectual property of the UK Sepsis Trust, registered charity no. 1158843. sepsistrust.org

Appendix 2a NEWS2 chart¹⁸ : (Reproduced from: Royal College of Physicians. *National Early Warning Score (NEWS) 2: Standardising the assessment of acute-illness severity in the NHS*. Updated report of a working party. London: RCP, 2017.)

Physiological parameter	3	2	1	Score 0	1	2	3
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25
SpO ₂ Scale 1 (%)	≤91	92–93	94–95	≥96			
SpO ₂ Scale 2 (%)	≤83	84–85	86–87	88–92 ≥93 on air	93–94 on oxygen	95–96 on oxygen	≥97 on oxygen
Air or oxygen?		Oxygen		Air			
Systolic blood pressure (mmHg)	≤90	91–100	101–110	111–219			≥220
Pulse (per minute)	≤40		41–50	51–90	91–110	111–130	≥131
Consciousness				Alert			CVPU
Temperature (°C)	≤35.0		35.1–36.0	36.1–38.0	38.1–39.0	≥39.1	

Appendix 2b: ‘MEWS’ Maternal Early Warning Score¹⁹

Physiological parameters	Normal values	Yellow alert	Red Alert
Respiratory rate /minute	10-20 breaths	21-30 breaths	< 10 or >30 breaths
Oxygen saturation	96-100%	< 95 %	
Temperature	36.0-37.4C	35-36 or 37.5- 38C	< 35 or > 38C
Systolic blood pressure	100-139 mmHg	150 – 180 or 90 – 100 mmHg	>180 or < 90 mmHg
Diastolic blood pressure	50-89 mmHg	90–100 mmHg	>100 mmHg
Heart rate beats per minute	50-99	100- 120 or 40 -50	>120 or < 40
Neurological response	Alert	Voice	Unresponsive, pain

Appendix 3: Safety-netting patient information leaflet for children and adults^{31,32}

Sepsis Safety Net

Sepsis is a life-threatening condition and needs emergency treatment, usually in hospital. The symptoms of sepsis may be vague and not specific so seek medical advice immediately if you have any concerns.

If you, or anyone you're with or your child has any of the following, **seek medical advice immediately (call 999 if you can't get immediate access to a doctor) and ask: Could it be sepsis?**

Child

- unwell with either a fever or very low temperature (or has had a fever in the last 24 hours)
- Is breathing very fast
- Has a 'fit' or convulsion
- Has clammy, cold skin and looks blue, pale or patchy (mottled).
- Has a rash that does not fade when you press it.
- Is very lethargic or difficult to wake.
- Feels abnormally cold to touch.

Other symptoms to look out for include:

- Severe shivering.
- Severe muscle pain or tummy (abdominal) pain.
- Being confused or disorientated (not sure where they are).
- Slurred speech.
- Feeling very dizzy or faint

Any child under 5 who:

- Is not feeding.
- Is vomiting repeatedly.
- Hasn't had a wee or wet nappy for 12 hours.

Adult

Slurred speech or confusion.

Extrême shivering or muscle pain.

Passing no urine (in a day).

Severe breathlessness.

It feels like you're going to die.

Skin mottled or discoloured.

Other symptoms which could suggest sepsis include:

- VERY high temperature (fever) or low body temperature (feels very cold).
- Feeling very sleepy or about to lose consciousness.
- Severe tummy (abdominal) pain.
- Feeling very dizzy or faint, or having a fit (seizure).
- A rash which does not fade with pressure.
- Not eating any food or drinking any fluid.
- Being sick (vomiting) repeatedly.

If you do have sepsis you may also have other symptoms of infection such as a flu-like illness (cough, fever, muscle aches and joint pains) or diarrhoea and vomiting.

Might have sepsis -If you're worried they're deteriorating call 111 or see your GP. Early treatment saves lives. Call 999 if you are very concerned. Call your GP immediately if you're concerned, but don't think you need to go straight to hospital. If there is any delay in talking to a doctor then call 999.

Appendix 4: [Telephone triage algorithm for children under 5](#) ²⁷

SEPSIS SCREENING TOOL TELEPHONE TRIAGE		AGE 0-5
01 START CHART IF ANY OF THE FOLLOWING ARE REPORTED: <ul style="list-style-type: none"> <input type="checkbox"/> Abnormal temperature <input type="checkbox"/> Appears to be breathing more quickly or slowly than normal <input type="checkbox"/> Altered mental state – include sleepy, irritable, drowsy or floppy <input type="checkbox"/> Abnormally pale / bluish skin or abnormally cold hands or feet <input type="checkbox"/> Reduced wet nappies or reduced urine output <hr/> RISK FACTORS FOR SEPSIS INCLUDE: <ul style="list-style-type: none"> <input type="checkbox"/> Impaired immunity (e.g. diabetes, steroids, chemotherapy) <input type="checkbox"/> Indwelling lines / broken skin <input type="checkbox"/> Recent trauma / surgery / invasive procedure 		SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS
02 COULD THIS BE DUE TO AN INFECTION? <div style="text-align: center;">YES</div> LIKELY SOURCE: <ul style="list-style-type: none"> <input type="checkbox"/> Respiratory <input type="checkbox"/> Brain <input type="checkbox"/> Urine <input type="checkbox"/> Surgical <input type="checkbox"/> Skin / joint / wound <input type="checkbox"/> Other <input type="checkbox"/> Indwelling device 		SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS
03 ANY RED FLAG PRESENT? <div style="text-align: center;">YES</div> <ul style="list-style-type: none"> <input type="checkbox"/> No response to social cues <input type="checkbox"/> Doesn't wake when roused / won't stay awake <input type="checkbox"/> Weak, high-pitched or continuous cry <input type="checkbox"/> Grunting or bleating noises with every breath <input type="checkbox"/> Finding it much harder to breathe than normal <input type="checkbox"/> Very fast breathing / 'pauses' in breathing <input type="checkbox"/> Skin that's very pale, mottled, ashen or blue <input type="checkbox"/> Rash that doesn't fade when pressed firmly <input type="checkbox"/> Temperature <36°C (check 3 times in 10 min) <input type="checkbox"/> If under 3 months, temperature ≥ 38°C 		<div style="background-color: red; color: white; padding: 20px; text-align: center;"> RED FLAG SEPSIS START BUNDLE </div>
04 ANY AMBER FLAG PRESENT? <div style="text-align: center;">NO</div> IF IMMUNITY IMPAIRED TREAT AS RED FLAG SEPSIS <ul style="list-style-type: none"> <input type="checkbox"/> Not responding normally / no smile <input type="checkbox"/> Parental concern <input type="checkbox"/> Wakes only with prolonged stimulation <input type="checkbox"/> Significantly decreased activity <input type="checkbox"/> Having to work hard to breathe <input type="checkbox"/> Poor feeding in infants <input type="checkbox"/> Reduced urine output <input type="checkbox"/> Leg pain <input type="checkbox"/> Cold feet or hands 		FURTHER INFORMATION AND REVIEW REQUIRED: <ul style="list-style-type: none"> - ARRANGE URGENT FACE-TO-FACE ASSESSMENT USING CLINICAL JUDGEMENT TO DETERMINE APPROPRIATE CLINICAL ENVIRONMENT
NO AMBER FLAGS : GIVE SAFETY-NETTING ADVICE: <p>CALL 111 IF CONDITION CHANGES OR DETERIORATES. SIGNPOST TO AVAILABLE RESOURCES AS APPROPRIATE</p>		<div style="background-color: red; color: white; padding: 10px; text-align: center;"> CALL 999 IF ANY OF: </div> <ul style="list-style-type: none"> Is breathing very fast Has a 'fit' or convulsion Looks mottled, bluish or pale Has a rash that does not fade when you press it Is very lethargic or difficult to wake Feels abnormally cold to touch
<div style="background-color: red; color: white; padding: 10px;"> TELEPHONE TRIAGE BUNDLE: <p>THIS IS TIME-CRITICAL – IMMEDIATE ACTION REQUIRED. DIAL 999 AND ARRANGE BLUE LIGHT TRANSFER</p> <p>COMMUNICATION. Ensure communication of 'Red Flag Sepsis' to crew. Advise crew to pre-alert as 'Red Flag Sepsis'</p> </div>		

Appendix 5 – [NICE Traffic light tool](#)²⁰

Traffic light system for identifying risk of serious illness

	Green – low risk	Amber – intermediate risk	Red – high risk
Colour (of skin, lips or tongue)	<ul style="list-style-type: none"> Normal colour 	<ul style="list-style-type: none"> Pallor reported by parent/carer 	<ul style="list-style-type: none"> Pale/mottled/ashen/blue
Activity	<ul style="list-style-type: none"> Responds normally to social cues Content/smiles Stays awake or awakens quickly Strong normal cry/not crying 	<ul style="list-style-type: none"> Not responding normally to social cues No smile Wakes only with prolonged stimulation Decreased activity 	<ul style="list-style-type: none"> No response to social cues Appears ill to a healthcare professional Does not wake or if roused does not stay awake Weak, high-pitched or continuous cry
Respiratory		<ul style="list-style-type: none"> Nasal flaring Tachypnoea: <ul style="list-style-type: none"> RR >50 breaths/minute, age 6–12 months RR >40 breaths/minute, age >12 months Oxygen saturation ≤95% in air Crackles in the chest 	<ul style="list-style-type: none"> Grunting Tachypnoea: RR >60 breaths/minute Moderate or severe chest indrawing
Circulation and hydration	<ul style="list-style-type: none"> Normal skin and eyes Moist mucous membranes 	<ul style="list-style-type: none"> Tachycardia: <ul style="list-style-type: none"> >160 beats/minute, age <12 months >150 beats/minute, age 12–24 months >140 beats/minute, age 2–5 years CRT ≥3 seconds Dry mucous membranes Poor feeding in infants Reduced urine output 	<ul style="list-style-type: none"> Reduced skin turgor
Other	<ul style="list-style-type: none"> None of the amber or red symptoms or signs 	<ul style="list-style-type: none"> Age 3–6 months, temperature ≥39°C Fever for ≥5 days Rigors Swelling of a limb or joint Non-weight bearing limb/not using an extremity 	<ul style="list-style-type: none"> Age <3 months, temperature ≥38°C* Non-blanching rash Bulging fontanelle Neck stiffness Status epilepticus Focal neurological signs Focal seizures
CRT, capillary refill time; RR, respiratory rate * Some vaccinations have been found to induce fever in children aged under 3 months			
This traffic light table should be used in conjunction with the recommendations in the NICE guideline on fever in under 5s .			