

# Sepsis Pathway < 18 years

Clinical Assessment / Management tool for Children and Young People



## Assessment and Management – Combined Acute and Primary Care

### Child presents with signs and/or symptoms of infection

- **Think sepsis**, even if they do not have a high temperature
- Be aware that children with sepsis may have non-specific, non-localising presentations
- **Pay particular attention to concerns expressed by the child and family/carer**
- Take particular care in the assessment of children, who might have sepsis, who are unable, or their parent/carer is unable, to give a good history

### Consider additional vulnerability to sepsis:

- The very young (<1yr)
- Non-immunised
- Recent (<6 weeks) trauma or surgery or invasive procedure
- Impaired immunity due to illness or drugs
- Indwelling lines/catheters, any breach of skin integrity e.g. any cuts, burns, blisters or skin infections

**If at risk of neutropenic sepsis - refer to secondary care**

Perform assessment to identify likely source of infection, risk factors and clinical indicators of concern (see below)

Sepsis not suspected

Suspected sepsis

Age		Low			High	
		Severe	Moderate	Normal	Moderate	Severe
0-1 yr	HR	<90	90-109	110-160	161-180	>180
	RR	<25	25-29	30-40	41-60	>60
	SBP			80-90		
1-2 yr	HR	<90	90-99	100-140	141-160	>160
	RR	<20	20-24	25-35	36-50	>50
	SBP			85-95		
2-5 yr	HR	<80	81-94	95-140	141-150	>150
	RR	<20	20-24	25-30	31-40	>40
	SBP			85-100		
5-12 yr	HR	<70	70-79	80-120	121-140	>140
	RR	<15	15-19	20-25	26-40	>40
	SBP			90-110		
12 yr +	HR	<50	50-59	60-100	101-130	>130
	RR	<12	13-15	15-20	21-25	>25
	SBP			100-120		

No Moderate or High Risk Criteria met

### Clinical Action

Where a definitive condition affecting the child can be identified, use clinical judgment to treat using NICE guidance relevant to their diagnosis when available. **If clinical concern of possible sepsis remains, seek advice even if trigger criteria not met.**

### Safety-Netting

- Arrange follow up and re-assessment as clinically appropriate
- Provide information about symptoms to monitor and how to access medical care [here](#)
- Consider if there are any issues relating to [safeguarding](#) that require action

### TWO or more AMBER FLAGS present

- Vital sign in moderate category
- SpO2 ≤ 90-92%
- Abnormal behaviour/reduced activity causing concern
- Reduced urine output /dry nappies
- Leg pain / cold extremities
- Pallor / flushed
- Cap refill time >2 -3 seconds

### One or more RED FLAGS present

- Vital sign in severe category
- Looks very ill to you
- Doesn't wake when roused
- Doesn't stay awake
- Irritable / floppy /AVPU ≤ V
- Weak, high pitched / Continuous Cry
- Non blanching rash /mottled /ashen / cyanosed
- SpO2 ≤ 90% / new need for O2
- Cap refill time ≥ 3 seconds
- Temperature <36°C
- Temperature ≥38°C if under 3m

### Immediate Action

- Request 999 ambulance and say "Red Flag Sepsis" for fastest response time from Ambulance Service. Send patient urgently to emergency paediatric care service (to a setting that has resuscitation facilities)
- [Alert hospital](#) and provide clinical data
- 2222 in hospital
- Complete Paediatric Sepsis 6 if sepsis triggered
- Escalate as per [STRS guideline](#) and liaise with [STRS](#) and local Anaesthetics

2 Moderate risk Amber flags present?

1 High risk Red flag present?

Seek urgent advice from primary care colleague or [Paediatrician](#)

Can a definitive diagnosis be made and treated?

### Urgent Action

- Refer immediately for urgent review according to [local pathway](#) (hospital ED or paediatric unit) - consider 999
- Commence relevant treatment to stabilise child for transfer with documentation
- Consider 2222 in hospital
- If haemodynamically stable, can allow up to 3 hours to gather evidence with bloods and repeat obs prior to commencing Antibiotics and Sepsis 6

Paediatric Sepsis 6 Bundle: Complete within 1 hour of recognition

- 1 Oxygen if required (Aim Sats >92%)
- 2 IV/IO Access & Bloods  
Blood gas, lactate, FBC, U&E, CRP, Coag, LFT, Blood culture, Consider Meningococcal PCR
- 3 Consider IV/IO Antibiotics  
As per local policy. Antivirals may also be required
- 4 Consider IV/IO Fluids  
If lactate >2mmol/L give 20ml/kg bolus (in 10ml/kg aliquots)
- 5 Involve Senior Clinician Early
- 6 Consider Inotropic Support  
If normal physiological parameters not restored after 40ml/kg fluids, discuss with [STRS](#) and Anaesthetics

