PAEDIATRIC SEPSIS PATHWAY

Use for all patients aged 11 years and under

This pathway is to be filed in patient record and is intended for use by all clinicians

Family name

Given name | Gender

AFFIX PATIENT LABEL HERE

DOB | NHI

RAISE THE FLAG | **Could it be Sepsis?**

Sepsis is a life-threatening emergency and can happen to anyone.
Consider sepsis for any sick person with evidence of infection, especially when risk factors are present.

Māori and Pacific populations experience disproportionately higher rates of sepsis and sepsis-related harm

SEPSIS RISK FACTORS

- Incomplete immunisation
- Socio-economic deprivation
- Infants < 12 months
- Chronic medical conditions
- Immunosuppressed
- Recent trauma, surgery/ procedure, or hospital admission
- Previous sepsis event

RECOGNISE

Date, time started, initial DD/MM/YY 00:00 24 HR AB

☐ Is the presentation consistent with **suspected** or **confirmed** infection?

NO → Exit sepsis pathway[1]

YES ↓

Does patient meet ANY of the following criteria?

- ☐ Concern for sepsis
- ☐ Parent/carer very worried
- ☐ PEWS ≥ 5
- ☐ Pre-hospital treatment for sepsis

NO → Exit sepsis pathway[1]

YES ↓

RED FLAGS

- ☐ Persistent, severe[4] or unexplained tachypnoea
- ☐ Persistent, severe[4] or unexplained tachycardia
- ☐ Fever > 38.5°C **AND** child < 6 weeks old
- ☐ Purpuric rash
- ☐ Perfusion changes (mottled/cold extremities/capillary refill 3 seconds or more)
- ☐ Reduced GCS / change in mental status (confusion, difficult to rouse, irritable)

ONE OR MORE RED FLAG ↓

NO RED FLAG → AMBER FLAGS

AMBER FLAGS

- ☐ Persistent whānau concern
- ☐ Oxygen saturation < 92% in air
- ☐ Rigors or temp > 39°C
- ☐ Moderate tachycardia/tachypnoea[4]
- ☐ Acute leg pain
- ☐ Significant cardiac, respiratory or neuro-disability comorbidity

≥1 flags ticked ↓

No flag ticked → Exit pathway[1]

- ☐ Review with a senior clinician[2]
- ☐ Send bloods[3] and review results < 1 hour
- ☐ Consider antibiotics

↓

☐ Clinical deterioration **AND/OR** lactate > 4

YES → **Start Sepsis Six NOW**
AND MOVE CHILD TO RESUS

NO ↓

No clinical change **AND/OR** lactate 2 - 4

NO ↓

Clinical improvement **AND** lactate < 2 → Exit pathway[1]

Prolong period of observation and review within 2 hours

- ☐ If antibiotic needed, administer within 3 hours (Discuss paediatric registrar / SMO)
- ☐ Update caregiver and whānau

[1] In case of deterioration restart screening

[2] ED/paediatric registrar, senior rural physician, or nurse practitioner

[3] CBC, U&Es, blood gas, blood culture, and coags

[4] Refer to PEWS parameters in the red or blue zones for Red Flags, and orange zone for Amber Flags, in the age-appropriate Paediatric Vital Signs Chart

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Sepsis Trust NZ

Health New Zealand Te Whatu Ora

Health Quality & Safety Commission Te Tāhū Hauora

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RESUSCITATE

Date, time started, initial DD/MM/YY 00:00 24 HR AB

Sepsis Six

These steps should be completed concurrently (steps are not sequential)

Complete **ALL** steps **WITHIN 1 HOUR**

DO NOT DELAY for investigations or results

1. Get help

Inform a senior clinician* that your patient has “red flag sepsis”

* ED/paediatric registrar, senior rural physician, or nurse practitioner

N/A ☐ | Time completed: 24 HOURS | Initials

Who

2. Give Oxygen to Achieve Sats ≥ 94%

Unless contraindicated (e.g., double outlet right ventricle and hypoplastic left heart)

N/A ☐ | Time completed: 24 HOURS | Initials

3. Obtain Lactate & Full Set of Bloods

Including FBC, U&Es, LFTs, coags, blood cultures

Max 2 attempts at IV access, or 90 seconds then proceed to IO

N/A ☐ | Time completed: 24 HOURS | Initials

4. Give IV/IO Fluids

Use 0.9% saline 10 ml/kg

Assess response, repeat as clinically indicated

N/A ☐ | Time completed: 24 HOURS | Initials

5. Give IV Antibiotics

- Refer to Te Whata Kura – National Antibiotic Guideline for empiric antibiotic choice.
- Use sepsis-specific guideline if one is available

N/A ☐ | Time completed: 24 HOURS | Initials

6. Consider Vasoactive Agents

If perfusion abnormal after 20 ml - 40 ml/kg fluid, commence vasoactive support. Escalate to paediatrician and ICU team

N/A ☐ | Time completed: 24 HOURS | Initials

REASSESS

Date, time started, initial DD/MM/YY 00:00 24 HR AB

☐ Inform caregiver and whānau of sepsis diagnosis

- Observe vital signs every 30 minutes
- Assess for perfusion, fluid response, and volume overload (e.g., hepatomegaly)
- Prioritise investigation, referral, and source control

Vasoactive agents can be given in ED

Vasoactive agents can be given while awaiting ICU admission/retrieval and central access. Give via a peripheral cannula or intraosseous line, after ensuring it flushes well.

Commence adrenaline- start at 0.1 micrograms/kg/min
Range (0.05-0.3 micrograms/kg/min)
If warm shock, consider noradrenaline via central line
Range (0.05-0.3 micrograms/kg/min)