Child and Adolescent Health Service
Perth Children's Hospital

# SEPSIS PATHWAY

Med Rec. No: .....
Surname: .....
Forename: .....
Gender: ..... D.O.B. .....

AFFIX LABEL HERE

## Results / Investigations

**Document key results; handover outstanding results and investigations to be followed up**

## Additional Clinical Notes

## Disposition

☐ **Ward** ☐ **PCC** ☐ **Other:**

Date DD: MM: YY Time: HH:MM (24hr) Signed: Clinician:

## Post Resuscitation Care Guide

Patients with presumed sepsis are at a high risk of deterioration despite initial resuscitation, IV antibiotics and fluids.
**Ongoing management plans are to be documented in the health care record.**

| | |
|---|---|
| **Ongoing monitoring** | • Monitor closely for deterioration<br>• Document required frequency of observations<br>• Document plan for timing of repeat blood tests e.g. blood glucose, blood gas / lactate, FBC, UEC, LFTS, CRP and coagulation profile |
| **Medical review** | • Document time for next medical review (within 4hrs of pathway commencement) |
| **Source of sepsis** | • Reassess and re-examine patient for source of infection, including invasive devices<br>• Consider urine sample, bacterial + viral swabs of skin lesion, EDTA blood sample for meningococcal, pneumococcal and Group A streptococcal PCR, CSF collection and imaging |
| **Antimicrobial review** | • Follow-up all cultures and PCR results and notify (when required) public health<br>• Review antimicrobial regimen within 24-72 hours<br>• Seek advice from Infectious Diseases physician and/or Microbiologist |
| **Sepsis diagnosis** | • Confirm and document sepsis diagnosis in health care record |
| **Family** | • Discuss sepsis diagnosis and management plan with patient and carers, and document discussion<br>• Antibiotic prophylaxis for household contacts (meningococcal, Group A streptococcal sepsis)<br>• Consider cultural needs, and use an interpreter for families with limited English proficiency |

## Discharge Guide

- Discharge Summary completed with sepsis as a diagnosis
- Follow-up appointments, referrals and surveillance e.g. audiology, developmental follow up etc.
- PCH patient and visitor sepsis resources provided to patient and carers













HCHPCFMR301H
PC785
11/23

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For use in infants, children and adolescents treated at Perth Children's Hospital with suspected or confirmed sepsis
(excluding those admitted to the Neonatal Intensive Care Unit)
Clinical pathways / guidelines never replace expert clinical judgement.

**SEPSIS is infection with organ dysfunction and is a MEDICAL EMERGENCY**

**Could this be sepsis?**
If sepsis is considered, perform full set of observations then follow Sepsis Escalation Pathway Prompt below

## SCREEN

**High-risk patients - consider a lower threshold for requesting Senior Clinician Review in the following groups**
one tick box constitutes high risk

- ☐ Infants less than 3 months
- ☐ Immunosuppression, chemotherapy, long-term steroids or asplenia
- ☐ Central venous access devices (CVAD), indwelling medical devices
- ☐ Unimmunised / incomplete immunisations
- ☐ Rural, remote, low socioeconomic status, delayed access to healthcare
- ☐ Recent surgery, burn or wound
- ☐ Complex / chronic medical condition
- ☐ Culturally and linguistically diverse children
- ☐ Representation (including GP)
- ☐ Family and/or clinician concern

**Screening initiated:**
Date DD: MM: YY Time: HH:MM (24hr) Signed: Clinician:

**Suspected infection and or abnormal temperature and ANY of the following:**
**(one tick box requires escalation)**

- ☐ EWS 6 - 7
- ☐ Mottled, CRT ≥ 3 or cold peripheries
- ☐ Non-blanching rash
- ☐ Drowsy or confused
- ☐ Unexplained pain
- ☐ Lactate 2 - 4 mmol/L
- ☐ Family and/or clinician concern is continuing or increasing

**Suspected infection and or abnormal temperature and ANY of the following:**
**(one tick box requires escalation)**

- ☐ EWS ≥ 8
- ☐ Any observation in red zone
- ☐ AVPU score P
- ☐ Lactate > 4 mmol/L
- ☐ BGL < 3 mmol/L

- ☐ Request Senior Clinician Review within 5 mins
  **ED:** Consultant (Registrar overnight)
  **Ward:** Request MET review
- ☐ State "sepsis review required"
- ☐ No response within 5 mins or clinically indicated call a CODE BLUE
- ☐ Reviewing doctor to notify Consultant responsible for the patient

- ☐ Request Treating Doctor or STARS review within 15 mins
- ☐ State "sepsis review required"
- ☐ Reviewing doctor to discuss with Senior Clinician / Consultant responsible for the patient

## ESCALATE

**Outcome of Senior Clinician Review**
At PCH the Senior Clinician is the Consultant / Fellow. If unavailable or overnight this is the ED / STARS Registrar or most senior MET team member

| ☐ **NO - unlikely Sepsis** | ☐ **YES - SUSPECTED SEPSIS WITHOUT SHOCK** | ☐ **YES - SUSPECTED SEPSIS WITH SHOCK** |
|---|---|---|
| Patient unlikely to have sepsis **now**. Consider differential diagnosis. Re-evaluate & escalate as indicated | **ED - consider moving to RESUS**<br>**WARD - consider calling a MET**<br>☐ **WARD - call Consultant** | ☐ **ED - move to RESUS**<br>☐ **WARD - call a MET / CODE BLUE**<br>☐ **ED & WARD - call Consultant** |
| ☐ Patient and carers directed to appropriate consumer resources | **Urgently commence resuscitation and sepsis management as per page 3** | **Urgently commence resuscitation and sepsis management as per page 3** |

Date DD: MM: YY Time: HH:MM (24hr) Signed: Clinician:

**SEPSIS PATHWAY**
**MR301.08 / MR872.00**

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ASSESS

| Initial Medical Assessment | Allergies |
|---|---|
| | |

| Medications |
|---|
| |

| Primary Assessment | | | Comments |
|---|---|---|---|
| **A**irway | ☐ Patent | ☐ Compromised | |
| **B**reathing | RR:<br>Effort:<br>Auscultation: | SpO2: | |
| **C**irculation | HR:<br>Heart sounds:<br>Femoral pulses in neonates<br>Pulse Volume: ☐ Normal ☐ Reduced ☐ Bounding<br>Skin: Pale, mottling, cool peripheries, flushed? | BP: Central CRT: | |
| **D**isability | A V P U<br>Photophobia: ☐ Yes ☐ No<br>Neck Stiffness: ☐ Yes ☐ No<br>Anterior fontanelle: ☐ Normal ☐ Bulging ☐ Sunken<br>Seizures: ☐ Yes ☐ No<br>Tone:<br>Irritable or unexplained pain? | BGL:<br>Pupils: | |
| **E**xposure | Temperature:<br>Rash?<br>Consider source, document other key examination findings (e.g. abdominal exam): | | |

**Impression – include likely source of infection**
**Senior Clinician to select appropriate box on page 1 and sign**

Date DD: MM: YY Time: HH:MM (24hr) Signed: Clinician:





DO NOT WRITE IN BINDING MARGIN

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RESUSCITATE

**Management**
**Refer to the PCH Sepsis Recognition and Management Guideline for further details**

| | | |
|---|---|---|
| **A**irway | Assess and maintain airway<br>**If airway compromised consider calling a CODE BLUE.** Intubation in Sepsis / Septic Shock is high risk. | |
| **B**reathing | Assess and apply oxygen as required to keep SpO2 ≥ 93% | ☐ **Supplemental oxygen**<br>Type: |
| **C**irculation | **Vascular Access, Bloods, Antibiotics, Fluids +/- Inotropes**<br>***Vascular access:*** In Septic Shock aim for access within 5 minutes.<br>Consider intraosseous access after 2 failed attempts at IV cannulation. | ☐ **Vascular access**<br>Time: HH:MM (24hr) |
| | ***Blood sample:*** **Don't delay resuscitation and antibiotics if blood collection is not possible.**<br>Aim for the following (in order of priority):<br>• Glucose - if < 3 mmol/L treat with 2 mL/kg glucose 10%<br>• VBG including lactate<br>• Blood Cultures<br>• FBC, UEC, LFTS, CRP, coagulation studies<br>*Normal blood test results do not exclude sepsis; Cultures are still useful post antibiotics.* | ☐ **Glucose checked**<br>Result: _____ mmol/L<br>☐ **Lactate checked**<br>Result: _____ mmol/L<br>☐ **Blood cultures taken**<br>Time: HH:MM (24hr) |
| | ***Antibiotics:*** Prescribe per the ChAMP Guidelines<br>• Check allergy status<br>• **Give first dose by IM injection if no access within 15 minutes**<br>*All IV antimicrobials in the 'ChAMP – Sepsis and Bacteraemia Guideline' are suitable for IM administration* ***except vancomycin and aciclovir.*** | ☐ **Antibiotics commenced**<br>Time: HH:MM (24hr) |
| | ***Fluid Resuscitation***<br>• 10 - 20 mL/kg sodium chloride 0.9% bolus pushed via vascular access for patients with septic shock or circulatory compromise (10 ml/kg boluses for neonates)<br>• Review after each bolus for reversal of shock e.g. CRT, HR, BP, clinical condition<br>• Repeat boluses, as required, total volume up to 40 mL/kg (may exceed on Consultant / PCC advice)<br>• Consider Balanced Fluids (e.g. Plasma-Lyte 148 or Hartmann's) if patient is acidotic or hyperchloraemic | ☐ **1st fluid bolus**<br>Time: HH:MM (24hr)<br>mL/kg:<br>☐ **Additional boluses**<br>Time: HH:MM (24hr)<br>mL/kg:<br>Time: HH:MM (24hr)<br>mL/kg:<br>Time: HH:MM (24hr)<br>mL/kg: |
| | ***Inotropes considered*** (PCC review mandatory at this stage):<br>• If circulatory failure / shock persists after 40 mL/kg fluids OR if deemed appropriate by Consultant<br>• Peripheral adrenaline is the appropriate first line choice in most circumstances | ☐ **Inotropes commenced**<br>Time: HH:MM (24hr)<br>☐ **PCC review** |
| **D**isability | **Assess level of consciousness**<br>• Repeat BGL as appropriate<br>• Consider need for airway support if low GCS / level of consciousness | ☐ **Glucose rechecked**<br>Result: _____ mmol/L |
| **E**xposure | **Targeted history and re-examine the patient for sources of sepsis** | |
| **F**luids | **Commence Fluid Balance Chart and monitor strict fluid input / output**<br>• Consider indwelling urinary catheter<br>• Monitor for signs of fluid overload (e.g. worsening breathlessness, new onset wheeze, hepatomegaly) | |
| **S**teroids | • Children on long-term steroid therapy or with adrenal insufficiency should receive stress dose steroids | |

Date DD: MM: YY Time: HH:MM (24hr) Signed: Clinician: