NSW Health

Facility:

FAMILY NAME	MRN
GIVEN NAME	☐ MALE ☐ FEMALE
D.O.B. _____ / _____ / _____	M.O.
ADDRESS	
LOCATION / WARD	

COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE

NEONATAL SEPSIS PATHWAY

Use for neonates (babies up to 28 days corrected age) in any clinical setting to support recognition and management of sepsis

RECOGNISE

COULD IT BE SEPSIS?

Sepsis is **infection** with **organ dysfunction** and is a **medical emergency**

Does the baby have any of the following:

Signs or symptoms of INFECTION?

- ☐ Fever, hypothermia, temperature instability
- ☐ Pale, mottled, central cyanosis
- ☐ Lethargy, poor feeding, floppy / poor tone
- ☐ Apnoea(s)
- ☐ New or worsening signs of respiratory distress
- ☐ New rash, red umbilicus, cellulitis, joint swelling
- ☐ Seizure(s), abnormal movements, high pitched cry, irritability, increased tone, jitteriness
- ☐ Abdominal distension / tenderness, vomiting, diarrhoea, blood in stool

Maternal risk factors?

- ☐ Prolonged rupture of membranes > 18 hours
- ☐ Maternal pyrexia ≥ 38°C
- ☐ Maternal infection
- ☐ Group B streptococcus (GBS)
- ☐ Bacterial growth on placental swab
- ☐ Increased sepsis probability on Neonatal Early-Onset Sepsis Calculator*

Other risk factors?

- ☐ Family, carer or clinician concern the baby is sick
- ☐ Unwell family members
- ☐ Re-presentation for ongoing condition or concern
- ☐ Known or suspected infection - not improving
- ☐ Indwelling line(s) with signs of infection
- ☐ Prematurity (immunocompromised)
- ☐ Aboriginal and Torres Strait Islander people

***Neonatal Early-Onset Sepsis Calculator**

ONLY for babies < 24 hours old AND ≥ 34 weeks gestation
Entered details must be exact
Set incidence to 0.4/1000 births
Note: Does not replace the senior clinician decision to commence treatment

Commence A-G systematic assessment and document a full set of vital sign observations including blood pressure

RESPOND & ESCALATE

Does the baby have ANY features of SEVERE ILLNESS?

*Laboratory features of **severe illness / organ dysfunction** include acidosis, lactate ≥ 4 mmol/L, neutropenia, thrombocytopenia, elevated CRP*

☐ **ANY RED ZONE observation OR additional criteria**

→ Call a **RAPID RESPONSE** (as per local CERS) and consult with **SENIOR CLINICIAN**

☐ **ANY YELLOW ZONE observation OR additional criteria**

→ Call for a **CLINICAL REVIEW** (as per local CERS) and **SENIOR CLINICIAN** review within 30 minutes

Consider other causes (e.g. postnatal transition, respiratory distress syndrome, congenital heart disease, hypovolaemia or metabolic disease)

Does the senior clinician consider the baby has POSSIBLE SEPSIS?

YES → **COMMENCE SEPSIS TREATMENT (over page)**

NO → Consider other causes of deterioration and increase frequency of vital sign observations

Reconsider sepsis if the baby deteriorates

SMR060403

Holes Punched as per AS2828.1: 2019

BINDING MARGIN - NO WRITING

NH700108 050224

NEONATAL SEPSIS PATHWAY

SMR060.403

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NEONATAL SEPSIS PATHWAY

RESUSCITATE

Complete actions 1 to 5 within 60 minutes with ongoing A-G systematic assessment

1. Get help

2. Monitor Airway, Breathing, Circulation

- Consult with Paediatrician / Neonatologist / Emergency Physician / NETS
- Commence respiratory support if required
- Give supplemental oxygen to maintain SpO_2
  - 90 – 94% (babies < 48 hours)
  - ≥ 95% (babies > 48 hours)
- Continually monitor the baby and assess vital sign observations including blood pressure
- Assess for signs of shock (e.g. delayed capillary refill, poor perfusion, tachycardia, hypotension, acidosis)
- Provide thermal environment to achieve normothermia

WITHIN 5 min

WITHIN 15 min

3. Obtain access and collect pathology

- ☐ Vascular access
- ☐ Blood culture
- ☐ Blood gas
- ☐ Lactate
- ☐ Blood glucose level (BGL)

- Gain access: IV / umbilical / intraosseous (if baby > 2 kg)

Call for expert assistance after 2 failed attempts at cannulation

- Prioritise blood culture collection (0.5 - 1 mL) prior to antibiotics
- Collect relevant screening samples (e.g. lumbar puncture, urine) according to suspected source if haemodynamically stable

Do not delay antibiotic administration for sample collection or test results

WITHIN 30 min

4. Commence antibiotics

- ☐ Antibiotics commenced
- ☐ Consulted with appropriate expert clinician or NETS

Prescribe and administer antibiotics according to the Australasian Neonatal Medicines Formulary (ANMF)
BENZYLPENICILLIN OR AMPICILLIN plus GENTAMICIN

If baby is severely unwell or deteriorating, discuss other infective sources and additional antimicrobials with appropriate expert clinician or NETS (e.g. CEFOTAXIME if suspected meningitis, ACICLOVIR, VANCOMYCIN)

WITHIN 60 min

5. Consider fluid resuscitation

- If signs of shock, administer 10 mL/kg sodium chloride 0.9% bolus
- Give 2 mL/kg glucose 10% plus maintenance fluids if:
  - BGL < 2.6 mmol/L (babies < 48 hours)
  - BGL < 3.0 mmol/L (babies > 48 hours)

REASSESS & REFER

6. Reassess

- If signs of shock persist, discuss ongoing management including additional fluid bolus and/or vasopressors e.g. adrenaline (epinephrine) with a Neonatologist / NETS
- Continue to monitor vital sign observations at a minimum frequency every 30 minutes for 2 hours, then hourly for 4 hours
- Actively seek microbiology and other investigation results
- Review treatment plan and consider viral screening

7. Refer

- ☐ Intensive Care / NETS contacted

- If no improvement or further deterioration occurs, escalate to higher level of care (e.g. Intensive Care / NETS)
- Discuss management plan with the family / carers

NETS 1300 36 25 00

Print Name: _____ **Signature:** _____

Designation: _____ **Date:** _____/_____/_____

NO WRITING

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