Safer Care Victoria

Health service logo

Family name	MRN
Given name	Gender at birth ○ Male ○ Female
D.O.B	M.O.
Address	
Location/Ward	

COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE

Victorian Maternal Sepsis Pathway

*Use for **all pregnant women** and **up to six weeks post-patrum**, including any perinatal loss.*

1. Could it be Sepsis?

RECOGNISE

Does your patient have a known or suspected infection?

- **Systemic:** history of fevers or rigors, myalgias or recent infection (e.g. breast infection, mastitis, gastro)
- **Obstetric:** possible intrauterine infection involving membranes or placenta, premature rupture of membranes, prolonged labour, retained product
- **Fetal:** fetal tachycardia/ demise
- **Genitourinary:** dysuria, anuria, or frequency
- **Respiratory:** cough, shortness of breath
- **Abdominal:** pain, peritonism, diarrhoea or vomiting
- **CNS:** headache, altered conscious state/decreased mental alertness, neck stiffness
- **Skin:** cellulitis, wound, petechial rash, cool peripheries

AND/OR any of the following increase risk factors?

- Recent surgery or invasive procedure
- Aboriginal and Torres Strait Islander people
- On immunosuppressive treatment
- Patient, carer or family concern
- Re-presentation within 48 hours or deterioration
- Neutropenia
- Close contact with unwell children/household members

2. Does your patient have abnormal vital signs?

RESUSCITATE & REFER

≥ 2 of the following:

- SBP < 90 mmHg **or** MAP < 65
- Clinical concern
- Altered mental status
- Lactate ≥2 mmol/L (if not in labour)

YES

Initiate **EMERGENCY CALL** as per local guidelines

Treat as SEPSIS and / or SEPTIC SHOCK until proven otherwise – high risk of deterioration

OR

≥ 2 of the following:

- Temperature < 36°C **or** > 38°C **or** clinical concern
- Heart rate >110 bpm
- Respiratory rate > 24 per minute
- WCC < 4×10^9 **or** > 15×10^9

YES

Call for Senior clinical review as per local guidelines

Does the patient have **POSSIBLE SEPSIS?**

NO

Consider other causes:

- Haemorrhage
- Pulmonary embolism / DVT
- Transfusion or drug reaction
- Dehydration / hypovolemia
- Endocrine / pancreatitis
- Ischaemia
- New arrhythmia
- Atelectasis
- Stroke
- Overdose/oversedation
- Intoxication/ withdrawal
- Myocardial infarct

YES

COMMENCE SEPSIS TREATMENT IMMEDIATELY

- Review the patient's Goals of Care (GOC)
- Consider if patient requires transfer to a higher acuity setting
- Discuss treatment plan with patient, carer, and/or family
- Consider fetal surveillance if appropriate for the gestation of the pregnancy

Patient requires:

- Clinical assessment
- Repeat observations within 30 minutes and manage according to Step 2 of this pathway

3. Six key actions in 60 minutes

1. **Oxygen administration**
2. **Two sets of blood cultures**
3. **Venous blood lactate**
4. **Fluid resuscitation**
5. **Intravenous antibiotics***
6. **Monitoring observations and fluid balance**

* Antibiotics should be administered within 60 minutes.
** Cancer patients currently undergoing systemic chemotherapy require first antibiotics within 30 minutes.

4. Document and monitor *(continued on next page)*

Sepsis pathway commenced?	Name/Designation:	
	Date/Time:	Initials:
	Triage Category:	Time:
Has the goals of care/ACP/resuscitation options been completed?	○ Yes ○ No	Initials:
Has the diagnosis and treatment plan been discussed with the patient, carer, or family member?	○ Yes ○ No	Initials:

FIRST 30 MINUTES FROM PRESENTING SIGNS/SYMPTOMS

Key Actions (including the fetal/baby wellbeing as relevant)

Senior medical review *(Name/Designation)*		**Time:**	**Initials:**
Fetal surveillance if appropriate for the gestation of the pregnancy		**Time:**	**Initials:**

Consider urgent birth if chorioamnionitis is suspected.
At pre- or peri-viable gestations, delivery may be required for maternal wellbeing.

Oxygen administration	○ Aim SpO2 > 95% (or 88–92% for COPD and chronic type II respiratory failure)		**Time:**	**Initials:**
Ensure IV Access:	2x large bore peripheral cannula available for fluid bolus, **OR** access to a suitable central venous access device (CVAD)			
Blood cultures	○ **Two sets** of blood cultures (2 peripheral – can be from same site; or 1 peripheral and 1 from CVAD lumen)		**Time:**	**Initials:**
Lactate	○ Venous blood lactate	**Level:**	**Time:**	**Initials:**

Pathology
- Collect FBC, UEC, CRP, LFTs, coags and BSL (BSL >7.7mmol/L in absence of diabetes may be significant)
- Consider cross match if patient at risk of anaemia or known recent surgery

DO NOT WAIT for test results. Commence fluid resuscitation and antibiotics ASAP

Fluid resuscitate If hypotensive (SBP < 90mmHg) or lactate ≥2mmol/L

Fluids must have medical officer authorisation and be prescribed on the IV Therapy Chart

Give RAPID fluid bolus STAT. 500 mL 0.9% sodium chloride or Hartmann's*

○ **First bolus required and given**	**Time given:**	**Initials:**

If hypotension persists after the initial fluid resuscitation, administer second fluid bolus

○ **Second bolus required and given** Caution if signs of pulmonary oedema, history of cardiac dysfunction	**Time given:**	**Initials:**

** Antibiotics **MUST NOT** be administered concurrently with Hartmann's. Flush with compatible fluid before and after. Consider IDC and maintain strict fluid balance chart.*

If blood pressure does not improve after fluid boluses ESCALATE care and consider inotropes

4. Document and monitor *(continued from previous page)*

FIRST 60 MINUTES FROM PRESENTING SIGNS/SYMPTOMS

Clinically examine the patient for a focus of infection, e.g. chest, urinary tract

Check the patient's **ALLERGY STATUS**

- ○ No penicillin allergy
- ○ Non-life threating penicillin allergy (e.g. rash)
- ○ Life-threatening penicillin allergy (e.g. anaphylaxis)

Record antibiotic allergy and reaction:

Initials:

For SUSPECTED, KNOWN OR UNKNOWN infection refer to local antimicrobial policy

Antibiotics must be prescribed on a medication chart by a medical/nurse practitioner

Administer antibiotics*

* *Antibiotics should be administered within 60 minutes. Cancer patients currently undergoing systemic chemotherapy require first antibiotic within 30 minutes.*

Time prescribed:

Time given:

Initials:

Steroids

Consider hydrocortisone if patient taking corticosteroids or known/suspected steroid deficiency.

If pre-term birth is likely, give corticosteroids according to local protocol. Maternal health is the priority rather than fetal lung maturity.

Time prescribed:

Time given:

Initials:

FIRST 6 HOURS

Ongoing Care

Source control

ALWAYS CONSIDER THE NEED FOR SOURCE CONTROL.
Refer to obstetric teams early.

Time:

Investigation
Initiate investigations as directed by likely source

- ○ Diagnostic Imaging
- ○ Urine MSU (or CSU) for MCS
- ○ Nasal/throat swab for respiratory multiplex PCR including COVID-19
- ○ High vaginal swab (HVS) /low vaginal swab(LVS) for MCS
- ○ Cultures from lumens of central lines
- ○ Breast milk MCS if breastfeeding
- ○ Sputum for MCS
- ○ Wound swab for MCS
- ○ Stool for C. difficile testing (if diarrhoea present)

Initials:

Monitoring
Monitor vital signs and fluid balance every 30 minutes for 2 hours, then hourly for 4 hours or more frequently as needed

- ○ Keep oxygen saturation > 95%

Assess for deterioration which may include one or more of the following:

- ○ Increasing respiratory rate (in orange or purple zone on observation chart)
- ○ SBP < 100 mmHG
- ○ Decreased or no improvement in consciousness
- ○ Urine output <20 mL/hr and/or 0.5mL/kg/hr
- ○ If lactate ≥2mmol/L or rising, repeat in 2 hours

If pathway is no longer indicated, document in medical records

Time:

Initials: