NSW GOVERNMENT 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	

SEPSIS KILLS
RECOGNISE · RESUSCITATE · REFER

MATERNAL SEPSIS PATHWAY

Greater than 20 weeks gestation / Up to 42 days post-partum

Emergency department and inpatient maternal sepsis pathway
Use relevant febrile neutropenia guidelines if the woman has haematology/oncology diagnosis

RECOGNISE

ARE YOU CONCERNED THAT THE WOMAN COULD HAVE EARLY SEPSIS?

Does the woman have any of the following sepsis risk factors, signs or symptoms?

- ☐ History of fevers or rigors
- ☐ Cough/sputum/breathlessness
- ☐ Flu like symptoms
- ☐ Unexplained abdominal pain/distension
- ☐ Vomiting and/or diarrhoea
- ☐ Line associated infection/redness/swelling/pain
- ☐ Possible intrauterine infection (PROM/prolonged labour/retained products/fetal tachycardia)
- ☐ Myalgia/back pain/general malaise/headache
- ☐ Dysuria/frequency/odour
- ☐ New onset of confusion or altered LOC
- ☐ Recent surgery/cellulitis/wound infection
- ☐ Immunocompromised/chronic illness
- ☐ Possible breast infection

MATERNAL SEPSIS CAN OFTEN PRESENT WITH VAGUE NON-SPECIFIC SYMPTOMS

PLUS
(record observations on the Standard Maternity Observation Chart - SMOC)

Does the woman have any RED ZONE observations OR additional criteria OR serious clinician concern?

OR

Does the woman have any YELLOW ZONE observations OR additional criteria OR clinician concern?

**Temperature instability is consistent with sepsis*

RESPOND & ESCALATE

YES (RED ZONE)

The woman has SEVERE SEPSIS or SEPTIC SHOCK until proven otherwise

- Sepsis is a medical emergency
- Call for a Rapid Response (as per local CERS) unless already made
- Conduct a targeted history and clinical examination

YES (YELLOW ZONE)

The woman may have SEPSIS

- Sepsis is a medical emergency
- Call for a Clinical Review (as per local CERS) unless already made
- Conduct a targeted history and clinical examination
- Obtain **SENIOR CLINICIAN** review to confirm diagnosis and prioritise investigations and management
- Look for other causes of deterioration

Does the senior clinician consider the woman has sepsis?

NO

NO (NO ZONE)

Look for other common causes of deterioration and treat

Hypovolaemia
Concealed abruption
Pulmonary embolus/DVT
Pre-eclampsia

- Initiate appropriate clinical care
- Continue to monitor on the SMOC
- Repeat observations within 30 minutes AND increase the frequency of observations as indicated by the woman's condition
- Document decision/ diagnosis and management plan in the health care record
- Re-evaluate for sepsis if observations remain abnormal or deteriorate

YES

Commence treatment as per sepsis resuscitation guideline (over page)
AND inform the Attending Medical Officer (as per local CERS)

Discuss management plan with the woman and her family
Adapt treatment to the woman's end of life care plan if applicable

REVIEW THE NEWBORN OR FETUS FOR SIGNS AND SYMPTOMS OF DETERIORATION

NSW GOVERNMENT 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

SEPSIS KILLS
RECOGNISE · RESUSCITATE · REFER

MATERNAL SEPSIS PATHWAY

Greater than 20 weeks gestation / Up to 42 days post-partum

Sepsis recognition

Date:__ __/ __ __/ __ __ Time: __ __ : __ __

☐ **Emergency Department Patient**

Triage category 1 2 3 4 5

☐ **Inpatient** Ward: _____

☐ Clinical Review ☐ Rapid Response

Consider other causes of deterioration (such as hypovolaemia, concealed abruption, pulmonary embolus/DVT or pre-eclampsia) until sepsis is confirmed or if the woman does not respond to treatment as expected

RESUSCITATE

A — **Airway** - Assess and maintain patent airway

B — **Breathing** - Assess and administer oxygen if required; aim SpO_2 ≥ 95% (or as per local guidelines)

C

Circulation - Large bore vascular access, blood/culture collection, IV fluid resuscitation and antibiotics
Call for expert assistance after two failed cannulation attempts

IF PREGNANT ASSESS THE FETUS

Collect Blood Cultures Take two (2) sets from two (2) separate sites	☐ Yes ☐ Not obtained
Collect Lactate *(venous or arterial sample)* Increasing or no improvement in serum lactate levels after adequate fluid resuscitation is significant	☐ Yes ☐ Not obtained Lactate:__ __.__mmol/L
Collect FBC, EUC, CRP/PCT, LFTs, coags and glucose	☐ Yes ☐ Not obtained BGL:__ __.__mmol/L
Order and collect other cultures prior to antibiotics (unless a **SENIOR CLINICIAN** assesses that this would result in an unacceptable delay in commencing antibiotic therapy) E.g. Urine, vaginal swabs/lochia, breast milk, stool, wound, placental, viral swabs and throat	Document cultures collected: _____ _____ _____ _____ _____ _____

Fluid Resuscitation

- Use crystalloid
- Aim Systolic Blood Pressure > 90mmHg
- Monitor for signs of pulmonary oedema and review at risk women more frequently
- Use caution for women who may have pre-eclampsia

☐ **Emergency Department**
Give initial 20mL/kg STAT, if no response repeat 20mL/kg STAT

☐ **Inpatient units**
Initial 250 – 500mL STAT, if no response repeat 250 – 500mL STAT

If no response in SBP after 1000 mL of fluid call a Rapid Response

NSW GOVERNMENT Health

Facility:

SEPSIS KILLS
RECOGNISE · RESUSCITATE · REFER

MATERNAL SEPSIS PATHWAY

Greater than 20 weeks gestation / Up to 42 days post-partum

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

COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE

SMR060402

Holes Punched as per AS2828.1: 2012

BINDING MARGIN - NO WRITING

RESUSCITATE

C

Antibiotics First/new antibiotic administered Date:__ __/ __ __/ __ __ Time: __ __ : __ __

USE LOCAL ANTIBIOTIC PRESCRIBING GUIDELINE

Prescribe and administer IV antibiotics within **60 MINUTES** of sepsis recognition

Blood cultures (at least two sets) and other relevant cultures should be collected **PRIOR** to antibiotic administration. However if difficult to obtain or the woman has severe sepsis or septic shock do not delay administration of IV antibiotic(s).

Consider alternate source of infection including viral

Consult Infectious Diseases Physician or Clinical Microbiologist (if available)
- For women already on antibiotic(s)
- For women who have severe sepsis/septic shock

D — **Disability** - **Assess level of consciousness (LOC)** using Alert, Voice, Pain, Unresponsive (AVPU)

E — **Exposure** - Re-examine the woman for source of sepsis to guide further investigation
Collect swabs, cultures, and chest X-ray if indicated

F — **Fluid** - Monitor and document strict fluid input/output and consider an IDC

G — **Check Blood Glucose Level** – Manage as per local guidelines

Monitor and Reassess

Continue monitoring, assess for signs of deterioration and escalate as per local CERS:
- Respiratory rate in the Red or Yellow Zone
- SBP < 90mmHg
- Decreased or no improvement in level of consciousness
- Urine output < 80mL over 4 hours
- Increasing or no improvement in serum lactate

Consider commencement of vasopressors in consultation with an Intensive Care specialist

INTENSIVE CARE MAY BE REQUIRED

REFER

Update the Attending Medical Officer on the woman's condition using ISBAR	☐ Yes
Discuss the management plan with the woman and her family	☐ Yes
Sepsis management plan documented by a medical officer in health care record as per page 4 (over)	☐ Yes
Update the newborn's care team on the woman's condition	☐ Yes
Does the local/referral Intensive care specialist or the Tiered Maternity and Neonatal Network need to be contacted for advice?	☐ Yes ☐ No

Name: _____ Designation_____ Signature: _____

NSW GOVERNMENT 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

SEPSIS KILLS® RECOGNISE · RESUSCITATE · REFER

MATERNAL SEPSIS PATHWAY

Greater than 20 weeks gestation / Up to 42 days post-partum

SEPSIS MANAGEMENT PLAN

Women with presumed sepsis are at high risk of deterioration despite initial resuscitation with intravenous antibiotics and fluids. These women require a management plan that must to be discussed with the Attending Medical Officer (AMO) and Intensive care specialist. The Infectious Diseases/Clinical Microbiology Specialist and Antimicrobial Stewardship (AMS) team are to be consulted where necessary. The plan should be communicated to the Senior Medical Officer, Midwife/Nurse in Charge, the woman and her family.

Specific management plans are to be documented in the woman's health care record

			Complete
Initial 24 hours	**Continue monitoring**	• Prescribe the frequency of observations ***Minimum recommendation every 30 minutes for 2 hours, then hourly for 4 hours*** • Monitor and reassess for signs of sepsis deterioration which may include one or more of the following: Respiratory rate in the Red or Yellow Zone Systolic blood pressure < 90mmHg Decreased or no improvement in level of consciousness Urine output less than 80mL over 4 hours No improvement in serum lactate level If deteriorating (has any Red or Yellow Zone criteria), escalate as per your local CERS and inform AMO	☐ ☐
	Repeat lactate 4 and 8 hours post recognition	4 hours Date:__ __/ __ __/ __ __ Time: __ __ : __ __ Result __ __ . __ mmol/L 8 hours Date:__ __/ __ __/ __ __ Time: __ __ : __ __ Result __ __ . __ mmol/L	☐ ☐
	Fluid resuscitation	• Prescribe IV fluids as appropriate based on the woman's condition *Monitor for signs of fluid overload/pulmonary oedema*	☐
	Reassess	• Complete a targeted physical examination • Confirm diagnosis and consider other causes of deterioration *(e.g. hypovolaemia, concealed abruption, pre-eclampsia, PE/DVT)* • Check preliminary results and consider repeats • Repeat Venous Thromboembolism (VTE) risk assessment • Reassess the newborn or fetus for signs of deterioration	☐ ☐ ☐ ☐ ☐
	Review treatment/ management	• Discuss with AMO • Document a plan to continue, change or cease antibiotics • Continue monitoring for signs of deterioration • If the woman's recovery is uncertain or she is considered high risk, discuss the goals of care with the woman and her family	☐ ☐ ☐ ☐
24 - 48 hours	**Reassess**	• Complete a targeted physical examination • Actively seek microbiological/investigations results and review • Confirm diagnosis and document source of sepsis in the health care record • Reassess the newborn or fetus for signs of deterioration • Discuss with the AMO • Document a plan to continue, change or cease antibiotics • Consider seeking advice from infectious disease/microbiology physician • Obtain AMS approval for restricted antibiotics • Repeat biochemistry as indicated • Continue monitoring for signs of deterioration • Update the newborn's care team on the woman's condition	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Continue to monitor as per woman's condition – observations, medical review, antibiotics