GUIDELINE

Newborn Care of the Infant Born to a Mother receiving Minimal or No Antenatal Care

<table>
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<tr>
<th>Scope (Staff):</th>
<th>Midwifery, Nursing and Medical Staff</th>
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<tbody>
<tr>
<td>Scope (Area):</td>
<td>NICU KEMH, NICU PCH, NETS WA, KEMH Postnatal Wards</td>
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Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Aim

To provide a safe and consistent clinical guide to facilitate urgent screening and prompt treatment of mothers and infants at risk of communicable disease, where antenatal care (ANC) has been minimal or not provided.

This guideline recommends a specific pathway for communication with health professionals and Pathwest laboratory services applicable only to patients referred to King Edward Memorial Hospital and Perth Children’s Hospital. Laboratory services, personnel and estimated turn-around times of results etc., in other clinical settings are beyond the scope of this document.

Risk

Potential to miss opportunities for the diagnosis and treatment of potentially serious disease, if guidelines and processes are not followed. The provision of appropriate counselling and support of patients is essential.

Background

Routine ANC care provides a holistic framework for maternal and neonatal health throughout pregnancy and the postnatal period. The provision of health and wellbeing education and resources, opportunity for medical, psychological and social support and referral are fundamental.

Detailed health screening for conditions that may adversely affect the pregnancy are routinely conducted at booking, with opportunity for early diagnoses, surveillance and
Newborn Care of the Infant Born to a Mother receiving Minimal or No Antenatal treatment. Women who have not received ANC warrant counselling and consent to undertake urgent screening for sexually transmitted Infections (STI) and blood borne disease and commencement of therapy without delay.

Comprehensive medical and social care must also be provided. Where possible, serology tests should be performed using maternal samples, however special circumstances may require additional resources and neonatal testing, where there is little or no capacity to perform maternal screening (e.g. physical separation or abandonment).

Close communication between the senior obstetric, neonatal and microbiology/ID physicians is paramount to this model of care and to ensure the correct maternal and neonatal specimens are taken, processed and results communicated without delay.

**Principles / Key points**

- The Clinical Microbiologist on call (KEMH) must be contacted in the first instance to facilitate appropriate testing with Pathwest laboratory staff. An anticipated turn-around-time (*within KEMH only*) for urgent preliminary results is approximately 24 hours for those processed via this route in normal weekdays and working hours.

- Serology services will usually not be available out-of-hours/weekends/Public Holidays, therefore it remains essential to converse directly with the on call clinical microbiologist and be mindful of an extended turnaround time of results despite best efforts.

- All STI screening specimens (including serology) to be marked as urgent. Please use pre-printed specimen forms attached to this guideline for completion, including signature, date and contact information of both the obstetric & microbiology clinician.

- Send blood samples immediately to the Women and Newborn Health Service Pathology 24 hour laboratory at KEMH using the pre-printed forms provided (will provide when available). Currently, all samples will be processed offsite at PathWest QEII Campus.

- The Clinical Microbiologist on call is the point of contact for obstetric & neonatal investigations and communication of positive results for patients cared for at KEMH. The Obstetric Senior Registrar/Consultant will continue to co-ordinate clinical care and maintain communication with neonatal team (Senior Registrar/Consultant) and ongoing care and follow-up within the community & support services following discharge.

- Request Neonatal consultation with the Senior Registrar (page 3377) or Consultant on call, to provide parental counselling of anticipated neonatal care, including determination of a feeding plan.

- Safe discharge planning is paramount and may require an extended period of in-patient care. Thorough assessment of social risk factors with regards to child protection, family violence, financial/residential stress or concerns with mental health and substance use.
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Maternal Care

Maternal care will be coordinated through the Senior Obstetric Registrar and Clinical Microbiologist on call (KEMH) to lead patient-centred discussions & risk assessment to ensure appropriate testing and indication for empirical treatment.

Patients at high-risk of blood born viruses (HIV/Hepatitis B/C) may require prophylaxis (dependent on timing of results) with additional input with the PCH Infectious Diseases Consultant on call. Refer to Antenatal care: Late presentation (intrapartum or third trimester) with no or minimal antenatal care.

Maternal Investigations (to be sent urgently)

- Serology: Hepatitis B, Hepatitis C, HIV 1/2 Serology (Antigen/ Antibody), Rubella (IgG), Syphilis Serology (Trepomonal pallidum Total Antibody Screening).
- Blood Group & Hold, Antibody screen, FBC, Ferritin, Vitamin D
- 2 x Lower Vaginal Swabs: GBS (charcoal); Chlamydia trachomatis & Neisseria gonorrhoea PCR (Dry Swab)
- Urine: MC & S (And Chlamydia trachomatis & Neisseria gonorrhoea PCR if swabs not taken)
- Placenta (Upon delivery): Syphilis PCR

The Obstetric Senior Registrar will notify the Neonatal Senior Registrar page 3377 (or Consultant via switchboard 91) as the point of contact and arrange consultation for maternal counselling of anticipated neonatal care and to formulate an appropriate feeding plan.

Neonatal Care

<table>
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<tr>
<th>Steps</th>
<th>Additional Information</th>
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<tbody>
<tr>
<td><strong>1. Neonatal Specimens</strong></td>
<td><strong>Equipment</strong></td>
</tr>
<tr>
<td>• Blood Culture, FBC, LFTs, CRP</td>
<td>• 0.5-1ml BD Bactec blood culture vial,</td>
</tr>
<tr>
<td>• Blood Group &amp; DAT</td>
<td>2 x 0.5ml Lavender (1 handwritten label)</td>
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<tr>
<td>• Ear Swab: MC &amp; S</td>
<td>0.5ml Mint Green Tube</td>
</tr>
<tr>
<td>• Eye Swab: Chlamydia &amp; Gonorrhoea PCR</td>
<td>Charcoal swabs for MC &amp; S and MRSA screen</td>
</tr>
<tr>
<td>• Nose/ Throat/ Umbilical Swabs: MRSA Screen</td>
<td>Dry swabs for all PCR’S (Chlamydia &amp; Gonorrhoea; Syphilis)</td>
</tr>
<tr>
<td>• Gastric Aspirate: MC &amp; S</td>
<td>Sterile specimen container</td>
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<tr>
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<td>Any additional testing will be determined by availability of maternal results.</td>
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<tr>
<td><strong>2. Consult the on call Clinical Microbiologist at PCH.</strong></td>
<td><strong>Expert consultation for a patient-specific risk assessment and guidance of empirical therapy and potential additional indications for Antiretroviral prophylaxis</strong></td>
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### Neonatal Therapy

The infant’s skin should be cleansed of blood/liquor prior to administration of IM injections (Vitamin K, Hepatitis B Vaccination).

**Refer to WNHS Neonatal Medicine Monographs** [Neonatal Medication Protocols](#)

Empirical antibiotic therapy covers potential GBS & Syphilis pending results:

- IV Benzylpenicillin 60 mg/kg 12 hourly if <3kg or risk of sepsis (together with IV Gentamycin as per monograph)

- Alternatively Prophylactic IM Benzathine penicillin 200,000U (0.4ml) IM as per Perth Children’s Hospital Children’s Antimicrobial Programme monograph if ≥ 3kg.

Indications for anti-retroviral prophylaxis and/or Hepatitis vaccine & immunoglobulin are patient-specific and must be discussed urgently with the Paediatric Infectious Diseases Consultant from Perth Children’s Hospital on call.

Zidovudine (IV or oral) is prescribed most commonly and sometimes in combination with Nevirapine and Lamivudine.

Avoidance of maternal breast milk exposure may be appropriate in particular clinical cases thought to be very high risk of HIV. There is a cumulative risk of potential HIV transmission associated prolonged mixed feeding of breast milk & formula.
If the infant is born ≤35 weeks gestation NICU admission and IV ART therapy will be indicated and consideration of the use of PDHM pending maternal results.

If the mother is found to be HBsAg positive then HBIG is recommended immediately. Efficacy of HBIG deteriorates markedly if administration is delayed beyond 48 hours of birth; however administration of Hepatitis B Vaccination should not be delayed pending results.

**Related CAHS internal policies, procedures and guidelines**

**Neonatology**
- Hepatitis B Virus: Care of the infant born to HBV positive women
- HIV: Care of the Infant born to HIV Positive Women
- Syphilis: Investigation and Management of the Neonate Born to a Mother with Syphilis

**WNHS**
- Antenatal Care Schedule
- Antenatal care: Late presentation (intrapartum or third trimester) with no or minimal antenatal care.
- Sexually Transmitted Infections
- Syphilis in Pregnancy

**Useful resources (including related forms)**
- Infectious & Related Disease Notification Form.
Appendix 1

Printable Laboratory Forms will be provided here when available. See specimens required under Neonatal Care in the interim.