Royal Hospital for Women (RHW)
BUSINESS RULE
COVER SHEET

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NAME OF DOCUMENT	Sexually Transmitted Infections (STI)/Blood Borne Viruses (BBV) Antenatal screening and treatment
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FORMER REFERENCE(S)	Sexually Transmitted Infections (STI)/Blood Borne Viruses (BBV) Antenatal screening and treatment
EXECUTIVE SPONSOR	Medical Co-Director of Maternity Services
AUTHOR	Dr S Lee (Consultant Obstetrician) Dr K Nguyen (Junior Medical Officer)
SUMMARY	This business rule provides guidance for appropriate screening and treatment of sexually transmitted infections and blood borne viruses to a woman during pregnancy

Royal Hospital for Women (RHW)
CLINICAL BUSINESS RULE

Sexually transmitted infections (STI)/Blood borne viruses (BBV) Antenatal screening and treatment

RHW CLIN014

1. BACKGROUND

Antenatal screening and detection for Sexually Transmitted Infections (STIs) and Blood Born Viruses (BBVs) for a woman in pregnancy provides an opportunity for early detection, prompt and appropriate management, prevention or reduction of adverse outcomes for the fetus or neonate, prevention of long term sequelae in the mother, informed antenatal care, education and contact tracing [2].

This CBR aims to provide guidance for antenatal STI and BBV screening and treatment for both routine and high risk populations in pregnancy to reduce morbidity to the mother and fetus/neonate.

2. RESPONSIBILITIES

2.1 Medical staff – screening, counselling, treatment and development of a comprehensive care plan for the antenatal, intrapartum and postnatal periods, inclusive of public health if required

2.2 Midwifery staff – screening, referral and support in the development of the comprehensive care plan

3. PROCEDURE

High risk antenatal woman includes:

- Aboriginal/Torres Strait Islanders
- Under 25 years of age
- Sex workers
- Intravenous drug users (IDU)
- Woman who is symptomatic of STI
- Woman who is homeless or sleeping rough
- Woman with past history of STI or BBV
- Woman who has had limited or no antenatal care
- Woman from countries with high prevalence for specific BBV infections
- Woman or her partner[s] resides in a declared syphilis outbreak area or an area of known high prevalence
- Woman with sexual or IDU partners with STI or BBV infection
- Woman with multiple partners or has a partner who has sex with other people

3.1 Clinical Practice

- Ensure woman's confidentiality is maintained
- Ascertain whether routine or high-risk antenatal screening is recommended
- Counsel woman on ALL screening tests recommended and the implications for maternal and fetal/neonatal morbidity

3.1.1 **Routine antenatal screening**

- Review results for any woman at the initial visit. If not attended recommend serology for STIs and BBV's. Obtain verbal consent for following:[1-3]
  - Syphilis serology
  - Hepatitis B surface antigen (sAg), surface antibody (sAb) and core antibody (these need to be listed separately on the pathology form)
  - HIV antibody
  - Hepatitis C antibody
- Recommend cervical screening at first visit if due or never attended (see RHW CBR Cervical Screening for Pregnant and Postnatal Women)
- Routinely offer testing for Chlamydia Trachomatis and Neisseria Gonorrhoea to a woman under 30 years old, a woman in high-risk groups (see above) and those who live in areas of high STI prevalence:
  - nucleic acid amplification testing (NAAT) for chlamydia and gonorrhoea (if required) is performed on first-pass urine, self-collected vaginal swab or clinician-collected endocervical swab
- Ensure routine repeat screen for Syphilis at 28 weeks gestation (repeat at 36 weeks and birth in high-risk groups)
- Recommend testing to a woman symptomatic of genitourinary infection at any time. This may include a high vaginal swab for Trichomoniasis in addition to the tests above

3.1.2 **High risk screening**

- Note if high risk behaviours are present such as unprotected vaginal, oral or anal intercourse with an infected partner or a partner who is:
  - known to have high risk factors
  - sharing injecting drug use equipment
  - tattooing and other body piercing where unsterile practices are used or equipment is reused
- Consider repeat antenatal serology screening at 28 weeks gestation for these women including:
  - HIV
  - Hepatitis B
  - Hepatitis C
  - Chlamydia and Gonorrhoea

3.2 **Unbooked woman presenting in labour**

- Recommend, obtain consent and collect bloods for full serology STI and BBV screen
- Request urgent reporting of results
- Recommend, obtain consent and collect vaginal swabs for Chlamydia, Gonorrhoea and Group B Streptococcus
  - follow up of results and any actions required must be done by the requesting practitioner

3.3 **Management/Treatment**

- Arrange contact tracing if woman positive for Syphilis, Hepatitis B, Hepatitis C, HIV, Chlamydia, Gonorrhoea or Trichomoniasis
- Contact local public health unit

3.3.1 Syphilis[6,7]

- Consult with Infectious Diseases regarding treatment
- For a woman with newly confirmed infectious syphilis, recommend an intramuscular dose of 1.8 g (=2.4MU) of benzathine penicillin as soon as possible (given as 2 injections containing 0.9g (=1.2MU) of benzathine penicillin). For late latent syphilis it is recommended to have weekly injections for three weeks
    - ideally woman receives treatment at least 30 days before the estimated date of birth
- Refer woman to the Infection in Pregnancy clinic for review
- Ensure partner/s notification and treatment has taken place to reduce risk of re-infection
    - advise couple to avoid intercourse until 5 day post treatment or symptoms resolved (whichever is longer)
    - syphilis serology can be negative for up to 90 days and hence empirical treatment of partner/s is recommended. Contact sexual health or infectious diseases department for further guidance
- Ensure follow up of woman after treatment
    - serological follow-up of maternal RPR (rapid plasma reagin) during and following pregnancy is essential and should start at 3 months after first dose of benzathine penicillin
    - ideally there should be demonstrated fourfold drop in maternal RPR e.g., 1 in 64 to 1 in 16, prior to birth
    - if titre has not dropped to 1 in 16 prior to birth baby should be examined, investigated and treatment considered for congenital syphilis, with specialist neonatal/paediatric review recommended

3.3.2 Hepatitis B, Hepatitis C, HIV

- Refer to the individual CBRs:
    - *Hepatitis B Positive Woman and her Neonate(s)*
    - *Hepatitis C Positive Mothers and their Babies*
    - *Human Immunodeficiency Virus (HIV) in Pregnancy, Birth and Postpartum Period* and
    - *Human Immunodeficiency Virus (HIV) in Pregnancy: Prevention of Mother-to-child transmission*

3.3.3 Chlamydia[8]

- Manage with stat dose of Azithromycin 1g oral
- Advise couple to avoid intercourse until 7 day post treatment
- Advise no sexual contact with partner/s from last 6 months until partner/s have been tested and treated if necessary
- Recommend a test of cure which should be performed no earlier than 4 weeks after treatment is completed
- Retest 3 months post-treatment to rule out re-infection prior to birth
- Consult with neonatal team if woman untreated or treatment incomplete

3.3.4 Gonorrhoea[8]

- Manage with stat doses of Ceftriaxone 500mg IV or Ceftriaxone 500mg in 2mL of 1% lignocaine IM , PLUS Azithromycin 1g oral
- Advise couple to avoid intercourse until 7 day post treatment
- Advise no sexual contact with partner/s from last 2 months until partner/s have been tested and treated if necessary
- Recommend a test of cure which should be performed 2-4 weeks after treatment is completed

- Retest 3 months post-treatment to rule out re-infection prior to birth
- Consult with neonatal team if woman untreated or treatment incomplete

3.3.5 Trichomoniasis

- Manage with Metronidazole 400mg orally with food, twice a day for 5-7 days; or a once off dose of metronidazole 2 grams orally (should be taken with food)

3.4 **Management of a neonate of a positive woman**

- Refer to neonatal team and the Australia Society for Infectious Diseases 2022 Guidelines for Management of Perinatal Infections
- Ensure all cases of congenital syphilis are investigated as a clinical incident and entered into ims+

3.5 **Documentation**

- Medical record
- Antenatal yellow card

3.6 **Educational Notes**

- Swabs are more sensitive than urine for screening for chlamydia and gonorrhoea and therefore is the recommended option[8]
- Routine screening for herpes simplex virus, trichomoniasis and bacterial vaginosis is not recommended unless clinical suspicion exists
- Chlamydia is the most commonly notifiable sexually transmitted infection in Australia. Chlamydia is usually asymptomatic, however the woman may experience any of the following:[2]
    - Cramps or pain in the lower abdomen
    - Dysuria
    - Bleeding or pain during or after intercourse
    - Change in vaginal discharge

Syphilis[6,7]

- Infectious syphilis is increasing in the general population and has led to an increase in congenital syphilis cases in NSW. Based upon this change in epidemiology, it is now recommended that all pregnant women are screened for syphilis at least twice in pregnancy[5]
- A large Australian government campaign "Don't fool around with syphilis" has many different resources and factsheets to help the clinician inform and educate women on syphilis, see link for more information
- Syphilis is a sexually acquired infection caused by *Treponema pallidum*
- Syphilis testing should be performed by screening with a specific treponema pallidum assay, for example, Treponema pallidum haemaglutination assay (TPHA) or the Treponema pallidum particle agglutination assay (TPPA). The non-specific Treponema pallidum assays, such as the rapid plasma reagin (RPR) or Veneral Diseases Reference Laboratory (VDRL) tests, although cheaper, are less likely to pick up latent infection therefore not advised
- Factors that increase the risk of syphilis infection or reinfection include:
    - sexual contact of a person with infectious syphilis
    - unprotected vaginal, oral or anal sex with a male partner at high risk of having syphilis
    - male sexual partner who has sex with men

  - partner/s have sexual partners from high prevalence countries (e.g. countries in Africa and Asia, especially among refugees from these countries)
  - limited antenatal care
- Untreated syphilis during pregnancy is associated with perinatal loss, preterm birth, neonatal death, low birthweight and congenital syphilis
- A newborn baby with congenital syphilis may appear asymptomatic however still be severely affected at birth (e.g. with hepatomegaly, ascites, hydrops, fetal anaemia)
- If the diagnosis is not made at birth, the baby may present later with non-specific signs and symptoms (e.g. failure to thrive, pneumonia) nearly always within 3 months of birth

3.4 Implementation, Communication and Education Plan

This revised CBR will be distributed to all medical, nursing and midwifery staff via @health email. The CBR will be discussed at ward meetings, education and patient quality and safety meetings. Education will occur through in-services, open forum and local ward implementation strategies to address changes to practice. The staff are asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and understood the revised CBR. The CBR will be uploaded to the CBR tab on the intranet and staff are informed how to access

3.5 Related Policies/procedures

- Hepatitis B Positive Woman and her Neonate(s)
- Hepatitis C Positive Mothers and their Babies
- Human Immunodeficiency Virus (HIV) in Pregnancy, Birth and Postpartum Period
- Human Immunodeficiency Virus (HIV) in Pregnancy: Prevention of Mother-to-child transmission
- Australasian Society for Infectious Diseases 2022 Guidelines on Management of Perinatal Infections (Third Edition)
- NSW Ministry of Health Syphilis in Pregnancy and Newborns PD2023_029

3.6 References

1. RANZCOG. Routine antenatal assessment in the absence of pregnancy complications 2019 [Available from: https://ranzcog.edu.au/wp-content/uploads/2022/05/Routine-antenatal-assessment-in-the-absence-of-pregnancy-complications.pdf.]
2. ASHM. STI management guidelines for pregnant people 2022 [Available from: https://sti.guidelines.org.au/populations-and-situations/pregnant-people/.]
3. ASHM. Bloodborne Viruses and Sexually Transmissible Infections in Antenatal Care (3rd edition) Sydney ASHM 2022
4. Cancer Council. Screening in Pregnancy 2022 [Available from: https://www.cancer.org.au/clinical-guidelines/cervical-cancer/cervical-cancer-screening/screening-in-pregnancy.]
5. Clinical Excellence Commission. Increased universal screening for syphilis infection in pregnancy. November 2022 [Available from https://www.health.nsw.gov.au/sabs/Documents/2022-si-009.pdf]
6. Australian Government Department of Health and Aged Care. Pregnancy Care Guidelines: Syphilis 2023 [Available from: https://www.health.gov.au/resources/pregnancy-care-guidelines/part-f-routine-maternal-health-tests/syphilis.]
7. CDNA. Syphilis CDNA National Guidelines for Public Health Units 2018 [Available from: https://www.health.gov.au/sites/default/files/documents/2020/02/syphilis-cdna-national-guidelines-for-public-health-units.pdf.]
8. ASID. Management of Perinatal Infections (third edition) Sydney ASID 2022.

9. Australian STI Management Guidelines for use in Primary care. ASHM 2021 https://sti.guidelines.org.au/populations-and-situations/pregnant-people/
10. NSW Sexually Transmissible Infections Strategy: 2022-2026. NSW Ministry of Health May 2022

4. CULTURAL SUPPORT

- When clinical risks are identified for an Aboriginal woman, she may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.
- For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours
- If the woman is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

5. REVISION AND APPROVAL HISTORY

Date	Revision No.	Approval
16.11.23	4	Endorsed RHW Safety and Quality Committee
Reviewed and endorsed Maternity Services CBR committee 19/09/2023 Endorsed by SELHD DTC August 2023 Reviewed and endorsed Maternity Services LOPs 12/5/20 Approved Quality & Patient Safety Committee 17/4/14 Reviewed and endorsed Obstetrics LOPs group 8/4/14 Approved Quality & Patient Safety Committee 16/7/09 Endorsed Obstetrics Clinical Guidelines Group June 2009		