1. Introduction and who the guideline applies to:

This guideline is intended for use by all medical, midwifery and nursing staff working in both Primary and Secondary care settings involved in the care of women and their families throughout screening and diagnosis of Hepatitis B and Syphilis in pregnancy.

Background:

These care pathways have been developed by the Multi-disciplinary Sexual Health Group to provide guidance for Maternity Unit staff involved in the care of women and their families with blood borne infections. The members of the Sexual Health Group are:

- Dr J Dhar, Consultant Physician Genito-Urinary Medicine
- Dr F Siddiqui, Fetal and Maternal Medicine Consultant
- Dr M Finney, Consultant Obstetrician
- Dr T Singhal, Consultant Obstetrician
- Dr H White, Consultant – Infectious Diseases
- L Boon - Specialist Midwife
- M Jethwa – Specialist Midwife
- H Ulyett, Antenatal Screening Co-ordinator
- R Meakin, Pharmacist

There is a designated lead for antenatal screening for the UHL maternity service (Senior Midwife for Antenatal Services and Community), whose role it is to ensure appropriate processes are in place to offer women appropriate screening tests for blood borne infections in pregnancy as per National Screening Committee Guidance.
The following care pathways are available in this document:

**Hepatitis B:**

- Women’s Services: Hepatitis B positive women. Antenatal & Postnatal management.
- Women’s Services: Hepatitis B positive man. Antenatal & Postnatal management.
- Children’s Services: Paediatric exposure to parental Hepatitis B surface antigen positive.

**Syphilis:**

- Women’s Services: Syphilis serology positive women. Antenatal & Postnatal management.
- Children’s Services: Paediatric exposure to maternal syphilis.

In addition there are 3 care plans that are used by the Sexual Health Group. These care plans have been reproduced as part of this document for information, but may be subject to changes by the Sexual Health Group. These care plans are to be commenced by the Sexual Health Group.

**Perinatal Blood Borne Infection Care Plans:**

- Hepatitis B Care Plan
- Maternal syphilis Infection

**Communication:**

For any case that triggers the use of these care plans all relevant health professionals involved in the woman’s care should be contacted and informed.

**Related documents:**

- Booking Bloods and Urine Test Guideline (UHL, 2014)
- Hepatitis C screening in Pregnancy Guideline (UHL, 2014)
- Missed antenatal appointments management guideline (UHL, 2015)
2. **Recommendations**

1. All pregnant women should be offered screening for Hepatitis B & Syphilis infection by their midwife. This should ideally be at booking, but can be at any time during pregnancy, intrapartum or postnatally after pre-test counselling.

2. All screening tests for Hepatitis B & Syphilis in pregnancy must be seen by a qualified member of staff, communicated to the woman and documented within the Maternity Health record.

3. Women who have a positive Hepatitis B screening test result should be managed following the Hepatitis B Care pathways and use the relevant care plans.

4. Women who have a positive Syphilis screening test result should be managed following the Syphilis Care pathways and use the relevant care plans.

5. Hepatitis C screening is not routinely performed in pregnancy but where indicated (after discussion with GUM Specialists) women who have a positive Hepatitis C screening test result should be managed following the Hepatitis C Care pathways and use the relevant care plans.
ANTENATAL MANAGEMENT OF ALL PREGNANT WOMEN (1,3):

Recommendation 1

All pregnant women should be offered screening for Hepatitis B & Syphilis Infection by their midwife. This should ideally be at booking, but can be at any time during pregnancy, intrapartum or postnatally after pre-test counselling.

This test should be considered an opt-out test, rather than an opt-in test:

- If screening is accepted, this must be documented within the Hand-Held Notes (Personal Maternity Record) by the person consenting the woman for the test.

- For full details of accurate completion of screening request forms and the management of rejected samples refer to the UHL booking bloods and urine tests guideline.

If screening is declined, the woman should be informed that she will be contacted by a specialist midwife at around 20 weeks to re-offer Infectious Diseases Screening.

All women who decline screening should have a form completed with documentation of her choice and submitted to the Lab. This should be documented in the maternity health record.

If screening is further declined, the reason should be documented in the Maternity Health records.

Consider offering repeat screening during pregnancy if test negative in 1st trimester, to exclude seroconversion, in those who fit the high-risk categories defined below and have a continuing risk exposure, including women diagnosed with a sexually transmitted infection in pregnancy.

High risk women/partners:

- Known IV drug users, or whose partner is an IV drug user
- Women or their sexual partners who have lived in areas of the world where Hep B virus is endemic:
  - Sub-Saharan Africa (including Zimbabwe, Malawi and Somalia),
  - The Far East
  - Thailand
- Women who have had treatment abroad from a high prevalence area
- A blood transfusion abroad or pre 1985
- Women who know or suspect that their partner is bisexual
Recommendation 2

All screening tests for Hepatitis B & Syphilis in pregnancy must be seen by a qualified member of staff, communicated to the woman and documented within the Maternity Health Record.

Negative results for Hepatitis B & Syphilis.

- The Community Midwife or Obstetrician who sees the woman at the next antenatal visit (at 14 -18 weeks gestation if possible), should check that the results of the Hepatitis B & Syphilis screening test are available, communicate the result to the woman and document the result in the Maternity Health Record.

- If the result is missing or not available, the health professional should check where the result is, and as a last resort consider repeat the screening test

- If the result is inconclusive, repeat the screening test, and discuss with virologist

- If the result is negative but the woman is from the “high risk” (as detailed above), offer screening again at 28 weeks.

“Equivocal” or inconclusive results for Syphilis screening.

- Occasionally the laboratory will find that the results for syphilis screening are inconclusive. This is reported as an equivocal result.

- Another blood sample will be required by the Lab to do further testing to exclude syphilis infection. Reassurance should be given to the women in this circumstance that syphilis infection is extremely unlikely but further testing should be performed as a precaution.
Positive results for Hepatitis B & Syphilis

- Positive results are telephoned, faxed and a hard copy sent directly to the Midwife Specialist for Blood Borne Infections from the screening laboratory.

- The Midwife Specialist for Blood Borne Infections will contact the woman and arrange an appointment to give her the result within 10 working days.

- The Specialist Midwife will ensure that household contacts and partners are referred to their GP for testing as required.

- The Midwife Specialist for Blood Borne Infections will refer the woman to a Hepatologist or Infectious Diseases Consultant who will arrange an appointment for the woman to be seen within 6 weeks of diagnosis.

- If the partner is known to be Hepatitis B positive, a referral to the Specialist Midwives is required (see flow chart 2)

- For further advice on the management of positive results for Hepatitis B and Syphilis refer to the relevant pathways and care plans below.

- Women with a positive result who do not have an on-going pregnancy should still be seen by the specialist midwife and her results given and appropriate follow up arranged.

For further advice on the management of positive results for Hep B and Syphilis infection in pregnancy refer to the following flowcharts below.
Hepatitis B & Syphilis screening in Pregnancy guideline V2

Authors: Maternity Sexual Health Group
Written: September 2011
Contact: L Matthews, Clinical Risk and Quality Standards Midwife
Approved by: Maternity Service Governance Group
UHL Guideline Register No: C63/2004

NB: Paper copies of this guideline may not be the most recent version. The definitive version is in the Policy and Guidelines Library.
**HEPATITIS B POSITIVE WOMEN**
**ANTENATAL & POSTNATAL MANAGEMENT**

### Postnatal

#### Newborn

- Check newborn is consented to complete immunisation schedule
- Clotted Blood sample prior to 1st vaccine and HBIG (if required) **(NOT CORD BLOOD)**
- First Hep B vaccine (+HBIG if required) to be administered whilst on labour ward
- BCA to arrange 2nd vaccine appointment
  - Send HB1 letter to CHRD
  - (refer to "Necnata Hep B immunisation service - for babies born to Hep B positive mothers only" flowchart)
- Confirm follow-up requirements / offer advice
- BCA to complete paediatric health records (red book) immunisation section

#### Mother

- Standard universal precautions
- Routine postnatal care
- Specialist postnatal care available if required x 5990
- Specialist midwives notified of birth x 5990
- Advice/support as necessary
- Specialist midwives confirm follow-up arrangements
- Clerical support for BBI to timesafe the referral process between CHRD and UHL

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**Useful contact numbers:**

- Specialist Midwives: 258 5030
- IDU Ward: 258 8051/6026
- Secretaries: 258 8052
- Virology/Secretary: 258 9943

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*Note: Newborns Immunisation Schedule*

- **Monovalent Hepatitis B Vaccine at:**
  - Birth
  - 1 month
- **Infant Hep B routine childhood vaccination at:**
  - 2 months
  - 3 months
  - 4 months
- **Monovalent Hepatitis B booster at:**
  - 12 months
- **Blood Test also at:**
  - 12 months
- **Breastfeeding - encouraged if full immunisation schedule to be completed**
Preventing Mother to Child Transmission of Hepatitis B

Mother HBsAg positive in pregnancy

- Specialist midwives review and repeat HBV DNA/Liver function tests:
  1. In first trimester
  2. At 26 weeks gestation
  3. At 34 weeks gestation

HBeAg positive

- HBV DNA less than 1 million (<10^5) IU/ml
  - MOTHER: No treatment required

- HBV DNA greater than 1 million (>10^5) IU/ml
  - MOTHER: Consider treating when HBV DNA is greater than 10^6 IU/ml. Treat when HBV DNA is greater than 10^7 IU/ml as per national guidelines
  - NeONATE*: Hepatitis B Immunoglobulin at birth
    PLUS
    - Monovalent Hepatitis B vaccination in opposite limb at birth and 1 month
    - Routine childhood immunisation with Infanrix hexa® at 2, 3 and 4 months
    - Monovalent Hepatitis B booster vaccine at 12 months with dried blood spot test at 12 months

HBeAg negative

- Anti-HBe (HBeAb) negative/positive
  - HBV DNA greater than 1 million (>10^5) IU/ml
    - MOTHER: No treatment required

- HBV DNA less than 1 million (<10^6) IU/ml
  - MOTHER: No treatment required

- Anti-HBe (HBeAb) negative
  - HBV DNA less than 1 million (<10^6) IU/ml
    - MOTHER: No treatment required

Any woman who has previously given birth to a baby who was subsequently found to be infected with Hepatitis B should also be considered for Tenofovir disoproxil therapy.

* Infants born to mothers who had acute Hepatitis B infection during pregnancy, or those born weighing less than 1500g should also receive Hepatitis B Immunoglobulin at birth, irrespective of the viral load or HBeAg of the mother.
In cases where serology results differ from above e.g. in equivocal eAg results, we will in general be guided by the viral load when determining treatment options. Please seek advice from a Hepatology or Infectious Diseases physician. Out of hours there is an Infectious Diseases consultant on call – contact main hospital switchboard.

Management of women prescribed Tenofovir disoproxil for prevention of vertical transmission of Hepatitis B infection

1. Start treatment at 28-30 weeks gestation
2. Check renal function and serum phosphate level after 2-4 weeks, and after a further 3 months of therapy
3. Check HBV DNA at least once to ensure falling viraemia
4. Aim to discontinue Tenofovir disoproxil at one month post-partum but ALT monitoring may be required to detect postnataal HBV fares

Safety in pregnancy

There is a considerable body of safety data from the Antiretroviral Pregnancy Registry for the use of Tenofovir disoproxil in pregnancy. No increases in congenital malformation for 2nd and 3rd trimester use were seen on the pregnancy registry. The FDA considers it a Category B drug. Safety advice is supported by the National Institute for Health and Care Excellence 2013 guidelines.

Breastfeeding advice

Tenofovir disoproxil is excreted in breast milk but in tiny amounts, considered insignificant. Current advice from the UK Drugs in Breast Milk Advisory Service (based in Leicester) is that the benefits of breastfeeding outweigh any risks from Tenofovir disoproxil in this setting. This view is supported by the National Institute for Health and Care Excellent 2013 guidelines.

References

1. British Viral Hepatitis Group. BVHG Consensus statement – UK guidelines for the management of babies born to women who are HBsAg positive. June 2008.
6. UK Drugs in Breast Milk Advisory Service (personal correspondence)
Neonatal Hepatitis B Immunisation Service
for babies born to Hepatitis B positive mothers only

Universal antenatal screening for Hepatitis B infection
NICE guidelines recommend booking to be undertaken at 8-10 weeks gestation
Women who present later in pregnancy should be screened ASAP (even as delivery)

On receipt of a HBsAg positive result, UHL Maternity Services are required to:

- Inform the Trust's designated Blood-Borne Infection Midwives, Obstetrician, GP, Health Protection Team (HPT)
- No call women to give results and document results in notes within 10 working days
- Ensure the woman is referred for assessment (including confirmatory testing) and management by an appropriate specialist within 6 weeks of the screening results being received
- Refer household and sexual contacts for screening and vaccination
- Access indicators for HBIG and if required order from Coidia on standard form (see Appendix A)
- Consent mother for full vaccination schedule and dried blood spot test at 12 months

On receipt of Hepatitis B positive result, the Health Protection Team (HPT) is required to:

- Liaise with GP, and support screening and vaccinating of household and sexual contacts

On receipt of Hepatitis B positive result, the GP is required to:

- Arrange screening and vaccination of household and sexual contacts

After delivery, UHL Maternity Services are required to:

- Explain implications of hepatitis B and obtain consent for vaccination
- Provide leaflet to parent
- Ensure first vaccine +/- HBIG is administered within 24 hours of birth
- Record mother's hepatitis status and baby's vaccination status in midwifery notes, discharge letter, and POVR
- At discharge UHL maternity services are required to:
  - Inform CHID, GP, HV of mother’s Hep B status and that first dose (+/- HBIG) has been given to the baby
  - Notify CHID of maternal Hepatitis B notification (Form HBS)
- Ensure failure is in place for notifying CHID and GP
- Explain the follow up process and check that mother’s address and phone number are accurate

On receipt of notification form (HBS) CHID are required to:

- Commonly scheduling prompting and invitation for all subsequent vaccine doses
- Inform GPs of scheduled appointments
- Inform HV of missed appointments
- Follow system for rescheduling missed appointments
- Submit quarterly data on behalf of NHS England (NCDP)
- Co-ordinate Dried Blood Spot Testing to include infection at 12 months, and record the test result
- Follow local protocols when child moves in/out of area
- The GP is required to:
  - Identify newly registered ‘at risk’ babies. Inform HIV and CHID. If maternity services have been unable to give the first dose, arrange as soon as possible
  - Order and administer the second dose of monovalent Hepatitis B vaccine at 1 month
  - Order and administer the infant Hepatitis vaccine as part of the routine childhood immunisation schedule at 2, 3 & 4 months
  - Order and administer the booster dose of monovalent Hepatitis B vaccine at 12 months
  - Notify CHID after each dose of vaccine is given
  - Arrange dried blood spot test to exclude infection at 12 months, and report the result to the patient
  - Assess need for a booster dose of vaccine at 18 years 6 months (see Green Book or contact HPT)
  - Follow up CHID’s by contacting parents
  - Refer to an appropriate specialist if child develops hepatitis B infection

The Health Visitor is required to:

- Identify ‘at risk’ babies by checking mother’s Hep B status at newborn visit
- Check that vaccination schedule is up to date at 12-14 days, 6 weeks and 10th-11th
- Arrange for vaccination and sign consent parents at each routine visit
- Liaise with GP and contact the family when a child fails to attend for vaccination
- Check Hep B status for all children who move into the area

Follow up with GP and Health Visitor (HV)
Women’s, Perinatal & Sexual Health Services
Blood Borne Infection Flow Chart

HEPATITIS B POSITIVE PARTNER
ANTENATAL & POSTNATAL MANAGEMENT

Community Midwife identifies Hep B positive partner

Referral of woman with positive partner to BB1 specialist Midwife team

Provide advice and written information as necessary and discuss follow up care

Discuss the implications for the mother and her baby and advise Hep B positive partner to engage with IDU services

Referral mother

IDU Consultant

Obtain maternal consent for immunisation schedule

Referral baby

• Neonatal Team
• Paediatric alert form to Specialist Nurses (BBV)
• BCA – Paed alert form

Gain consent for neonatal vaccination schedule

Birth vaccination to be administered on delivery suite.

Useful contact numbers:

Specialist Midwives  258 5090
IDU  258 0142
Secretaries  259 6992
Consultant Virologist  253 0543
Perinatal Blood Borne Infection Care Plan

Hepatitis B

UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST

Directorate of Women’s, Perinatal & Sexual Health Services

Patient Addressograph
- Leicester Royal Infirmary
- Leicester General Hospital

Gravida _________ Parity _________
Blood Group ______________
Previous Blood Transfusion □ Yes □ No
Co-infection________________________

SPECIALIST CARE TEAM

<table>
<thead>
<tr>
<th>Specialist</th>
<th>Name</th>
<th>Contact Number</th>
<th>Date Notified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Midwife</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Specialist Midwife</td>
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<tr>
<td>General Practitioner</td>
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<tr>
<td>Obstetrician</td>
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<tr>
<td>Paediatric Team</td>
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<tr>
<td>ID Physician</td>
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<tr>
<td>Pharmacist</td>
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</tbody>
</table>

Interpreter Required □ Y □ N □
Language Spoken

Original Test Date □/□/□□□□ (see filed report in maternity notes)
Date result received □/□/□□□□
Date of result given □/□/□□□□ Gestation □ □ Weeks

Confirmatory Test Date □/□/□□□□

Aware of diagnosis □ Yes – Prior to pregnancy □ Yes – in this pregnancy
GP □ aware □ not aware □ to be informed / consented
Birth Partner □ aware □ not aware □ to be informed / consented
**Perinatal Blood Borne Infection Care Plan**

**Hepatitis B**

### Antepartum Care Plan

#### Issues Discussed / Actions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Sign &amp; Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is Hepatitis B?</td>
<td></td>
</tr>
<tr>
<td>Confirmatory testing, further blood investigations</td>
<td></td>
</tr>
<tr>
<td>Check Hep A &amp; C status.</td>
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</tr>
<tr>
<td>Identification of contacts advice to see GP</td>
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</tr>
<tr>
<td>Identify risk factors</td>
<td></td>
</tr>
<tr>
<td>Methods of transmission</td>
<td></td>
</tr>
<tr>
<td>Prevention Education (Family planning/contraception)</td>
<td></td>
</tr>
<tr>
<td>Antenatal Care / Intrapartum Care / Postnatal Care</td>
<td></td>
</tr>
<tr>
<td>Paediatric: follow up / immunisation schedule / blood tests</td>
<td></td>
</tr>
<tr>
<td>Consent obtained for immunisation schedule</td>
<td></td>
</tr>
<tr>
<td>Copy of consent given to parent</td>
<td></td>
</tr>
<tr>
<td>Written information provided?</td>
<td></td>
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</table>

Comments: ____________________________________________________________

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#### Antenatal Checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Sign &amp; Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP informed by letter</td>
<td></td>
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<tr>
<td>Partner testing advised</td>
<td></td>
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<tr>
<td>Other at risk children identified and referred</td>
<td></td>
</tr>
<tr>
<td>Referral made to Infectious Diseases</td>
<td></td>
</tr>
<tr>
<td>Paediatric alert completed</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B Immunoglobulin required (Order from HPA via Virology)</td>
<td></td>
</tr>
<tr>
<td>(Stored in NNU fridge LGH, Disute fridge LRI)</td>
<td></td>
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<tr>
<td>Hepatitis B DNA levels sent at first appt*</td>
<td>Yes</td>
</tr>
<tr>
<td>Result</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B DNA levels sent at 26-28 weeks*</td>
<td>Yes</td>
</tr>
<tr>
<td>Result</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B DNA levels sent at 34 weeks*</td>
<td>Yes</td>
</tr>
<tr>
<td>Result</td>
<td></td>
</tr>
</tbody>
</table>

*Please refer to neonatal care plan if Hepatitis B DNA levels > 10^5*

*In certain circumstances i.e. unusual serology/ or if amniocentesis is required seek specialist advice*

#### Plan (please date and sign)

________________________________________________________________________

__________________________
Perinatal Blood Borne Infection Care Plan

Hepatitis B

Intrapartum Care Plan

Aim for vaginal delivery

Managed actively as below, unless obstetric indication for caesarean section

- Await spontaneous labour unless obstetric indication to intervene
- Active management of labour
- If high infectivity avoid ARM/FBS/FSE.
- Check if there is an individualised careplan for this woman.

If Pre-labour Rupture of Membranes

- Be certain of diagnosis
- Induce/augment immediately using oxytocin and/or prostin
- In certain circumstances for example high viral loads, prematurity (<34 weeks) and pre-rupture of membranes seek advice from Hepatitis or Infectious diseases team.

Plan (please date and sign)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Caesarean section should only be undertaken for standard obstetric indication

☐ Elective caesarean section 39 weeks Signature __________________________ Date ____________

Pre-clerking Date __________________________ Time __________________________

Caesarean Section Date __________________________ Time __________________________

NB: Bath the baby immediately after birth; refer to Hepatitis B positive women Antenatal & Perinatal Management Guideline / Paediatric Alert Form and Neonatal Care Plan for guidance
Perinatal Blood Borne Infection Care Plan

Hepatitis B

Neonatal Care Plan

Baby’s Name _______________________________ Baby’s Number __________________

Date of Birth □□/□□/□□□□ Time of Birth □□ : □□

Mode of Delivery __________________________

Newborn Checklist

☐ Check newborn is consented to complete immunisation schedule
☐ Copy of consent (white copy) within newborns/maternity notes
☐ Clotted blood sample PRIOR to 1st vaccine + HBIG (if required) (NOT CORD BLOOD)
☐ First Hepatitis B vaccine administered on labour ward
☐ HBIG (if required) administered on labour ward
☐ Inform Specialist Midwife of delivery (Ext 5990)
☐ Refer to “Neonatal Hepatitis B Immunisation Service” pathway (pg 10) for letters required to refer baby for further vaccines
☐ BCA to document 1st vaccine in “immunisation section” of red health book and complete referral letters to CHD/ GP as described in pathway above

Sign & Date ____________________________

Note:

• HBIG (Hepatitis B Immunoglobulin) – given to some neonates at the time of 1st Hepatitis B vaccine (IN OPPOSITE THIGH). Please refer to the flowchart entitled ‘Preventing Mother to Child Transmission of Hepatitis B’ for details of which neonates should receive HBIG (appendix 1).

• Newborn accelerated immunisation schedule is Monovalent Hepatitis B vaccine at: Birth and 1 month. Then routine childhood immunisation schedule with Infanrix Hexa® at 2 months, 3 months and 4 months. Then Monovalent Hepatitis B Booster Vaccine at 12 months and dried blood spot test at 12 months.

• BREAST feeding encouraged if full vaccination schedule to be completed.
Women's, Perinatal & Sexual Health Services  
Blood Borne Infection Flow Chart  

WOMEN WITH POSITIVE SYPHILIS SEROLOGY IN PREGNANCY  
ANTENATAL & POSTNATAL MANAGEMENT

- Positive results telephoned/e-mailed and hard copy sent to specialist midwives for BBIs

- GP & Community Midwife

- Referral

- Sexual Health Consultant for assessment/history  
  Treatment commenced (if necessary)  
  (See BASHH Guidelines)  
  Refer to Health Advisor for contact tracing and support

- Sexual Health Consultant to complete Paediatric Syphilis template, copy to Paediatric Neonatal Team & Baby Care Assistants

- Inform client of positive result, obtain history. Offer written information. Contact numbers and support provided

- Obtain confirmatory blood sample

- For acute infectious Syphilis consider arranging a detailed scan with Fetal Medicine Consultant at 24 weeks

- Inform with clients permission who will be involved in care

- Specialist Midwife to send Paediatric Alert form to Neonatal Team & Baby Care Assistants

- Postnatal routine care of mother

* Refer to the Paediatric Syphilis Template for further information and guidance should the baby require Syphilis treatment  
  (Contact Pharmacist for advice)

Useful contact numbers:
- Specialist Midwives: 259 5900
- IDU: 259 2129
- Secretaries: 259 9802
- Consultant Virologist: 258 8543
Children's Services
Paediatric Exposure to Maternal Syphilis
Flowchart

Newborn

Clotted blood sample for Treponemal Serology, obtained prior to maternity discharge (NOT CORD BLOOD)

Follow-up in SBRNIF Dr Bandi's Clinic at 3 and 9 months
Requires Ht and Vit, Treponemal Serology and clinical assessment

Blood Results

Positive VDRL
Treponemal Serology (IgM)

Repeat blood sample to obtain confirmatory results
2 positive samples
To be followed up in SBRNIF Dr Bandi's Clinic

Paediatric Specialist Nurses
- Notified about delivery
- Organise appointments
- Collate audit
- Provide information, advice and support
  - Family + Professionals
- Follow-up trace contacts
- Disclose results to parents / carer

Useful contact numbers:

<table>
<thead>
<tr>
<th>Role</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist Midwives</td>
<td>259 5990</td>
</tr>
<tr>
<td>IDU</td>
<td>259 2129</td>
</tr>
<tr>
<td>NNU (LRH)</td>
<td>6462</td>
</tr>
<tr>
<td>NICU (LGH)</td>
<td>4800</td>
</tr>
<tr>
<td>Secretaries</td>
<td>259 6952</td>
</tr>
<tr>
<td>Consultant Virologist</td>
<td>259 6543</td>
</tr>
</tbody>
</table>
Perinatal Blood Borne Infection Care Plan

Women with positive syphilis serology in pregnancy Care plan

UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST
Directorate of Women’s, Perinatal & Sexual Health Services

Patient Addressograph

☐ Leicester Royal Infirmary

☐ Leicester General Hospital

EDD [Date]

Gravida [Number]  Parity [Number]

Blood Group [Blood Type]

Previous Blood Transfusion ☐ Yes ☐ No

Co-infection [Condition]

SPECIALIST CARE TEAM

<table>
<thead>
<tr>
<th>Specialists</th>
<th>Name</th>
<th>Contact Number</th>
<th>Date Notified</th>
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</thead>
<tbody>
<tr>
<td>Community Midwife</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Specialist Midwife</td>
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<tr>
<td>Pharmacist</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpreter Required ☐ Y ☐ N

Language Spoken [Language]

Original Test Date ☐ [Date]

(see field report in maternity notes)

Date result received ☐ [Date]

Date of result given ☐ [Date]

Gestation ☐ [Weeks]

Confirmatory Test Date ☐ [Date]

Aware of diagnosis ☐ Yes – Prior to pregnancy ☐ No – in this pregnancy

GP ☐ aware ☐ not aware ☐ to be informed / consented

Birth Partner ☐ aware ☐ not aware ☐ to be informed / consented
## Perinatal Blood Borne Infection Care Plan

### Women with positive syphilis serology in pregnancy Care plan

#### Antepartum Care Plan

<table>
<thead>
<tr>
<th>Issues Discussed / Actions</th>
<th>Sign &amp; Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is Syphilis?</td>
<td></td>
</tr>
<tr>
<td>Confirmatory testing, further blood investigations</td>
<td></td>
</tr>
<tr>
<td>Identification of contact advise to attend St. Peter’s HC</td>
<td></td>
</tr>
<tr>
<td>Identity risk factors</td>
<td></td>
</tr>
<tr>
<td>Methods of transmission</td>
<td></td>
</tr>
<tr>
<td>Prevention Education (Family planning/contraception)</td>
<td></td>
</tr>
<tr>
<td>Antenatal Care / Intrapartum Care / Postnatal Care</td>
<td></td>
</tr>
<tr>
<td>Paediatric follow up / blood tests</td>
<td></td>
</tr>
<tr>
<td>Written information provided?</td>
<td></td>
</tr>
<tr>
<td>Previous Syphilis infection and treatment</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

__________________________________________________________________________

### Antenatal Checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Sign &amp; Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP informed by letter</td>
<td></td>
</tr>
<tr>
<td>Partner testing advised and referral to GP</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Previous children referred if required</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Referral made to Sexual Health at St. Peter’s HC</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Paediatric alert form sent</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

*In certain circumstances i.e. unusual serology or if amniocentesis is required seek specialist advice*

Plan (please date and sign)

__________________________________________________________________________

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Perinatal Blood Borne Infection Care Plan

Women with Positive Syphilis Serology in Pregnancy Care Plan

Intrapartum Care Plan

Neonatal Care Plan

Baby’s Name ___________________________ Baby’s Number __________________

Date of Birth _______ Time of Birth _______

Mode of Delivery ________________________

Syphilis - Infant Management

☐ Mother adequately treated prior to the pregnancy with no risk of Congenital Syphilis
  - At birth: infant requires no additional physical examination or tests for Syphilis
  - Follow-up: infant needs no follow-up for Syphilis

☐ Mother treated for Syphilis during this pregnancy with low risk of Congenital Syphilis
  - At birth: Assess infant for signs of Congenital Syphilis. If no concerns perform routine Syphilis
    screening on infant venous (not cord) serum sample, request `Syphilis screen+ RPR+ Treponemal IgM`
  - Maternal sample required for Syphilis Serology
  - Follow-up: Send a referral to Dr Bandi (SBRINF clinic) – 3 month follow up

☐ Significant risk of Congenital Syphilis
  - At birth: Assess infant for signs of CS (see 2015 BASHH guidelines). Request `Syphilis Screen+ RPR+ Treponemal IgM` plus FBC, U&E, LFT, ALT. Lumbar puncture (request WBC, protein, RPR, TPPA) and further tests as clinically indicated; long bone and chest X-rays, ophthalmology and audiology reviews and (if available) samples from lesions for dark ground microscopy and PCR for T. Pallidum.
  - Treatment for Congenital Syphilis: Benzyl Penicillin Sodium – 60-90 mg/kg daily IV (in divided doses given as) –
    - 30 mg/kg 12 hourly in the first seven days of life and then 8 hourly on days 8, 9 & 10
    - which will be a total of 10 days.
  - Send a referral letter to Dr Bandi (SBRINF) – 1 month follow up

Newborn Checklist

☐ Inform Specialist Midwife of delivery (Ext 5090)

☐ Confirm follow up requirement / offer advice

☐ Discharge summary letter to Consultant Paediatrician (Dr Bandi)

Sign & Date ___________________________
Patient Details

<table>
<thead>
<tr>
<th>Date:</th>
<th>Serology (at diagnosis)</th>
<th>Treatment given</th>
<th>Serology (post treatment)</th>
<th>Serology (Current)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Treponemal Infection

<table>
<thead>
<tr>
<th>EIA</th>
<th>TPPA</th>
<th>EIA</th>
<th>TPPA</th>
<th>EIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDRL</td>
<td>VDRL</td>
<td>1gM</td>
<td>1gM</td>
<td>1gM</td>
</tr>
</tbody>
</table>

Date: | Serology | Contact Details | Vaccination | Follow up
-----|----------|-----------------|-------------|----------
      |          |                 |             |          |

Hepatitis B

Syphilis – Infant Management

- Mother adequately treated prior to the pregnancy with no risk of Congenital Syphilis
  - At birth: infant requires no additional physical examination or tests for Syphilis
  - Follow-up: Infant needs no follow-up for Syphilis

- Mother treated for Syphilis during this pregnancy with low risk of Congenital Syphilis
  - At birth: Assess infant for signs of Congenital Syphilis. If no concerns perform routine Syphilis screening on infant venous (not cord) serum sample, request Syphilis screen+, RPR+, Treponemal IgM.
  - Maternal sample required for Syphilis Serology
  - Follow-up: Send a referral to Dr Bandi (SBRINF clinic) – 3 month follow up

- Significant risk of Congenital Syphilis
  - At birth: Assess infant for signs of CS (see 2015 BASHH guidelines). Request Syphilis Screen+, RPR+, Treponemal IgM plus FBC, U&E, LFT, ALT. Lumbar puncture (request WBC, protein, RPR, TPPA) and further tests as clinically indicated; long bone and chest X-rays, ophthalmology and audiology reviews and (if available) samples from lesions for dark ground microscopy and PCR for T. Pallidum.
  - Treatment for Congenital Syphilis: Benzyl Penicillin Sodium – 60-90 mg/kg daily IV (in divided doses given as) –
    - 30 mg/kg 12 hourly in the first seven days of life and then 8 hourly on days 8, 9 & 10 which will be a total of 10 days.
  - Send a referral letter to Dr Bandi (SBRINF) – 1 month follow up

Any other Issues

Signed: ____________________ Date: ____________________
3. **Education and Training:**
   Antenatal Screening Session on Mandatory Training Day

4. **Monitoring Compliance:**

<table>
<thead>
<tr>
<th>What will be measured to monitor compliance</th>
<th>How will compliance be monitored</th>
<th>Monitoring Lead</th>
<th>Frequency</th>
<th>Reporting arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>All women were offered screening for Hepatitis B and Syphilis and this was documented in the health record</td>
<td>Antenatal screening KPI's</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Quarterly</td>
<td>NSC</td>
</tr>
<tr>
<td>All women that consent to Hep B &amp; Syphilis screening receive a conclusive result or are informed if the sample is not processed and repeat screening is offered even if they miscarry</td>
<td>Antenatal screening KPI's</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Quarterly</td>
<td>NSC</td>
</tr>
<tr>
<td>All high risk results were telephoned to the Specialist Midwife</td>
<td>Monthly failsafe checking between the Lab, antenatal screening and specialist midwifery</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Monthly</td>
<td>Internal database maintained</td>
</tr>
<tr>
<td>All women who had screen positive test results for Hepatitis B and Syphilis were seen by the Specialist Midwife, her results reviewed and the woman informed of the positive result within 10 working days of the result being available</td>
<td>Annual IDPS data return to PHE</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Annually</td>
<td>NSC</td>
</tr>
<tr>
<td>All positive results are clearly documented in the woman’s records</td>
<td>Screening audits for QA review</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Triennially</td>
<td>PHE QA team</td>
</tr>
<tr>
<td>All notes of woman with a positive result had an alert sticker on the front cover of the hospital notes</td>
<td>Screening audits for QA review</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Triennially</td>
<td>PHE QA team</td>
</tr>
<tr>
<td>All women with a positive result had an Hepatitis B and Syphilis Care Plan completed and this is filed in the health record</td>
<td>Screening audits for QA review</td>
<td>AN screening co-ordinator and specialist midwives</td>
<td>Triennially</td>
<td>PHE QA team</td>
</tr>
</tbody>
</table>

5. **Supporting References (maximum of 3)**

6. **Key Words**
   Hepatitis B Syphilis screening pregnancy

**CONTACT AND REVIEW DETAILS**

<table>
<thead>
<tr>
<th>Guideline Lead (Name and Title)</th>
<th>Executive Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Jethwa, Specialist Midwife Blood Borne infections</td>
<td>I Scudamore</td>
</tr>
</tbody>
</table>

Details of Changes made during review:
Hepatitis B doses in the immunisation schedule for routine childhood and selective neonatal Hepatitis B programmes have been reviewed and updated.
Hepatitis B virus infection and your baby leaflets for patients have been updated and reprinted.
Generic inbox for emailed positive results now active for the team.
Syphilis care plan and template amended.
## DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT

<table>
<thead>
<tr>
<th>Author / Lead Officer:</th>
<th>Sexual Health Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Title:</td>
<td>Specialist Midwives and Consultants in GU medicine</td>
</tr>
<tr>
<td>Reviewed by:</td>
<td>As above</td>
</tr>
<tr>
<td>Approved by:</td>
<td>Maternity Services Governance Group</td>
</tr>
<tr>
<td>Date Approved:</td>
<td>21.02.18</td>
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</table>

## REVIEW RECORD

<table>
<thead>
<tr>
<th>Date</th>
<th>Issue Number</th>
<th>Reviewed By</th>
<th>Description Of Changes (If Any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb.15</td>
<td></td>
<td>Sexual Health Group</td>
<td>New process for arranging and administering Hep Vaccination to babies born to hep B positive mothers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More accurate flowcharts describing the antenatal/postnatal and positive partner processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Contact details have altered</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Updated careplans and brought into line with other BBI careplans in pregnancy</td>
</tr>
<tr>
<td>Nov 16</td>
<td></td>
<td>Related “missed antenatal appointments guideline added”</td>
<td>Changes in national recommendations for women who decline screening</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Addition of the management of positive results for women who miscarry or have a termination of pregnancy</td>
</tr>
<tr>
<td>February</td>
<td></td>
<td>Hepatitis B doses in the immunisation schedule for routine childhood and selective neonatal Hepatitis B programmes have been reviewed and updated. Hepatitis B virus infection and your baby leaflets for patients have been updated and reprinted. Generic inbox for emailed positive results now active for the team. Syphilis care plan and template amended.</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

## DISTRIBUTION RECORD:

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Dept</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>All Midwives and Obstetricians</td>
<td>Maternity</td>
<td></td>
</tr>
</tbody>
</table>