Syphilis in Pregnancy



Trust ref:C6/2024

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1. Introduction and Who 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 pregnant women, people and their families throughout screening and diagnosis of Syphilis in pregnancy.

Syphilis is a bacterial infection caused by *Treponema pallidum*. Congenital syphilis can occur when maternal syphilis infection is transmitted transplacentally to the unborn baby. It is usually transmitted transplacentally in the second or third trimester, although it can occur at any gestation. Syphilis in pregnancy can increase the risk of miscarriage, premature birth, low birth weight, stillbirth (occurs in 30-40% of congenital syphilis cases) and hydrops fetalis. The risk of vertical transmission is greatest in: - untreated infection; early disease; high VDRL/RPR titres; maternal co-infection with HIV; and where the mother has been re-infected during pregnancy.

Approximately two-thirds of babies with Congenital Syphilis will be asymptomatic at birth but most will develop symptoms by 5 weeks of age. Untreated CS can result in physical and neurological impairments affecting the child's bones, teeth, vision and hearing.

Between 1 April 2020 and 31 March 2021, 650000 pregnant women in England underwent screening for syphilis through the antenatal screening pathway. 1.59/1000 tested patients received a positive result for syphilis. 43% required treatment in pregnancy. There were 5 infants with confirmed congenital syphilis born to women or people with screen positive results requiring treatment.

Background:

The document is based on the following documents (for hyperlinks please see references):

- British Association of Sexual Health and HIV (BASHH) UK national guidelines on the management of syphilis 2015
- Managing Syphilis Infection in Pregnancy. NHS England (Published 3 April 2023)
- ISOSS Syphilis Report 2022. (Updated 16 November 2022)
- NHS Infectious Diseases in Pregnancy Screening Programme Handbook 2016-2017

Practitioners should refer to the full UK National Guidelines, including any updated guidance, for detailed information on clinical management and seek specialist advice as required.

Effective assessment and management of syphilis in pregnancy and any baby born to a syphilis positive mother should consist of a multi-disciplinary approach with joint management, involving Midwifery, Obstetrics, Genital-Urinary Medicine, Paediatrics, Pharmacy and Laboratory services. This requires adequate information flows between the disciplines to facilitate optimum management.

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

- Consultant Physician Genito-Urinary Medicine
- Consultant Paediatrician
- Fetal and Maternal Medicine Consultant
- Consultant Obstetrician
- Consultant Infectious Diseases
- Specialist Midwives
- Specialist Paediatric Nurse
- Antenatal Screening Co-ordinator
- 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 pregnant women and people appropriate screening tests for blood borne infections in pregnancy as per National Screening Committee Guidance.

The following care pathways are available in this document:

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

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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:

Maternal syphilis Infection

Communication:

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

Related documents:

- Booking Bloods and Urine Test UHL Obstetric Guideline
- Hepatitis B and Syphilis Screening in Pregnancy UHL Obstetric Guideline
- Hepatitis C Screening in Pregnancy UHL Obstetric Guideline
- Missed Antenatal Appointments UHL Obstetric Guideline

2. ANTENATAL SCREENING OF ALL PREGNANT WOMEN AND PEOPLE:

All pregnant women and people should be offered screening for Syphilis infection by their midwife, ideally at booking or antenatally to provide the most appropriate clinical care and minimise risk of transmission to the baby; if screening is missed antenatally, please offer intrapartum or postpartum and follow up accordingly

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

2.1 Accepted screening

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

2.2 Screening declined

If screening is declined, the person should be informed that they will be contacted by a specialist midwife at around 20 weeks to re-offer Infectious Diseases Screening. All who decline screening should have a form completed with documentation of their 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.

2.3 High-risk categories

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 and people diagnosed with a sexually transmitted infection in pregnancy.

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People at High risk:

- Have unprotected sex (without a condom) with a new partner during the pregnancy
- Have a sexual partner(s) who have tested positive for syphilis
- Direct contact with ulcers or weeping rashes of a person who is syphilis positive

3. Screening results:

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

3.1 Negative results for Syphilis

- The Community Midwife or Obstetrician who sees the pregnant woman or person at the next antenatal visit (at 14 -18 weeks gestation if possible), should check that the results of the Syphilis screening test are available, communicate the result to the pregnant woman or person and document the result in the Maternity Health Record ideally on the Maternity IT System.
- 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 pregnant woman or person is from the "high risk" (as detailed above), offer screening again at 28 weeks.

3.2 "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 pregnant women or person in this circumstance that syphilis infection is extremely unlikely but further testing should be performed as a precaution.

3.3 Positive results for Syphilis

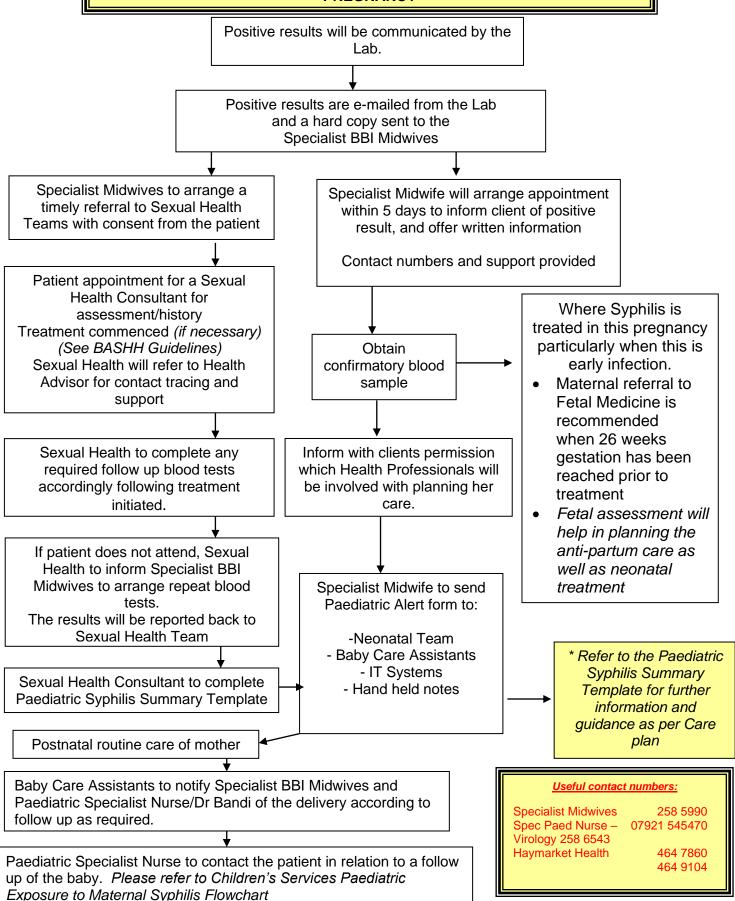
- Positive results are e-mailed directly to the Midwife Specialist for Blood Borne Infections from the screening laboratory.
- The Midwife Specialist for Blood Borne Infections will contact the pregnant woman or person and arrange an appointment to give them the result within 5 working days.
- The Specialist Midwife will ensure that household contacts and partners are referred to their GP for testing as required.
- For further advice on the management of positive results for Syphilis refer to the relevant pathways and care plans below.

- Women and people with a positive result who do not have an on-going pregnancy should still be seen by the specialist midwife and their results given and appropriate follow up arranged.
- If a pregnant woman or person presents late/unbooked in labour, please assess riskfactors and document a plan of care. All blood tests to be offered and results should be documented with 24 hours of the sample being taken or clear plan made to follow up the results (see Appendix1)

For further advice on the management of positive results for Syphilis infection in pregnancy refer to the following flowcharts below.

Women's, Perinatal & Sexual Health Services Blood Borne Infection Flow Chart

PREGNANT WOMEN AND PEOPLE WITH POSITIVE SYPHILIS SEROLOGY IN PREGNANCY



Title: Syphilis in pregnancy

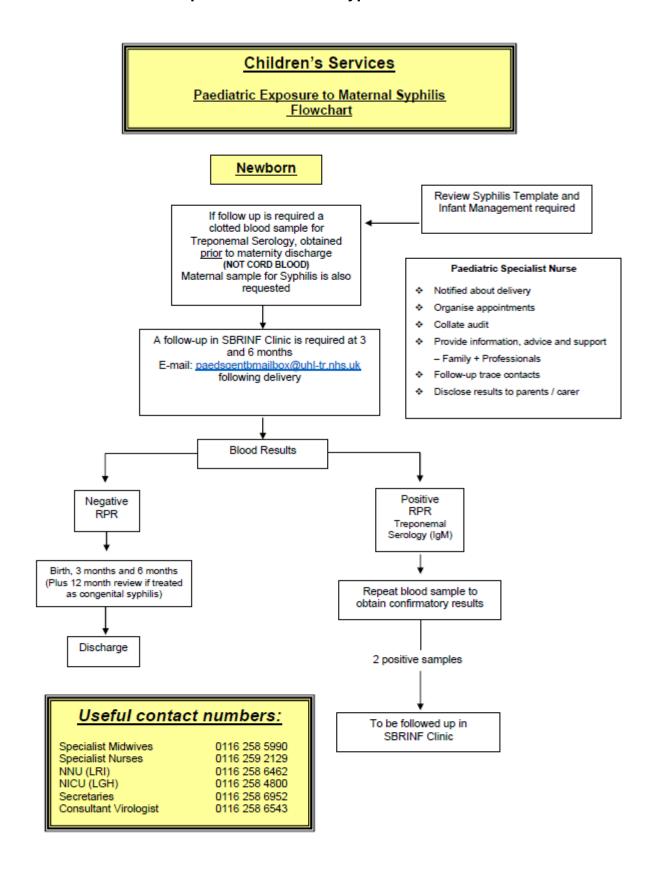
V: 1 Approved by: UHL Women's Quality & Safety Board: January 2023

Trust Ref No: C6/2024

NB: Paper copies of this document may not be most recent version. The definitive version is held on InSite in the Policies and Guidelines

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Flowchart 2: Paediatric exposure to maternal syphilis



4. Education and Training

Antenatal Screening Session on Mandatory Training Day

5. Monitoring Compliance

| What will be measured to monitor compliance | How will compliance be monitored | Monitoring Lead | Frequen cy | Reporting arrangements |
|---|---|--|-------------|------------------------------------|
| All women offered screening for Syphilis and documented in the health record | Antenatal screening KPI's | AN screening co-ordinator & specialist midwives | Quarterly | NSC |
| All women that consent to Syphilis screening receive a conclusive result or are informed if the sample is not processed and repeat screening is offered even if they miscarry | Antenatal screening KPI's | AN screening co-ordinator and specialist midwives | Quarterly | NSC |
| All high risk results telephoned to the Specialist Midwife | Monthly failsafe checking between the Lab, antenatal screening and specialist midwifery | AN screening co-ordinator and specialist midwives | Monthly | Internal database maintained |
| All women who screen positive for Syphilis seen by the Specialist Midwife, results reviewed and the woman informed of the positive result within 5 working days of the result being available | Annual IDPS data return to PHE | AN screening co-ordinator and specialist midwives | Annually | NSC |
| All positive results are clearly documented in the woman's records | Screening audits for QA review | AN screening co-ordinator and specialist midwives | Triennially | PHE QA team |
| All notes of woman with a positive result has an alert sticker on the front cover of the hospital notes | Screening audits for QA review | AN screening co-ordinator and specialist midwives | Triennially | PHE QA team |
| All women with a positive result have a Syphilis Care Plan completed and this is filed in the health record | Screening audits for QA review | AN screening co-ordinator and specialist midwives | Triennially | PHE QA team |

6. Supporting References

World Health Organization: 31 May 2023. Syphilis

British Association of Sexual Health and HIV (BASHH) UK national guidelines on the management of syphilis 2015

https://www.bashhguidelines.org/media/1148/uk-syphilis-guidelines-2015.pdf

Managing Syphilis Infection in Pregnancy. NHS England (Published 3 April 2023)

https://www.gov.uk/government/publications/syphilis-managing-infection-inpregnancy/managing-syphilis-infection-in-pregnancy#laboratory-informs-the-antenatalscreening-team-of-a-confirmed-screen-positive-syphilis-result

ISOSS Syphilis Report 2022. (Updated 16 November 2022)

ISOSS syphilis report 2022 - GOV.UK (www.gov.uk)

NHS Infectious Diseases in Pregnancy Screening Programme Handbook 2016-2017

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Next Review: July 2025

Title: Syphilis in pregnancy

V: 1 Approved by: UHL Women's Quality & Safety Board: January 2023

Trust Ref No: C6/2024

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NHS Infectious Diseases in Pregnancy Screening Programme Handbook 2016 2017 (publishing.service.gov.uk)

7. Key Words

Congenital syphilis, Sexually transmitted infection

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

| CONTACT AND REVIEW DETAILS | | | | | | | |
|---|--|---|------------------------|---|--|--|--|
| Guideline Lead (Name and Title) Dr S Ndoro, Consultant Physician Genito-Urinary Medicine | | | | Executive Lead | | | |
| Dr S Naoro, C | onsultant Physiciar | Genito-Urinary Medicine | Chie | f Nurse | | | |
| Details of Ch | anges made durin | g review: | | | | | |
| Date | Issue Number | Reviewed By | | Description Of Changes (If Any) | | | |
| September 2023 | Initial document when combined with C63/2011 written and reviewed by | Dr S Ndoro, Consultant Physician Genito-Urinary Medicine Dr Bandi, Consultant Paediatrician Dr M Khare - Fetal and Maternal Medicine Consultant Obstetrician L Boon - Specialist Midwif M Jethwa – Specialist Midwif H Cadman-Specialist Paediatric Nurse H Ulyett, Antenatal Screer Co-ordinator R Meakin, Pharmacist Dr S Ndoro, Consultant Physician Genito-Urinary Medicine Dr Bandi, Consultant Paediatrician Dr M Finney, Consultant Obstetrician L Boon - Specialist Midwif M Jethwa – Specialist Midwif M Jethwa – Specialist Midwif H Cadman-Specialist Paediatric Nurse | e lwife ning | New stand-alone guideline Introduction, scope & background added. Positive results distributed from Consultant Virologist added as first step in positive serology management, then all referred to specialist RM Referral for positive results time frame of 5 days added Specified that where Syphilis is treated in this pregnancy particularly when this is early infection. Maternal referral to Fetal Medicine is recommended when 26 weeks gestation has been reached prior to treatment Actions for non attenders added Baby Care Assistants to notify Specialist BBI Midwives and Paediatric Specialist Nurse/Dr Bandi of the delivery according to follow up as required Updated contact email addresses and telephone numbers. | | | |

Appendix 1: Positive syphilis serology in pregnancy care plan

Patient Addressograph

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

Leicester Royal Infirmary

| | ☐ Leicester General Hospital | |
|---|--|--|
| | EDD 00/00/00 | |
| | Gravida Parity | |
| | Blood Group | |
| | Previous Blood Transfusion ☐ Yes ☐ No | |
| | Co-infection: Hep C/Hep B/HIV (please circle) | |
| Interpreter Required Y□N□ | | |
| | Language Spoken | |
| | SPECIALIST CARE TEAM | |
| Specialists | Name Contact Number | |
| Community Midwife | | |
| Specialist Midwives | | |
| General Practitioner | | |
| Obstetrician | | |
| Consultant Paediatrician | | |
| Paediatric Specialist Nurse | | |
| Sexual Health Physician | | |
| Pharmacist | | |
| Driginal Test Date □□/□□/□ | □ (see filed report in maternity notes) | |
| Date result received \(\square\) |]_ | |
| Date of result given | ☐ Gestation ☐ ☐ Weeks | |
| Confirmatory Test Date □□/□□/□ | | |
| Patient seen within 5 days | Yes | |
| ware of diagnosis prior to pregnanc | y Diagnosis given during this pregnancy | |
| Previous treatment for Syphilis | ☐ Yes * | |
| My partner is aware of my positive erology | □ □ Not aware * | |
| | Jethws - BBI/Care Plans & Flowchschi 2023 Updated Careplans & Flowchschi Gyphillel Gyphillel Perinstal Blood Bourne Infection Care Plan Syphills | |

Perinatal Blood Borne Infection Care Plan

Women with Positive Syphilis Serology in Pregnancy Care Plan

Antepartum Care Plan

| *Topics Discussed / Actions | | | Sign & Date |
|---|-------------------------------------|-----------------------|-------------|
| ☐ What is Syphilis? (primary, seconda | rv. early latent. late latent) | | |
| ☐ Confirmatory testing, further blood in | | | |
| ☐ Identification of contacts and testing | - | as required* | |
| ☐ Identify risk factors | roquirourior to condui riodiar a | io roquirou | |
| ☐ Methods of transmission | | | |
| ☐ Prevention Education (safe sex/con | tracention) | | |
| Avoid sexual contact during and foll | | alth quidance | |
| Antenatal / Intrapartum / Postnatal a | | aitir guittarice | |
| □ Neonatal Plan made (refer to Syphil | | | |
| ☐ Written information offered and prov | | | |
| *Comments: | - rounce giren on. | | |
| | | | |
| *Antenatal Checklist | | | Sign & Date |
| Referral made to Sexual Health | | ☐ Yes ☐ No | |
| Appointment time and date: | | | |
| Partner testing advised and referral ma | de to Sexual Health | ☐ Yes ☐ No | |
| Other "at risk" children identified, and re | eferral made to Paed Spec Nurse | ☐ Yes ☐ No | |
| Paediatric alert and Syphilis summary t | template sent & on IT system | ☐ Yes | |
| BBI appointment made to discuss plan | of care accordingly at 22-25wks | ☐ Yes ☐ No | |
| GP Informed by letter with consent | | ☐ Yes ☐ No | |
| Referral made to Fetal Medicine | | ☐ Yes ☐ No | |
| (If a referral or transfer has been made | to Fetal Medicine, please alert th | e BBI Team) | |
| In certain circumstances i.e. unusual se | erology/or if amniocentesis is requ | uired seek specialist | advice |
| *Individualised Plan | | | |
| Ilidividualised Fiali | | | |
| | | | |
| | | | |

Appendix 2: Neonatal care plan

Perinatal Blood Borne Infection Care Plan

Women with Positive Syphilis Serology in Pregnancy Care Plan

Neonatal Care Plan

Paediatric Responsibility Following 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 in parallel with Neonatal Sample
- Follow-up: Send a referral to Dr Bandi (SBRINF clinic) 3 month follow up is required

Significant risk of Congenital Syphilis

- At birth: Assess infant for signs of Congenital Syphilis (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.
- Maternal sample required for Syphilis Serology in parallel with Neonatal Sample
- . Send a referral letter to Dr Bandi (SBRINF) 1 month follow up is required

Newborn Checklist

- Inform Specialist Midwife of Baby's birth (Ext: 15990)
- Inform Paediatric Specialist Nurse of Baby's birth by E-mail
- · Before discharge ensure blood tests that are required have been sent
- . Discharge summary letter to Consultant Paediatrician (Dr Bandi)

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Appendix 3: Birth plan template

| SYPHILIS PREGNANCY BIRTH PLAN TEMPLATE | | | | |
|--|--|--|--|--|
| For LLR Secretaries Please email completed t | template to Maxine.Jethwa@nhs.net and L.boon@nhs.net | | | |
| PATIENT DETAILS | | | | |
| Mother's name | Mother's hospital number | | | |
| Mother's address | Mother's DOB | | | |
| | Estimated date of delivery | | | |
| Mother's phone numbers: | | | | |
| | • | | | |

| CURRENT SYPHILIS | |
|-------------------------|--|
| SEROLOGY | |
| | |
| | |
| | |
| PREVIOUS SYPHILIS | |
| SEROLOGY AND | |
| TREATMENT | |
| | |
| | |

SYPHILIS –INFANT MANAGEMENT (delete as appropriate)

Mother adequately treated prior to 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 as per current BASSH Guidelines

If no concerns

- 1. Perform routine syphilis screening on infant (not cord) serum sample, request 'Syphilis screen + RPR+ Treponemal IgM'
- 2. Maternal sample required for syphilis serology
- 3. Follow up: Send referral to Dr Bandi (SBRINF) for 3 month follow up

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Significant risk of Congenital Syphilis

- At birth: assess infant for signs of congenital syphilis as per current BASSH Guidelines.
 - 1. Perform routine syphilis screening on infant (not cord) serum sample, request 'Syphilis screen + RPR+ Treponemal IgM' and FBC, U&E, LFT, ALT
 - 2. Lumbar puncture, request WBC, protein, RPR, TPPA
 - 3. Further tests (if clinically indicated) include long bone and chest x-rays, samples from lesions for (if available) dark ground microscopy and PCR for T. Pallidum
 - 4. Further assessments (if clinically indicated) include ophthalmology and audiology reviews
 - 5. Treatment for congenital syphilis Benzyl Penicillin Sodium- 60-90mg/kg daily IV (in divided doses given as below

30mg/kg 12 hourly in the first seven days of life and then 8 hourly on days 8,9 and 10 which will be a total on 10 days

6. Send a referral letter to Dr Bandi (SBRINF) for 1 month follow up

| Other | Comm | ents |
|-------|------|------|
|-------|------|------|

| Sign: | (print) |
|---------|---------|
| Date:// | |

Appendix 4: Checklist for unbooked women presenting in labour or at advanced gestation

CHECKLIST FOR UNBOOKED WOMEN presenting in labour or at advanced gestation.

ADDRESSOGRAPH

- Obtain obstetric/medical history, assess risk factors and document a plan of care.
- Appropriately qualified doctor to perform portable ultrasound scan to assess placental localisation and presentation and biometry if possible.
- · Consider use of continuous Fetal monitoring in labour.
- Postnatally–
 - commence NEWS chart for baby observations due to the high mortality rate in this group of neonates.
 - All babies born to "unbooked" women should have a paediatric check prior to discharge.
 - Consider any safeguarding concerns.
- All Blood tests to be offered and taken as follows:

| Blood test required | Sample bottle | Form | Sign & date when sample taken | Sign and date result received |
|---|---|---|---|--|
| FBC | Red EDTA 4.9ml | UHL Combined haematology/pathology | | |
| Group & Save | Red or blue EDTA 7.5ml | UHL Blood transfusion | | |
| HIV point of care test | Point of care test kit on delivery suite | Document in notes if this was offered but declined by patient | | |
| Virology –URGENT request for HIV, Hep B, Syphilis | White/black label | UHL virology | | |
| Haemoglobinopathy screening | Purple bottle | Dedicated UHL antenatal family origin questionnaire form – can be accessed on ICE | | |

PLEASE NOTE - ALL BLOOD RESULTS SHOULD BE DOCUMENTED WITHIN 24 HOURS OF THE SAMPLE BEING TAKEN or a clear plan made to follow up results.