Hepatitis B in pregnancy Full Clinical Guideline

Reference No.: UHDB/12:23/H12

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1. Abbreviations

ANNB DBS DNA EDTA EPR GP HBIG HBV IDPS ISOSS KPI MDT		Antenatal and Newborn Dry Blood Spot Detection and Quantification Ethylenediaminetetraacetic Acid Electronic Patient Record General Practitioner Hepatitis B Immunoglobulin Hepatitis B Virus Infectious Disease in Pregnancy Screening Integrated Screening Outcomes Surveillance Service Key Performance Indicator Management Directorate Team
HBV	-	
	-	•
ISOSS	-	
KPI	-	Key Performance Indicator
MDT	-	Management Directorate Team
MHHR	-	Maternity Hand Held Records
PHE	-	Public Health England
QHB	-	Queens Hospital Burton
RDH	-	Royal Derby Hospital
SIAF	-	Screening Incident Assessment Framework
SIT	-	Screening and Immunisation Team
SQAS	-	Screening Quality Assurance Service

2. Introduction

Hepatitis B virus affects the liver. It can cause acute (immediate) and chronic (long-term) ill health. Infants born to mothers who are infected with Hepatitis B (HBsAg positive) have a high risk of acquiring Hepatitis B infection. Infants who acquire Hepatitis B at birth or during the first year of life have a 9 in 10 (90%) chance of developing lifelong chronic hepatitis B infection and run the risk of serious liver damage and even liver cancer.

Neonatal immunisation with Hepatitis B vaccine is over 90% effective in reducing the risk of infection. To be fully effective, however, the infant must be immunised shortly after birth and complete a full course of necessary vaccinations. Some infants (see below) should also receive Hepatitis B Immunoglobulin in addition to the vaccine. This is determined by the testing of Hepatitis B e markers and will be detailed on the mothers' pathology report by the Virology Laboratory.

For further information on Hepatitis B: antenatal screening and selective neonatal immunisation pathway please view the national guidance:

Hepatitis B: antenatal screening and selective neonatal immunisation pathway - GOV.UK (www.gov.uk)

3. Purpose and Aim of Screening and Immunisation

The Purpose of Screening and Immunisation for Hepatitis B is:

- To identify women "at risk "of transmitting Hepatitis B to their babies
- To immunise infants "at risk" of acquiring Hepatitis B
- To prevent "at risk" infants acquiring Hepatitis B

4. Protocol Function

The function of this Protocol is to clearly define the processes involved in antenatal screening and neonatal immunisation for Hepatitis B within the acute Trust, and to identify individual responsibilities within the programme.

Suitable for printing to guide individual patient management but not for storage

5. Other At-Risk Groups

Hepatitis B vaccinations are also recommended for infants where the father is Hepatitis B positive.

6. Family Screening and Follow up

The sexual partner, other children and close household contacts should be offered screening for Hepatitis B. The sexual partner of the woman should be encouraged to access their own GP or the local sexual health department to be tested. Immunisation should be offered to contacts found to be susceptible. Women should refer to their GP for other children to be tested.

7. Families where English is a second language

Arrangements will be made for interpreters as necessary. Digital patient information leaflets can be accessed electronically or printed and are available in 19 different languages from:

Protecting your baby against hepatitis B (publishing.service.gov.uk) Hepatitis B: screening and care in pregnancy and protecting your baby by vaccination - GOV.UK (www.gov.uk)

8. Universal Antenatal Testing for Hepatitis B

At UHDB NHS Foundation Trust, all pregnant women are offered / recommended hepatitis B screening as part of routine booking blood tests (see appendix A). This screening is offered / recommended during each pregnancy.

The purpose and potential benefits of this screening will be explained to the pregnant woman by her midwife. The woman will have been given details of how to access '*Screening Tests for You and Your Baby*' information either digitally or it can be printed. It is available in 13 different languages via the link below or by using the QR code in the Patient Information section of the maternity hand-held records (MHHR)

https://www.gov.uk/government/publications/screening-tests-for-you-and-your-baby

All results for routine antenatal booking bloods are checked for availability by the midwife responsible for the woman's care 10 days after sampling. Routine 'negative' Hepatitis B results are reported to the woman at 16 weeks with a record of discussion of the results in the woman's electronic records.

The Community Midwife who is responsible for the woman's care must look up booking blood results within 10 days of sampling. On discovery of an unsuitable sample, the responsible Community Midwife must organise a repeat as soon as possible and not wait until the 16- week appointment. The national standard is that the repeat should be taken within 10 working days of the repeat requirement being notified. The ANNB Screening Team will be monitoring the completion of repeat sample.

If a woman is known to be Hepatitis B positive, antenatal screening in every pregnancy is recommended for assessment of infectivity markers and to ensure referral into the appropriate care pathways. The Community Midwife will contact the UHDB ANNB Screening Team directly on the generic screening email address for each site to inform of known positive cases via the generic emails below and document the status 'known positive' on the additional comments section or alert page on the Electronic Patient Record (EPR) and on the dedicated antenatal screening blood test request form.

Derby <u>dhft.antenatalandnewbornscreeningRDH@nhs.net</u> Burton <u>bhft.antenatalscreening@nhs.net</u>

Those providing antenatal care will be sufficiently informed about Hepatitis B to be able to discuss the test and its implications with the pregnant women.

Appropriate training for the midwives will be via the preceptorship programme, mandatory study days, e-learning and where applicable additional study days, meetings or workshops. After staff have completed their initial training, updates will be listed with other training opportunities. All relevant staff should be up-to date with appropriate training. Infectious Diseases in Pregnancy Screening (IDPS) e-learning is available via e-Learning for Health at https://portal.e-lfh.org.uk/

See the IDPS Programme Pathway in appendix A and / or via the link below to the appendices of the national documents:

<u>Guidance on the hepatitis B antenatal screening and selective neonatal immunisation pathway - GOV.UK</u> (www.gov.uk)

9. Declining Screening and re-offering of screening

 If a woman declines any of the routine infectious diseases screening in pregnancy, this should be documented in the woman's EPR and on the antenatal screening page of the Maternity Hand Held Record (MHHR).

The midwife will:

- Advise that screening for hepatitis B is recommended in every pregnancy to reduce the risk of vertical transmission to her baby and in the event of a positive result to offer Hep B vaccine +/-Hepatitis B immunoglobulin (HBIG) to babies in a timely manner to reduce chance of baby becoming Hep B positive.
- Complete the screening request form, ticking the test has been *Declined* and send form to Pathology lab.
- Advise she will be seen by a specialist midwife for further discussion either at the dating scan appointment or by 20 weeks; this is a national requirement on which we are measured. If greater than 20 weeks at the booking appointment, this discussion should take place by 24 weeks gestation.
- Advise the woman that she can opt in / request a screening test at any gestation.
- Advise she will be reoffered screening at various intervals throughout pregnancy and on admission in labour as duty of care to the woman and her baby.
- Email the screening team generic e-mail address as below as soon as possible following the decline, so the relevant discussions can take place with the woman with a member of the screening team in a timely manner. This is to ensure the decision is an informed choice for the woman by 20 weeks of pregnancy at the latest or within 2 weeks if more than 24 weeks of pregnancy, and to offer / signpost for any addition support required:

Derby - <u>dhft.antenatalandnewbornscreeningRDH@nhs.net</u> Burton - <u>bhft.antenatalscreening@nhs.net</u>

• On the EPR and in the MHHR omit ticking the consented to Hepatitis B screening box and write / tick HEPATITIS B DECLINED in the additional comments section or in AN review on EPR

10. Confirmation and Result Distribution

• All positive results are notified to the generic ANNB screening email by the Virology Reference Lab team to both sites:

Derby <u>dhft.antenatalandnewbornscreeningRDH@nhs.net</u> Burton <u>bhft.antenatalscreening@nhs.net</u>

- The Virology Reference Laboratory also informs the Public Health England Colindale Blood Borne Virus Unit, for surveillance and monitoring.
- It is the responsibility of the ANNB Screening Team to check this email account regularly and ideally every working day.
- Once a Hepatitis B positive result has been received the ANNB Screening Team enters the woman's details onto the local Hepatitis B audit Excel spreadsheet on the UHDB shared drive and the care pathway timeline begins.
- The ANNB Screening Team commences the national PHE maternal and paediatric checklist in (see appendix B).
- A weekly failsafe email of all positive IDPS results are sent by the UHDB Pathology Failsafe Officer to the generic screening team emails.
- The weekly failsafe lists are compared against all known positive results. If there are any noted discrepancies on the failsafe, immediate communication with the UHDB Pathology Failsafe Officer and Virology Reference Laboratory should take place.
- Any communication of positives result failures should have a DATIX completed.

11. Counselling, referral and follow up for Hepatitis B positive women in pregnancy

- There is an enhanced pathway to improve health outcomes for women who screen positive for Hepatitis B, this includes monitoring and advising on the administration of vaccinations and immunoglobulin (as required) and uptake of the accelerated Hepatitis B immunisation programme for neonates.
- For any positive results, the ANNB Screening Team will contact the woman as soon as possible or at the latest within 3 working days of the result being received to offer a face-to-face appointment.
- Women with a confirmed screen positive result should be encouraged to attend an appointment with the screening team less than or equal to 5 working days. This is to reduce the time that the woman enters specialist care for assessment/ treatment. There is evidence that waiting up to 10 days to give the result is having a clinical impact, especially for women who book late for antenatal care.
- The woman should be seen alone initially to ensure she is accepting for her result to be shared with the partner. If the woman consents to being seen jointly, the partner or other chosen support person can be invited to join the consultation.
- The purpose of this appointment is to ensure that:
 - Essential health education messages are explained.
 - The woman is given / signposted to the national leaflet <u>Hepatitis B: a guide to your care in pregnancy and after your baby is born GOV.UK (www.gov.uk)</u>
 - She is informed of the accelerated neonatal vaccination programme and that importance of her baby completing the full schedule is understood.
 - If not already taken place, advise partner / other close household contacts to be tested via by his/her own GP or advising that the partner accesses local Sexual Health Department.
- It is the ANNB screening team's responsibility to complete the Integrated Screening Outcomes Surveillance Service (ISOSS) reporting and data collection forms. ISOSS conducts active surveillance of pregnancies to women with HIV, syphilis and hepatitis B, their babies and other

children diagnosed with HIV, syphilis and hepatitis B, in England, as part of the NHS IDPS Programme.

Additional blood tests

At first contact with the woman the ANNB Screening Team will consent for the national enhanced pathway PHE maternal blood sample to be taken and send to Colindale in the kit boxes and packaging supplied (these kits are stored in the ANNB screening offices). Samples are also required for locally processed blood tests for baseline liver function tests (LFTs) and Hepatitis C antibodies.

Once a woman has been identified as Hepatitis B positive, the ANNB screening team ensure the following is completed:

- Create a maternal infection alert on the woman's EPR
- Send the Hepatology referral letter by email to Hepatology and the Clinical Nurse Viral Specialist Team by email to <u>dhft.Gastrosecretaries@nhs.net</u> and copy in the Hepatology Clinical Nurse Specialist (the name and email address of the current clinician will be on the letter template accessible of the UHDB shared drive and held by the ANNB screening team. Received and read email receipts requested.
- The wider MDT are also copied into the above referral letter as a national requirement:
 - > Child Health Department
 - Health Protection Specialist Nurse Team
 - Consultant Paediatrician
 - Consultant Virologist
 - Community Midwife
 - ≻ GP
 - Copy in notes.
- **Derby site only**-See appendix F for the national *'notification of maternal positive Hepatitis B antenatal result form',* which in addition to the referral letter above should be sent by the ANNB screening team to the Child Health Department and the woman's GP.
- Burton site only-See appendix I for the local `Form A. Notification of Hepatitis B Positive Antenatal Patient`.
- **Burton site only** See appendix J for the local `*Form B: Notification of Birth to a Hepatitis B Positive Patient*
- It is a national Key Performance Indicator (KPI) that all newly diagnosed Hepatitis B positive women and women already known to be Hepatitis B positive with high infectivity markers detected in the current pregnancy attend Hepatology for specialist assessment within 6 weeks of the positive result being reported to the maternity service.

High infectivity is defined as:

- HBsAg positive and HBeAg positive
- > HBsAg positive, HBeAg negative and anti-HBe negative
- > HBsAg positive where e-markers have not been determined
- having acute hepatitis B during pregnancy
- Women known to be Hepatis B positive with low infectivity markers are referred, but the 6-week KPI assessment timeframe does not apply. The 18 week-wait standard referral to assessment guide applies, but the women are usually seen much sooner.
- All women seen by the Hepatology Team receive a letter for their records, which is copied to the GP and the ANNB screening team. The woman's attendance is monitored via EPR and the Hepatology clinic outcome letter can also be viewed on EPR.

- Complete a neonatal alert
- Document in the Baby notes
- Partially complete the HB1 form 'Child at risk of hepatitis B infection from birth at RDH / QHB first vaccination given', which is site specific, see appendix G for the QHB HB1 form and appendix H for the RDH form. This is a notification to healthcare professionals to deliver the subsequent doses of Hepatitis B immunisations to the baby / child. It is filed in the baby notes sections of the woman's hospital obstetric notes.
- Between 20 and 24 weeks gestation, on guidance from the Hepatology team, repeat blood samples are required from the woman for:
 - Liver Function Tests
 - Hepatitis B viral load DNA
- The results of the above blood tests are reviewed in Hepatology and women who continue to have high infectivity markers and/or an HBV DNA greater than 200,000 IU/ml or HBsAg levels >4log₁₀ IU/ml may be started on Tenofovir Disoproxil ideally between 24-28 weeks' gestation to reduce the risk of transmission of HBV to the baby.
 - The Tenofovir Disoproxil is stopped 4 to 12 weeks after the birth unless the mother meets criteria for long-term treatment.
 - HBV DNA level will be monitored 2 months after starting Tenofovir Disoproxil and ALT monthly after the birth to detect postnatal HBV flares.
- As per the checklist (appendix B) all women are seen by the ANNB screening team in the 3rd trimester, ideally at 34 weeks, to revisit health education messages and the baby hepatitis B immunisation schedule. In the case of high infectivity women, a discussion will also take place regarding immunoglobulin administration. Higher infectivity women will have a 3rd trimester appointment with the Obstetric team, and the screening team will be responsible for triaging and arranging the appointments.
- The ANNB Screening Team will provide information leaflet Protecting your baby against hepatitis B available in15 different languages from: https://www.gov.uk/government/publications/protecting-your-baby-against-hepatitis-b-leaflet
- The ANNB Screening Team will document the outcome of this appointment including the pathway the woman will follow in the woman's electronic record.

If the woman declines to follow the enhanced pathway it should be recorded in her notes and on the completed request forms and returned to PHE Colindale

There are two pathways a woman will follow woman; a lower infectivity pathway (see appendix D) OR higher infectivity pathway (see Appendix E):

HIGHER INFECTIVITY PATHWAY

https://khub.net/documents/135939561/406080379/Hep+B+antenatal+screening+-+All+pregnant+women+offered+and+recommended+screening+for+hepatitis+B+in+every+pregnancy+ regardless+of+previous+results+2.jpg/4a10d3c8-19f3-5ae6-13bc-94bfeb698afc?t=1612437484753

LOWER INFECTIVITY PATHWAY

https://khub.net/documents/135939561/406080379/Hep+B+antenatal+screening+-+All+pregnant+women+offered+and+recommended+screening+for+hepatitis+B+in+every+pregnancy+ regardless+of+previous+results.jpg/2ae9c65d-2c18-447d-4bb0-4d9092291f26?t=1612437357999

https://www.gov.uk/government/publications/protecting-your-baby-against-hepatitis-b-leaflet

12. Ordering Vaccine and Immunoglobulin

Hepatitis B vaccine is stored in the NEONATAL ward fridge as a stock item at QHB BURTON and in labour ward fridge at RDH.

Hepatitis B immunoglobulin (HBIG) if required will be ordered by the ANNB Screening Team from Public Health England using a request form available. See appendix C for HBIG order form, this will be sent to phe.hepatitisbbabies@nhs.net and will be available from QHB and RDH as a 'named patient' pack, this named patient pack should not be used for any other baby.

In the event of needing HBIG in an emergency, contact maternity Pharmacist to check if any in stock and if not, PHE Colindale can be contacted 24 hours a day on **020 832 76439**. PHE will dispatch the HBIG immediately to the hospital. All HBIG is tracked and audited by PHE, and administration of a named dose to another baby will require explanation and DATIX.

https://www.gov.uk/government/publications/hepatitis-b-requesting-issue-of-immunoglobulin-for-infants & phe.hepatitisbbabies@nhs.net

Pharmacy also holds an 'emergency stock' of 500iu of immunoglobulin. If this is required, then discussion with pharmacy should take place to ensure the correct dose of 200iu is given.

Hepatitis B Vaccination of pre-term babies:

It is important that premature infants receive the full paediatric dose of hepatitis B vaccine on schedule. Babies born to mothers infected with hepatitis B, with a birthweight of 1500g or less, should receive HBIG in addition to the vaccine, regardless of the e-antigen status or viral load of the mother. As the benefit of vaccination is high in this group of infants, vaccination should not be withheld or delayed.

13. <u>Responsibility of the ANNB Screening Team</u>

Hepatitis B vaccine is stored as a stock item in the Neonatal Unit fridge at QHB Burton and in the Labour Ward fridge at RDH.

The HBIG, if required, will be ordered by the ANNB Screening Team from Public Heath England by sending the Hepatitis B Immunoglobulin request form (link below) to:

phe.hepatitisbbabies@nhs.net

https://www.gov.uk/government/publications/hepatitis-b-requesting-issue-of-immunoglobulin-for-infants & phe.hepatitisbbabies@nhs.net

If HBIG is ordered, a "delivery suite box" will arrive 6 weeks prior to the EDD and will need to be matched with the HBIG, which is delivered to Pharmacy, it contains a dry blood spot (DBS) sample cared and maternal surveillance EDTA blood test kit. See high infectivity pathway appendix D.

14. <u>Responsibility of the paediatric team administering the Hepatitis B vaccine +/- HBIG &</u> <u>discharging MW</u>

- The HB1 'Child at risk of hepatitis B infection from birth at RDH / QHB first vaccination given' form will be fully completed after the baby is born by the paediatric team who administers the Hepatitis B vaccine (+/- HBIG) once he/she has received the first dose. The HB1 form is site specific, see appendix G for the QHB HB1 form and appendix H for the RDH form.
- The health professional who discharges the woman and baby is responsible for sending the HB1 form to the appropriate health professionals listed at the bottom of the form.

15. <u>Responsibility of the Virology Reference Laboratory team</u>

To inform the ANNB Screening Team of all hepatitis B positive women by generic screening email:

Derby <u>dhft.antenatalandnewbornscreeningRDH@nhs.net</u> Burton <u>Burton bhft.antenatalscreening@nhs.net</u>.

All new cases will also be phoned through to the relevant ANNB screening team by the virology registrars based at Derby Pathology. The Pathology Failsafe Officer will provide a weekly failsafe list of all Hepatitis B positive women referred to the ANNB Screening Team in the preceding week.

The laboratory will notify the ANNB Screening Team of any samples which are unsuitable for testing by a weekly failsafe sent to the generic screening email.

16. <u>Responsibility of the Child Health Record Department</u>

The Child Health Record Department will send out reminders to the registered GP of each baby when the subsequent vaccinations are due at one month and 12 months of age.

17. <u>Maternal Venous Surveillance</u>

An EDTA venous sample should be taken on delivery suite from those women classified as being of higher infectivity after the woman has delivered her baby. EDTA blood tubes, request forms and prepaid return envelopes will be available in the named 'hep B delivery suite box' which, along with the HBIG, will be requested by the screening team and sent to maternity units approximately 6 weeks prior to the estimated delivery date. This named 'box' will be stored in the neonatal unit fridge alongside Hepatitis vaccinations.

18. Newborn Dried Blood Spot (DBS) Sample

A dried blood spot sample (DBS) test should be taken on delivery suite from babies born to mothers classified as being at higher infectivity **before administration of the vaccine and HBIG**. The DBS cards, instructions on collection and pre-paid return envelopes will be provided in the hep B delivery suite box, which along with the HBIG, will be delivered to maternity units approximately 6 weeks prior to the estimated delivery date. This surveillance blood sample is different to the newborn blood spot screening (NBSS) sample taken on day 5 after the baby's birth. The mother should be informed that the baby will still need to have the newborn blood spot screen sample on day 5. This DBS is not subject to the standards or requirements of the newborn blood spot screening programme.

If the woman declines to have maternal serology and or neonatal DBS taken it should be recorded in her notes and the ANNB Screening Team informed, the ANNB Screening Team will then complete the documents and returned to PHE Colindale.

West Midlands Health Protection Team or East Midlands Health Protection Specialist Nurse Team will seek confirmation from the GP practice that the second and final (1 month & 12 Month) doses have been given. The Health Protection Nurse will inform the Child Health Information Services of the dates when the immunisations have been given.

19. Immunisation of the Newborn - see opac-retrieve-file.pl (koha-ptfs.co.uk)

20. Mothers who present Late in Pregnancy or in Labour

Where screening has not been performed in early pregnancy, it should be offered to all women later in pregnancy or even at the time of delivery.

Midwives taking urgent samples taken on labour ward at RDH site should follow the process below:

- ✓ <u>Tick</u> LABOUR box next to **PRIORITY Infectious Diseases** on request form
- ✓ Send as URGENT using RED plastic sample bag

 <u>Phone</u> BMS in Biochemistry, inform of expected Infectious Disease Pregnancy Screening (IDPS) samples as urgent processing required

In hours = Mon-Fri 09:00-21:00 ext. 88522 / 88521

Out of hours = Mon-Fri 21:00-09:00, plus 24hrs Sat / Sun / Bank Hol ext. 88522 / 88521 if no answer <u>BLEEP</u> 3110 for on-call Biomedical Scientist

- ✓ 2-hour turnaround time for HIV & Hep B results; 24-hours for syphilis result
- ✓ <u>Handover</u> any outstanding results with all SBAR handovers

After baby born:

- ✓ IDPS outstanding results, inform Paediatrician to assess maternal risk factors +/- baby prophylactic Hep B vaccination
- ✓ Women <u>NOT</u> to be discharged from RDH until results are available

Midwives taking urgent samples taken on labour ward at QHB site should follow the process below:

- ✓ Unbooked lady in Labour identified-document on FOQ "In labour unbooked"
- ✓ **URGENT** IDPS sample taken
- Contact on call Microbiology BMS at Burton inform of expected Infectious Disease Pregnancy Screening (IDPS) samples as urgent processing required

In hours = Monday-Saturday 09:00-17:00 ext 4045/ 4023

Out of hours = contact the On-call BMS in Microbiology via switchboard.

- Microbiology BMS to book sample into Meditech and site batch transfer, contact Chemistry staff at RDH to inform them of sample being sent
- ✓ Microbiology BMS to arrange for taxi/ blood bike
- ✓ Chemistry BMS to run sample
- ✓ Negatives auto-authorise
- ✓ Positive results are communicated to Consultant Microbiologist and screening team

After baby born:

✓ IDPS outstanding results, inform Paediatrician to assess maternal risk factors +/- baby prophylactic Hep B vaccination.

21. During labour, postnatal and neonatal period

It is recommended to avoid both fetal blood sampling and the use of fetal scalp electrodes.

Hepatitis B information packs are available on the neonatal ward.

Breast Feeding

There is no contra-indication to breast feeding when a baby born to a Hepatitis B positive mother has been immunised at birth and proceeds with a complete course of immunisation.

Birth of a Premature Baby

The usual recommendation for the newborn baby applies to all neonates regardless of gestational age or birth weight. If the baby is under 1500gms then immunoglobulin may be considered. Babies at High Risk of Hepatitis B - Full Clinical Neonatal Guideline – Joint Derby & Burton Reference no.: NIC IN 15/Nov 20/v003.1. This includes giving further doses if the baby remains in hospital for a month or more.

Home Delivery of a Hepatitis B Positive Mother:

Vaccines are kept as stock in the neonatal unit fridge at Burton and in pharmacy at Derby. The HBIG will be ordered by the ANNB Screening Team in the antenatal period and will be available in the named 'box' in the delivery suite fridge that stores the hepatitis vaccine. If necessary, contact the On-Call Pharmacist if outside normal working hours. The delivering midwife should refer the infant as soon as possible after birth to the paediatric team for administration of Hepatitis vaccination +/- immunoglobulin. The recommended vaccine and immunoglobulin should be administered within 24 hours of birth. The Paediatrician will ensure that the Hepatitis B pack is completed and the information sent to the relevant personnel.

Miscarriage or Termination of pregnancy

Women who miscarry or have a termination of pregnancy and have a positive Hepatitis B screening result will be informed by the ANNB Screening Team and advised to contact their GP for follow on care. The ANNB Screening Team will contact the GP to ensure the GP is aware of the result and can refer to Hepatology and provide appropriate follow up care.

Women who miscarry or have a termination of pregnancy and have negative screening results for screened infectious diseases (Hepatitis B, Syphilis and HIV) will receive a letter of their booking results. Please see Antenatal screening results letter for no longer pregnant women on KOHA or in appendix of the Antenatal Screening Tests guideline.

22. Home Delivery of an Un-booked Pregnancy

The midwife attending the delivery will collect a blood sample for serology and mark it as "urgent" and send it to the virology laboratory as soon as possible, but at the latest the next working day. In the case of a positive result, the midwife shall refer the baby to the Neonatal Registrar at the hospital as soon as possible.

23. Movements of Patients in and out of the Area

Hepatitis B positive women who transfer maternity care to UHDB will have their routine booking blood tests performed. Cases found to be Hepatitis B positive will be referred to the ANNB Screening Team by generic e-mail email asper section 10 above.

Those moving out of the area and UHDB care will carry with them their maternity patient held records, which will hold the result of the Hepatitis B screening test recorded in them, unless the woman has declined for it to be documented in her MHHR. In which case, if the screening team are aware of the new providers or as requested by a new provider, electronic result copies can be sent by secure NHS mail.

24. Consultation

This Protocol was written following consultation with personnel from these departments: Antenatal Services manager, Paediatrics, Hepatology, Obstetrics, Pathology, Pharmacy, and Health Protection Agency.

25. Dissemination/Circulation

This Protocol will be disseminated by the Maternity Clinical Governance Committee.

26. Monitoring of Effectiveness and Compliance

Compliance with this Protocol will be monitored, reviewed, and action plans made.

27. Suspected Screening Incidents

Screening Incidents will be reported by the Trusts reporting process DATIX. Suspected patient safety or serious incidents within the screening programme will be notified by the Screening midwives to the Screening Quality Assurance Service (SQAS) and the screening and immunisation team (SIT) at NHSE&I via the Screening Incident Assessment Form (SIAF). The ANNB screening team will then act as guided by the NHSE&I and SQAS teams. Managing Safety incidents in NHS Screening Programmes Guidance and the Screening Incident Assessment form (SIAF) can be obtained at: managing safety incidents in NHS screening programmes - Search - GOV.UK (www.gov.uk)

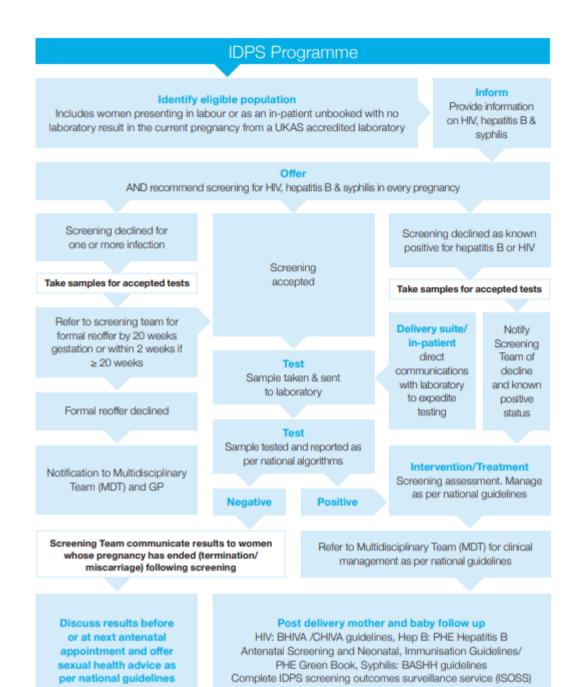
28. <u>References</u>

Infectious diseases in pregnancy screening: programme handbook July 2021. Available at <u>Infectious diseases in pregnancy screening (IDPS): programme overview - GOV.UK (www.gov.uk)</u> <u>NHS population screening: reporting data definitions - GOV.UK (www.gov.uk)</u>

Immunisation against infectious disease The Green Book has the latest information on vaccines and vaccination procedures, for vaccine preventable infectious diseases in the UK. From: <u>UK Health Security Agency</u> Published 11 September 2013 Last updated 27 November 2020 via link below

Immunisation against infectious disease - GOV.UK (www.gov.uk)

Babies of hepatitis B infected mothers (issued August 2008) - GOV.UK (www.gov.uk)



Refernce documents/links

- 1. NHS Service specifications No 1 and 15
- IDPS Programme Standard
- IDPS Screening Handbool
- Notification letter templa
- IDPS Laboratory Handbook
- 6. IDPS Audit and Checks document
- 7. PHE Green Book

- 8. PHE Guidance on the hepatitis B antenatal screening & selective neonatal immunisation pathway
- 9. Clinical Guidelines (BASL/BVHG)
- 10. PHE Healthy Child Programme 0-19: Health Visitor service specifications

All pregnant women offered and recommended screening for hepatitis B in every pregnancy regardless of previous results (Ref 1)

Pregnant woman with a positive screening result or known positive hepatitis B status Screening team contacts woman and offers faceto-face appointment to discuss result ≤ 10 days of result/notification (Ref 1/2/3)

Screening team assessment appointment (≤ 10 days of result/notification [Ref 1/2/3/5/8])

Infomation

Use PHE 'hepatitis B. A guide to your care' leaflet to explain main points to the woman, including:

- aetiology of hepatitis B and multidisciplinary team care in pregnancy and beyond
- importance of completing neonatal vaccination schedule
- PHE hepatitis B surveillance processes the requirement to inform all health professionals of her plan of care and to notify their positive status to GP/ CHIS/Health Visitor/Health Protection Team

Actions

Screening teams action

(Ref4)

- take additional serology tests as per local clinical protocols- viral loads, LFTs etc. and send to laboratory
- take PHE maternal venous sample and send to PHE Virus Reference Department, Colindale in pre-paid packaging (result will be sent back to you to report to specialist team) Check and record all other antenatal results
- commence PHE Hepatitis B in Pregnancy Checklist

Infectivity status established

Lower infectivity pregnancy

create neonatal alert for delivery suite

Health Visitor and CHIS of antenatal

neonatal vaccination (Ref 7,8)

notify Health Protection Team, GP,

positive status and plans for care

Higher infectivity pregnancy and all newly diagnosed women pregnancy and all newly diagnosed women

See higher infectivity pathway

Pathway continued overleaf

Arrange appointment with

national guidelines (Ref 8/9)

< 24 weeks gestation, within</p>

≥ 24 weeks gestation, within

6 weeks of receipt of referral

18 weeks of receipt of referral

specialist team to plan care as per

And the second s

See higher infectivity pathway a 34 weeks gestation, within 6 weeks of receipt of referral Health Verton and OHS of environme positive status and plans for cars (FigH)

Specialist service

3rd trimester review with screening team to prepare for birth (Ref 8)

Using PHE 'Protecting your baby against hepatitis B' leaflet discuss:

- importance of prompt registration with a GP and prompt registration of the baby's birth
- importance of completing vaccination schedule
- PHE hepatitis B surveillance processes postdelivery

Lower infectivity pregnancy

Woman seen in specialist service to plan care as per national clinical guidelines (Ref 8/9)

Delivery suite/Postnatal

Babies with a birthweight of 1500g or less need HBIG plus vaccine regardless of the maternal infectivity status (Ref 7)

Delivery suite team

inform screening team of admission

- administration of hep B vaccine ≤ 24 hrs of birth
- completion of hep B page in Red Book
- notify birth, return notes and checklist to screening team

Selective at risk neonatal immunisation schedule (Ref 1/7)

Screening team ensure GP, CHIS and Health Visitor informed of:

- vaccine administration at birth
- need for 2nd vaccine at 4 weeks and completion of selective at risk neonatal immunisation schedule (Ref 1/4/7/8)

Screening team complete PHE Hepatitis B in Pregnancy Checklist and PHE IDPS Integrated screening outcomes surveillance service (ISOSS) hepatitis B database

Appendix B

Enç	HEPATITIS B (HEP B) blic Health SCREENING AND gland IMMUNISATION MATERNAL AND DIATRIC CHECKLIST	NHS n Surnar	ımber: umber: ne	mplete or attac	· · · · · · · · · · · · · · · · · · ·	
Date	of booking/			Serology resu	ılts	
Date	of hep B screen//	Vi	Test ral load	Date of test		esult
	of screening result//					
	of notification//		_			
	vn positives/decline)		Ts			
	of screening// assessment		ther test sults			
	of specialist// intment	Lowe	er infectivity	High	er infectivi	ty
vity	Screening team appointmen (≤ 10 working days of laborato result/notification)		Status/	comments	Date	Signature and name in capitals
All women: or lower infectivity	Discuss care using 'Hep B: a guide to care in pregnancy and after your baby					
All women: higher or lower infi	Additional bloods taken as per local guidelines. Maternal venous sample sent to PHE Colindale. Check and record all other antenatal re	esults.				
	Inform GP, H/V, HPT, CHIS and CMW	<i>'</i> .				
Withi	n 6 weeks of result/notification					T
All women with hepatitis B	Specialist MDT appointment. High infectivity and all newly diagno women: within 6 weeks or by 24 week gestation.	Ś				
All w	Low infectivity known status: 18-we target or within 6 weeks if ≥ 24 weeks	ek OPD				
	Create neonatal alert					

		1	r	
	Submit a HBIG request as per trust practice.			
Higher infectivity women only	 7 weeks before EDD PHE coordinator will send: HBIG to your pharmacy delivery suite box to screening team to match up with HBIG and place in box box which should be stored according to trust practice and the location clearly noted on the maternal record. Notify the PHE co-ordinator if the woman's provide to the provide terms of the provided on the maternal record.			
34-\	care is transferred. week pre-birth consultation/screening team review	Status/comments	Date	Signature and name in capitals
All women	Preparation for birth Discuss care and adherence to schedule using PHE 'Protecting your baby from hep B' leaflet. Check neonatal alert is in place.			in oupitais
Higher infectivity	Confirm where PHE hep B delivery suite box containing HBIG is stored and that the location is recorded in notes/birth plan/maternity information system.			
Deliv	ery suite team		•	
	 On admission: inform screening team of admission locate PHE hep B delivery suite box 			
ctivity I baby	Using the hep B delivery suite box - take maternal serology sample after delivery and complete form (pack 1)	Date/time of blood test		
Higher infectiv mother and ba	 take neonatal 'hep B dried blood spot' prior to vaccination (pack 2) give HBIG + hep B vaccination (pack 3) complete PCHR red book hep B page and give to mother 	Card number/time of blood test. Date/time given/batch number.		
	- complete paperwork and store with samples in hep B delivery suite box and return to screening team as soon as possible (if weekend/BH: recommend store in fridge at 4°C or room temperature if not available)			
Lower infectivit	- vaccination administered ≤24 hours of birth - complete PCHR red book hep B page and given to mother	Prescription in notes/batch number.		
Post-	natal	I	l	

Pre-discharge checks	 PCHR book has completed hep B page mother has a copy of the vaccination leaflet mother informed of the importance of early registration of the birth with a GP ensure notes go back to screening team 		
Screening team	 check request form for maternal sample and PHE notification forms are completed DBS and bloods and forms despatched to PHE Virus Reference Department, Colindale in pre-paid packaging inform CHIS, H/V GP, and CMW of vaccination using PHE letter templates complete ISOSS database 		

Appendix C

Public Health England
Please write clearly in dark ink

epatitis B Immunoglobulin request form

Т

Hepatitis B Immunoglobulin request form

For infants at high risk of perinatal hepatitis B infection

ark ink IMPORTANT: Please complete all fields below to avoid delays in processing.

ANTENATAL PATIENT DETAILS

Mother's surname:	Home address:
First name:	
Date of birth:	
	GP name and address:
NHS Number:	
Booking blood sample number:	
Requesting hospital:	
Ethnic Group	Has the mother been referred to specialist care for her hepatitis B?
U White Indian Chinese Other Asian	
Black African Black British or Caribbean Mixed Other	Yes No Unknown If yes: Specialist name
	Hospital
Country of birth	Title/position Contact number
INDICATION FOR HBIG: WOMEN WITH HIGHE	
Acute hepatitis B in pregnancy Yes No	Immunoglobulin is indicated for INFANTS of women with higher
HBsAG Positive Negative Unknown	infectivity risk, i.e: Pregnant women with acute hepatitis B OR:
HBeAG Dositive Negative Unknown	Pregnant women who are HBsAg positive AND: • HBeAg positive OR
Anti-HBe	Anti-HBe negative OR E-markers unknown OR
	 HBV DNA ≥ 1 x 10⁶ IU/ml, OR Birth weight of their newborn is ≤1500g
CURRENT STATUS OF PREGNANCY	
Expected Delivered Est. delivery date	Multiple birth (please complete a separate form for each sibling)
HBIG ISSUE For routine issues, this HBIG request will prompt the dispatch of the HepB baby to your pharmacy 6-8 weeks prior to the EDD (during normal office ho Screening Team on receipt of the vial in order to link the vial and the box.	delivery suite box to the antenatal screening team and a vial of HBIG for the named ours). The HBIG vial will have instructions for the pharmacist to contact the Antenatal
Please provide name of the ASC or equivalent person responsible for storir	
wave provide name of the Acro of equivalent person responsible for storing	ng HBIG (if not at pharmacy)
Antenatal Screening Coordinator:	ng HBIG (if not at pharmacy) Coordinator address for HepB delivery suite box:
Antenatal Screening Coordinator:	
Antenatal Screening Coordinator: Telephone number:	Coordinator address for HepB delivery suite box: Signature of GMC registered
Antenatal Screening Coordinator: Telephone number: Email address:	Coordinator address for HepB delivery suite box: Signature of GMC registered medical practitioner (required by HMRA)
Antenatal Screening Coordinator: Telephone number: Email address: Form completed by	Coordinator address for HepB delivery suite box: Signature of GMC registered medical practitioner (required by HMRA) Name of GMC doctor
Antenatal Screening Coordinator: Telephone number: Email address: Form completed by Contact number	Coordinator address for HepB delivery suite box: Signature of GMC registered medical practitioner (required by HMRA) Name of GMC doctor GMC no. Date
Antenatal Screening Coordinator: Telephone number: Email address: Form completed by Contact number Date	Coordinator address for HepB delivery suite box: Signature of GMC registered medical practitioner (required by HMRA) Name of GMC doctor GMC no. Date et from @nhs.net email address only phe.hepatitisbbabies@nhs.net.

If baby has already delivered, Public Health England please also complete this birth notification form

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Antiviral treatment in pregnancy	r	□ Yes (if	yes, please fill in details below)	🗆 No		
Drug name	Dose		Start date		End date	
DELIVERY						
Infant surname			Date of birth			
		_	Time of birth			
First name		_				
NHS Number:		_	Type of delivery			
Hospital number:		_	Birth weight			
Sex 🗆 Male	Female	_	Gestation			
If multiple birth please specify	number of babies (plea	se complete a	separate form for each sibling	1)		
If multiple birth please specify VACCINE AND HBIG ADMINIS NOTE	STRATION	injection and	· •		ediately after birth.	
VACCINE AND HBIG ADMINIS	STRATION	injection and	· •		ediately after birth.	
VACCINE AND HBIG ADMINIS	STRATION	injection and	· •		ediately after birth.	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of /ials of HBIG are approx. 500IU s	STRATION	injection and	paediatric hepatitis B vaccin HBIG Date given		ediately after birth.	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of /ials of HBIG are approx. 500IU s Vaccine Date given Dose given	STRATION	injection and	paediatric hepatitis B vaccin HBIG Date given Dose given		ediately after birth.	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vials of HBIG are approx. 500IU s Vaccine Date given	STRATION	injection and	paediatric hepatitis B vaccin HBIG Date given		ediately after birth.	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of /ials of HBIG are approx. 500IU s Vaccine Date given Dose given Make of vaccine	of HBIg intra-muscular so the whole vial should r	injection and phot be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no.	ne imm		
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vials of HBIG are approx. 500IU of Vaccine Date given Date given Make of vaccine Batch no.	of HBIg intra-muscular so the whole vial should r	Injection and not be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no.	ne imm ven (sho		
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vials of HBIG are approx. 500IU s Vaccine Date given Dose given Make of vaccine Batch no. *If baby is very low birth weight and clini	cal decision made to give divid	injection and phot be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given <u>Time given</u>	ne imm ven (sho	uld be given ASAP)	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vaccine Date given Dose given Make of vaccine Batch no. *If baby is very low birth weight and clini HBIG (2 nd part of dose*)	cal decision made to give divid	injection and interview in the given interview inte	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given <u>Time given</u>	ne imm ven (sho	uld be given ASAP)	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vaccine Date given Date given Make of vaccine Batch no. *If baby is very low birth weight and clini HBIG (2 nd part of dose*) DOCTOR RESPONSIBLE FOR Name Title/Position	cal decision made to give divid	injection and not be given ded doses, please <u>Dose</u>	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given Time given. NOT GP)	ne imm ven (sho	uld be given ASAP)	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vaccine Date given Date given Make of vaccine Batch no. *If baby is very low birth weight and clini HBIG (2 nd part of dose*) DOCTOR RESPONSIBLE FOR Name Title/Position Contact no.	cal decision made to give divid	injection and phot be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given Time given. NOT GP) Form completed by	ne imm ven (sho	uld be given ASAP)	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vaccine Date given Date given Make of vaccine Batch no. *If baby is very low birth weight and clini HBIG (2 nd part of dose*) DOCTOR RESPONSIBLE FOR Name Title/Position	cal decision made to give divid	injection and phot be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given Time given. NOT GP) Form completed by Contact no.	ne imm ven (sho	uld be given ASAP)	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vaccine Date given Date given Make of vaccine Batch no. *If baby is very low birth weight and clini HBIG (2 nd part of dose*) DOCTOR RESPONSIBLE FOR Name Title/Position Contact no.	cal decision made to give divid	injection and phot be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given Time given. NOT GP) Form completed by Contact no.	ne imm ven (sho	uld be given ASAP)	
VACCINE AND HBIG ADMINIS NOTE The infant should receive 250IU of Vaccine Date given Date given Make of vaccine Batch no. *If baby is very low birth weight and clini HBIG (2 nd part of dose*) DOCTOR RESPONSIBLE FOR Name Title/Position Contact no.	cal decision made to give divid Date given	injection and phot be given	paediatric hepatitis B vaccin HBIG Date given Dose given Time given: Batch no. record when 2 rd part of dose was giv given Time given. NOT GP) Form completed by Contact no.	ne imm ven (sho	uld be given ASAP)	

Lower Infectivity Pathway

All pregnant women offered and recommended screening for hepatitis B in every pregnancy regardless of previous results (Ref 1)

Pregnant woman with a positive screening result or known positive hepatitis B status Screening team contacts woman and offers faceto-face appointment to discuss result \leq 10 days of result/notification (Ref 1/2/3)

Screening team assessment appointment (≤ 10 days of result/notification [Ref 1/2/3/5/8])

Infomation

Use PHE 'hepatitis B. A guide to your care' leaflet to explain main points to the woman, including:

- aetiology of hepatitis B and multidisciplinary team care in pregnancy and beyond
- importance of completing neonatal vaccination schedule
- PHE hepatitis B surveillance processes the requirement to inform all health professionals of her plan of care and to notify their positive status to GP/ CHIS/Health Visitor/Health Protection Team

Actions

- take additional serology tests as per local clinical protocols- viral loads, LFTs etc. and send to laboratory
- take PHE maternal venous sample and send to PHE Virus Reference Department, Colindale in pre-paid packaging (result will be sent back to you to report to specialist team) Check and record all other antenatal results
- commence PHE Hepatitis B in Pregnancy Checklist

Infectivity status established

Lower infectivity pregnancy

Screening teams action

Higher infectivity pregnancy

See higher infectivity pathway

Arrange appointment with specialist team to plan care as per national guidelines (Ref 8/9)

- < 24 weeks gestation, within 18 weeks of receipt of referral
- ≥ 24 weeks gestation, within 6 weeks of receipt of referral
- create neonatal alert for delivery suite neonatal vaccination (Ref 7,8)
- notify Health Protection Team, GP, Health Visitor and CHIS of antenatal positive status and plans for care (Ref4)

Specialist service

3rd trimester review with screening team to prepare for birth (Ref 8)

Woman seen in specialist service to plan care as against hepatitis per national clinical guidelines (Ref 8/9)

Using PHE 'Protecting your baby against hepatitis B' leaflet discuss:

- importance of prompt registration with a GP and prompt registration of the baby's birth
- importance of completing vaccination schedule

Delivery suite/Postnatal

Babies with a birthweight of 1500g or less need HBIG plus vaccine regardless of the maternal infectivity status (Ref 7)

Delivery suite team

- inform screening team of admission
- administration of hep B vaccine ≤ 24 hrs of birth
- completion of hep B page in Red Book
- notify birth, return notes and checklist to screening team

Selective at risk neonatal immunisation schedule (Ref 1/7)

Screening team ensure GP, CHIS and Health Visitor informed of:

vaccine administration at birth

Lower infectivity pregnancy

 need for 2nd vaccine at 4 weeks and completion of selective at risk neonatal immunisation schedule (Ref 1/4/7/8)

Screening team complete PHE Hepatitis B in Pregnancy Checklist and PHE IDPS Integrated screening outcomes surveillance service (ISOSS) hepatitis B database

Higher Infectivity Pathway

All pregnant women offered and recommended screening for hepatitis B in every pregnancy regardless of previous results (Ref 1) Screening team contacts woman and offers face-Pregnant woman with a positive screening result to-face appointment to discuss result ≤ 10 days or known positive hepatitis B status of result/notification (Ref 1/2/3) Screening team consultation appointment (≤ 10 days of result/notification [Ref 1/2/3/5/8]) Actions Infomation use PHE 'hepatitis B. A guide to your care' leaflet · take additional serology tests as per local clinical to explain main points to the woman, including: protocols- viral loads, LFTs etc. and send to laboratory · aetiology of hepatitis B and MDT care in pregnancy and beyond take PHE maternal venous sample and send to PHE Virus Reference Department, Colindale in • importance of completing neonatal vaccination pre-paid packaging (result will be sent back to schedule you to report to specialist team) PHE hepatitis B surveillance processes check and record all other antenatal results • the requirement to inform all health professionals of commence PHE Hepatitis B in Pregnancy her plan of care and to notify their positive status to Checklist GP / CHIS / Health Visitor / Health Protection Teams Infectivity status established Lower infectivity pregnancy Higher infectivity pregnancy See lower infectivity pathway Screening teams action Arrange appointment with specialist team create neonatal alert for postnatal neonatal vaccination +/- HBIG as required (Ref 8) within 6 weeks of result or by 24 weeks gestation to plan care as per national request HBIG from PHE Colindale for women with guidelines (Ref 2/8/9) higher infectivity. This will prompt delivery of Hep B Delivery Suite box to the screening team notify HPT team, GP, Health Visitor and CHIS of antenatal positive status and plans for care (Ref 4) **Specialist service** Women seen in specialist service within 6 3rd trimester review with screening team weeks of result or by 24 weeks gestation to to prepare for birth (Ref 8). Match HBIG plan care as per national guidelines (Ref 2/8/9) with Delivery Suite Box and record location in notes. Using PHE Protecting your baby • higher infectivity: 3rd trimester review and antiviral against hepatitis B leaflet discuss: therapy if required · importance of prompt registration with a GP and newly diagnosed/ lower infectivity- go to lower prompt registration of the baby's birth infectivity pathway · importance of completing vaccination schedule PHE hepatitis B surveillance processes post-delivery **Delivery suite/Postnatal Delivery suite team** Babies with a birthweight of 1500g or less inform screening team of admission need HBIG plus vaccine regardless of the locate hep B box and follow instructions: maternal infectivity status (Ref 7). take maternal serology sample after delivery take baby's 'hep B dried bloodspot' sample Screening team ensure GP, CHIS and PRIOR to HBIG/hep B vaccination Health Visitor informed of: administration of HBIG + vaccine ≤ 24 hrs vaccine administration at birth of birth need for 2nd vaccine at 4 weeks and completion completion of hep B page in Red Book and of selective at risk neonatal immunisation PHE paperwork schedule (Ref 1/4/7/8) notify birth and return notes, checklist and hep B box with paperwork and samples to screening team Screening Team return paperwork & samples Screening team complete PHE hepatitis B in in hep B box to PHE Virus Reference Pregnancy Checklist and PHE IDPS Integrated Department, Colindale in pre-paid packaging screening outcomes surveillance service (ISOSS) and acknowledge receipt by email hepatitis B database

Suitable

Dear Dr [insert name]

Notification of maternal positive hepatitis B antenatal result form

- Child Health Information System (CHIS): see section A
- Actions for primary care: see section B

Maternal demographics and pregnancy details

Name of pregnant woman	Date of birth	NHS number
Address	1	1
Estimated due date	Additional information	on

Section A: action for CHIS

This woman is hepatitis B positive so can you please create a record for her?

Section B: actions for primary care

The baby will need **6 vaccinations** to protect him or her from acquiring chronic hepatitis B virus (HBV) in line with the Public Health England (PHE) Green Book. The first vaccination +/- human immunoglobulin (HBIG) will be given within 24 hours of birth. Please ensure you schedule appointments for:

- 2 extra hepatitis B vaccinations at 4 weeks and 12 months
- routine childhood immunisation schedule (containing the *hexavalent* vaccine) at 8, 12 and 16 weeks
- a blood test to check infectivity status at **12 months** (ideally using the dried blood spot card available at <u>www.gov.uk/guidance/hepatitis-b-dried-blood-spot-dbs-testing-forinfants</u>)

Additional information on management of mother and baby

We have referred the woman to hepatology/gastroenterology for specialist management and multidisciplinary care. The sexual and household contacts of an adult with HBV will benefit from hepatitis B testing and vaccination in primary care. We will notify your practice again when the baby has been born to support prompt registration of the baby with your practice and timely scheduling of extra appointments.

Timeliness of vaccinations is important to prevent viral transmission.

Yours sincerely

[Add details of health professional, including name, contact number and email].

Appendix G

HB1 form

NHS University Hospitals of Derby and Burton

Child at risk of Hepatitis B infection from birth at Queen's Hospital Burton - first vaccination given. Notification to healthcare professional to deliver subsequent vaccine doses Dear Doctor,

We would like to inform you of an infant who is at risk of Hepatitis B infection and requires a full course of Hepatitis B Vaccine. The first dose has been given (see details below). This infant is at risk of Hepatitis B infection for the fo

following reason (please tick):	1" DOSE MUST BE GIVEN WITHIN 24 HOURS OF BIRTH.
1. Mother has Hepatitis B infection	Refer to GP to complete full course of Hepatitis B vaccine.
2. Father or close household contact has Hepatitis B	Schedule as below:
Maternal Details (affix label):	It is of vital importance for full protection to be achieved that the second dose is given exactly at 4 weeks after the first dose was given & at 12 months (this is in addition to the routine Hexavalent (Hep B vaccinations given to all babies at
Surname:First name:	8, 12 & 16 weeks).
DOB: NHS Number:	Baby antigen & antibody levels should be checked 1-4 months following completion of the immunisation schedule
Hospital Number:	as per Colindale Reference Laboratory. Serum samples can be taken in local surgeries or via the Phlebotomy Service available at Derby Children's Hospital.
Maternal Hepatitis Status Antenatally:	
Positive Negative Unkown HBsAntigen	Infant Details (affix label where available):
HBeAntigen	Surname:First name:
Anti-HBe	DOB:NHS Number:
Viral Load:iu/ml Date:	Hospital Number:
	Hep B vaccine given to baby: Yes / No
Acute Hepatitis in Pregnancy: Yes / No	Date:
	Baby's Time of Birth:
Yours faithfully,	If not given <24 hours of age document & datix.
The Antenatal & Newborn Screening Team,	Batch Number:Thigh: Left / Right
Queen's Hospital Burton, Any queries please contact; 01283511511 ext 4339/4297	Administered by (Print & Sign):
	Hep B Immunoglobulin given to baby:Yes / No
Paediatrician or ANNP giving vaccine or HBIG completes this HB1 form:	Date: Time:
	Baby's Time of Birth:
1 copy in baby notes (original filed after copying).	If <u>not</u> given <24 hours of age document & datix.
4 photocopies minimum required	Batch Number:Thigh: Left / Right Administered by (Print & Sign):
(prior to discharge by the discharging Midwife):	

a

- 1 copy to GP, send by post or electronically attached to PN discharge address FAO Practice Nurse (Please DO NOT give to mums). ٥
- 1 copy to Antenatal Screening Specialist Midwife, Antenatal Clinic or email bhft.antenatalscreening@nhs.net
- 1 copy to West Midlands Health Protection Team, Stonefield House, Corporation Street, Stafford, ST16 3SR or phe.wmnoids@nhs.net
- 1 copy to CHIS, Team Manager Child Health, Mellor House, Corporation Street, Stafford, ST16 3SR or email ٥ childhealth@sshis.nhs.uk
- copy to NH\$ England Screening & Immunisation Team via email england.hbat@nhs.net ~

06/12//2022 Version 8 HB1 form

Thank you for your cooperation

Appendix H

HB1 form

University Hospitals of Derby and Burton NHS Foundation Trust

Child at risk of Hepatitis B infection from birth at Royal Derby Hospital – first vaccination given. Notification to healthcare professional to deliver subsequent vaccine doses Dear Doctor,

We would like to inform you of an infant who is at risk of Hepatitis B infection and requires a full course of Hepatitis B Vaccine. The first dose has been given (see details below). This infant is at risk of Hepatitis B infection for the following reason (*please tick*):

following reason (please tick):	1st DOSE MUST BE GIVEN WITHIN 24 HOURS OF
1. Mother has Hepatitis B infection	BIRTH.
2. Father or close household contact has Hepatitis B	Refer to GP to complete full course of Hepatitis B vaccine. Schedule as below:
Maternal Details (affix label): Surname:	It is of vital importance for full protection to be achieved that the second dose is given exactly at 4 weeks after the first dose was given & at 12 months (this is in addition to the routine Hexavalent (Hep B vaccinations given to all babies at 8, 12 & 16 weeks). Baby antigen & antibody levels should be checked 1-4 months following completion of the immunisation schedule as per Colindale Reference Laboratory. Serum samples can be taken in local surgeries or via the Phlebotomy Service available at Derby Children's Hospital.
Positive Negative Unkown HBsAntigen HBeAntigen Anti-HBe Viral Load:iu/ml Date:	Infant Details (affix label where available): Surname:First name: DOB:NHS Number: Hospital Number:
Acute Hepatitis in Pregnancy: Yes / No	Hep B vaccine given to baby: Yes / No Date:
Acute Hepatitis in Pregnancy: Yes / No Yours faithfully,	
	Date:Time: Baby's Time of Birth:
Yours faithfully, The Antenatal & Newborn Screening Team,	Date:Time: Baby's Time of Birth: If <u>not</u> given <24 hours of age document & datix. Batch Number:Thigh: Left / Right Administered by (Print & Sign):
Yours faithfully, The Antenatal & Newborn Screening Team, Royal Derby Hospital, Any queries please contact 01332 785435 or	Date: Time: Baby's Time of Birth: If If not given <24 hours of age document & datix.
Yours faithfully, The Antenatal & Newborn Screening Team, Royal Derby Hospital, Any queries please contact 01332 785435 or 01332 789924 Paediatrician or ANNP giving vaccine or	Date:Time: Baby's Time of Birth: If <u>not</u> given <24 hours of age document & datix. Batch Number:Thigh: Left / Right Administered by (Print & Sign): Hep B Immunoglobulin given to baby:Yes / No
Yours faithfully, The Antenatal & Newborn Screening Team, Royal Derby Hospital, Any queries please contact 01332 785435 or 01332 789924 Paediatrician or ANNP giving vaccine or HBIG completes this HB1 form:	Date: Time of Birth: Baby's Time of Birth: If not given <24 hours of age document & datix.

- 1 copy to Antenatal Screening Specialist Team, email to <u>dhft.antenatalandnewbornscreeningRDH@nhs.net</u>
- 1 copy to CHIS, Team Manager Child Health email to <u>scwcsu.derbyshire.chis@nhs.net</u>

Any forms sent by email request confirmation of receipt please

01/12/2023 Version 10 HB1 form

Thank you for your cooperation



Form A. Notification of Hepatitis B Positive Antenatal Patient

Maternity Unit							
Lead Professional				EDD	Clic	k or tap to enter a date.	
Mother Details							
NHS Number		Unit Nun	nber				
First Name		Surname	5				
Date of Birth	Click or tap to enter a date.	Ethnic O	rigin				
Preferred Language		Is an inte	erpreter	required	d?	Choose an item.	
Address							
Telephone Number		Mobile N	umber				
		mobile h	amber				
GP Name							
GP Address							
Latest Hepatitis B Bloo Sample Date	Click or tap to enter a date.	Sample I	Number				
Sample Date		Sample Number					
HbsAg	Choose an item.	AntiHbc	(total)				
AntiHbc (IGM)	Choose an item.	HbeAg. Cho		ioose an item.			
AntiHbe.	Choose an item.						
Is Neonatal Immunoglo	bulin required? (See table be	low)			Cho	oose an item.	
	_						
Interpretation of Serolo Status of Mother	gy Results		HanD	Vaccine		Hep B Immunoglobulin	
HBsAg positive + HBe	An Positive		HepB Vaccine Yes		-	Yes	
	tive for BOTH HBeAg and An	tiHBe	Yes		+	Yes	
HBsAg positive + e markers not known			Yes		+	Yes	
HBsAg positive + AntiHBe negative			Yes		+	Yes	
HBsAg positive + AntiHBe positive			Yes		+	No	
Acute Hepatitis B in Pregnancy			Yes		+	Yes	
Reported by				Date	Clic	k or tap to enter a date.	

The completed Neonatal Hepatitis B Notification form must be sent to;

1) West Midlands Screening and Immunisation Team- phe.wmnoids@nhs.net england.hbat@nhs.net

2) The responsible School Aged Immunisation Service- EITHER Staffordshire SAIShepb@mpft.nhs.uk OR Shropshire NOT BOTH Shropcom.immunisationteam@nhs.net

The responsible Child Health Information Department- childhealth@sshis.nhs.uk 3)

4) Registered GP Practice 5) Health Visitor



Form B: Notification of Birth to a Hepatitis B Positive Patient

Paediatrician/Neonatologist	
Mother's Details	
NHS Number	
Full Name	

Baby's Details							
NHS Number			Unit Number				
First Name			Surname				
Date of Birth	Click or tap to enter a date.		Sex	Choose an item.			
Address (if different from mothers)							
GP Name and Address (if different from mother's							
		•					

Immunisation Details								
Immunoglobulin (H	BIG)	Date	Click or tap to	o enter a	date.	Time		
Within 24 hours of birth if applicable		Batch Number						\neg
		Datch Number						
1 ^{et} Hepatitis B Vaccine		Date	Click or tap to enter a date.		date.	Time		
Within 24 hours of birth		Batch Number						┥
								_
Reason vaccine or HBIG was not given or given outside the appropriate timeframe (if applicable)								
								_
Reported by				Date	Click	or tap t	o enter a date.]

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Documentation Control

Reference Number:	Version:		Status: FINAL			
UHDB/12:23/H12	UHDB Version 2					
	Royal De	rby prior	to merged document:			
Version / Amendment	Version	Date	Author	Reason		
	1	Oct 2022	Rachel McLean - Antenatal and Newborn Screening Lead Midwife	New		
	2	Oct 2023	Rachel McLean - Antenatal and Newborn Screening Lead Midwife	Addition of appendix I & J notification forms		
Intended Recipients: /		: Staff				
Training and Dissemination: Cascaded through lead midwives/doctors, Published on Intranet, NHS mail circulation list. Article in BU newsletter						
To be read in conjunc Keywords:	tion with:					
Consultation with:	Obstet	Obstetricians & midwifery staff				
Business Unit sign off:	24/11/2	2023: M	aternity Guidelines Group: Mis	ss A Joshi – Chair		
	04/ 12 /2023: Maternity Governance Group / CD - Mr R Deveraj					
Notification Overview sent to TIER 3 Divisional Quality Governance Operations & Performance: 19/12/2023						
Implementation date:	22/12/2	22/12/2023				
Review Date:	Decem	December 2026				
Key Contact:	Joanna	Joanna Harrison-Engwell				