

HEPATITIS B AND C • 1/3

HEPATITIS B

- Check mother's hepatitis B status **before birth**

Antenatal

- Midwife to inform obstetrician, neonatologist, Public Health team and GP of plan to immunise
- Inform Antenatal Screening Midwives on wah-tr.AntenatalScreeningResults@nhs.net
- Hepatitis B immunoglobulin (HBIG) issued by Public Health England (PHE) via local consultant microbiologist
- order well in advance of birth
- if twins order 2 doses

Labour

- When an HBsAg positive mother arrives in labour or for caesarean section, labour ward must inform on-call neonatal team

Postnatal

- For all newborns, check screening results of mother's antenatal tests
- If antenatal testing not done, request urgent maternal HBsAg test
- Mother may breastfeed

IMMEDIATE POSTNATAL TREATMENT OF BABY

Table 1: To which babies

Maternal status	Vaccine required by baby	Immunoglobulin (HBIG) required by baby
HBsAg positive, HBeAg positive	Y	Y
HBsAg positive, HBeAg negative, HBe antibody (anti-HBe) negative	Y	Y
HBsAg positive where e markers have not been determined	Y	Y
Acute hepatitis B during pregnancy	Y	Y
HBsAg positive and baby <1.5 kg	Y	Y
HBsAg positive, anti-HBe positive	Y	N
HBsAg positive and >10 ⁶ iu/mL Hepatitis B DNA in antenatal sample	Y	Y
Other high-risk group	Y	N

- Give low-birth-weight and premature babies full neonatal dose hepatitis B vaccine
- Give HBIG and hepatitis B vaccine to babies with birth weight <1.5 kg born to mother with hepatitis B, regardless of mother's HBeAg status

When

Give within 24 hr of birth, ideally as soon as possible after delivery

When indicated HBIG should be given with hepatitis B vaccine ideally within 24 hr of birth, but no later than 7 days

What

- Give hepatitis B vaccine 0.5 mL IM. **Caution:** brands have different doses [e.g. Engerix-B® 10 microgram (recommended), HBVaxPro Paediatric® 5 microgram]
- HBIG 250 units additionally given to babies of highly infectious mothers (see **Table 1**)
- **A stock of Hepatitis B vaccine is kept on the fridge on NNU. If baby requires HBIG this will be names and also kept in the fridge on NNU.**
- Monitor infants born <28 weeks' gestation for 72 hr after HBIG

How

- Use 2 separate injection sites for hepatitis B vaccine and HBIG, in anterolateral thighs (not buttocks)
- Give hepatitis B vaccine IM, except in bleeding disorder where it may be given deep subcutaneously

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Relationship to other immunisations

- No need to delay BCG following HBIG
- Hepatitis B vaccine may be given with other vaccines, but use separate site. If same limb used, give vaccines >2.5 cm apart

Documentation

- Record immunisation in Red Book
- **If baby requires HBIG, please fill in the paperwork in the HBIG pack**
- **Advise GP when next dose is due (this can be done on NIPE Smart: e.g. next dose is due at 1 month of age)**
- **Please inform the antenatal screening midwives via email and include baby's name, NHS Number, mother's name and NHS number, as well as when the Hep B vaccine (and HBIG) were given including batch numbers. Email: wah-tr.AntenatalScreeningResults@nhs.net**

SUBSEQUENT MANAGEMENT

Further doses – arranged by GP

- 2nd dose at 1 month

1 yr follow-up

- Book 1 yr hospital blood test before neonatal discharge
- Check child's HBsAg status at aged 1 yr
- if HBsAg positive refer to infectious disease or liver team for further management

Table 2: Hepatitis B vaccine schedule for routine and at risk infant immunisation programmes

Age	Routine childhood programme		Babies born to hepatitis B infected mothers	
Birth	X*		✓	Monovalent HepB (Energix B [®] or HBvaxPRO Paediatric [®]) (with HBIG if indicated)
4 weeks	X		✓	Monovalent HepB (Energix B [®] or HBvaxPRO Paediatric [®])
8 weeks	✓	DTaP/IPV/Hib/HepB (Infanrix hexa [®])	✓	DTaP/IPV/Hib/HepB (Infanrix hexa [®])
12 weeks	✓	DTaP/IPV/Hib/HepB (Infanrix hexa [®])	✓	DTaP/IPV/Hib/HepB (Infanrix hexa [®])
16 weeks	✓	DTaP/IPV/Hib/HepB (Infanrix hexa [®])	✓	DTaP/IPV/Hib/HepB (Infanrix hexa [®])
1 yr	X		✓	Monovalent HepB (Energix B [®] or HBvaxPRO Paediatric [®]) Test for HBsAg

* **Babies born to hepatitis B negative mothers but going home to a household with another hepatitis B infected person may be at immediate risk of infection – give a monovalent dose of hepatitis B vaccine before discharge**

HEPATITIS C

Antenatal

- High-risk groups:
 - intravenous drug users (IVDU) or women with partners who are IVDU
 - from a country of high prevalence [e.g. North Africa (particularly Egypt), Middle East]
- Discuss baby testing with mothers who had hepatitis C during antenatal period
- If maternal HCV RNA negative, baby not at risk

Postnatal

- Hepatitis C antibody testing after 18 months (serum, clotted specimen)
- If antibody positive or if HIV co-infected, test for HCV RNA (EDTA)
- If RNA positive, refer to regional hepatitis unit
- HCV RNA testing before 18 months does not alter management

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- If mother is an IV drug user, she is at risk of contracting HIV infection and may seroconvert during pregnancy. She should ideally have HIV PCR at delivery. If negative, baby will not require HIV bloods however if HIV PCR positive, baby will require treatment.
- If mother is Hep B negative, baby can have routine immunisations (inc Hep B) at 2,3,4 months of age.
- Babies do not need for routine paediatric follow up

Documentation

- Document hepatitis C follow-up visits in Red Book to ensure health visitor aware and baby followed up

Breastfeeding

- Mother may breastfeed

ADOPTION AND FOSTERING

- If risk factor for HCV (e.g. IV drug use) and maternal status not known, HCV antibody:
 - if positive, retest aged 18 months
 - if still positive, refer to paediatric infectious diseases or liver specialist