

Hepatitis B vaccination for babies at risk

Section A

Hepatitis B Resource Pack: For babies born to mothers with hepatitis B infection

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Hepatitis B Resource Pack: For babies born to mothers with hepatitis B infection

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Context

The purpose of this pack is to prevent perinatal transmission by ensuring that babies born to mothers with hepatitis B infection receive their first dose of hepatitis B vaccine within 24 hours (preferably at birth) and that systems are in place for subsequent doses and follow up. **Hepatitis B infection/positive is defined as mothers who are Hepatitis B surface antigen positive (HBsAg) in pregnancy.**

This resource pack sets out the actions required, and contains the necessary documents which are essential in maintaining good communication with colleagues in primary care and public health to ensure that the mother's health, that of her baby and her family is protected.

Perinatal transmission can be prevented by administration of a course of active immunisation (HB vaccine) which is indicated for all babies born to hepatitis B infected mothers, together with hepatitis B immunoglobulin (HBIG) at birth where indicated – see Green book Chapter 18 page 14 Table 18.5.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628602/Greenbook_chapter_18.pdf).

Other members of the family may be infectious carriers and even if the baby escapes infection at birth, he/she may still be at risk of infection at a later date. This is why it is extremely important to ensure that babies born to HBsAg positive mothers are fully vaccinated against hepatitis B. If the child is vaccinated, breastfeeding is safe.

Paediatric hepatitis B immunisation schedule

All babies are eligible for a hexavalent vaccine, which includes hepatitis B, for their primary immunisations.

Babies born to hepatitis B infected mothers must receive monovalent hepatitis B vaccine at birth and 4 weeks of age (additional vaccines) and then three doses of hexavalent vaccine at 8, 12 and 16 weeks of age ('primaries'). They should receive a booster dose of monovalent hepatitis B vaccine at 12 months of age (additional vaccine). Serology is checked at 14 months of age to ensure that the baby has not become infected (see table below).

Timely vaccination at birth and at four weeks of age is critical for preventing infection in the infant.

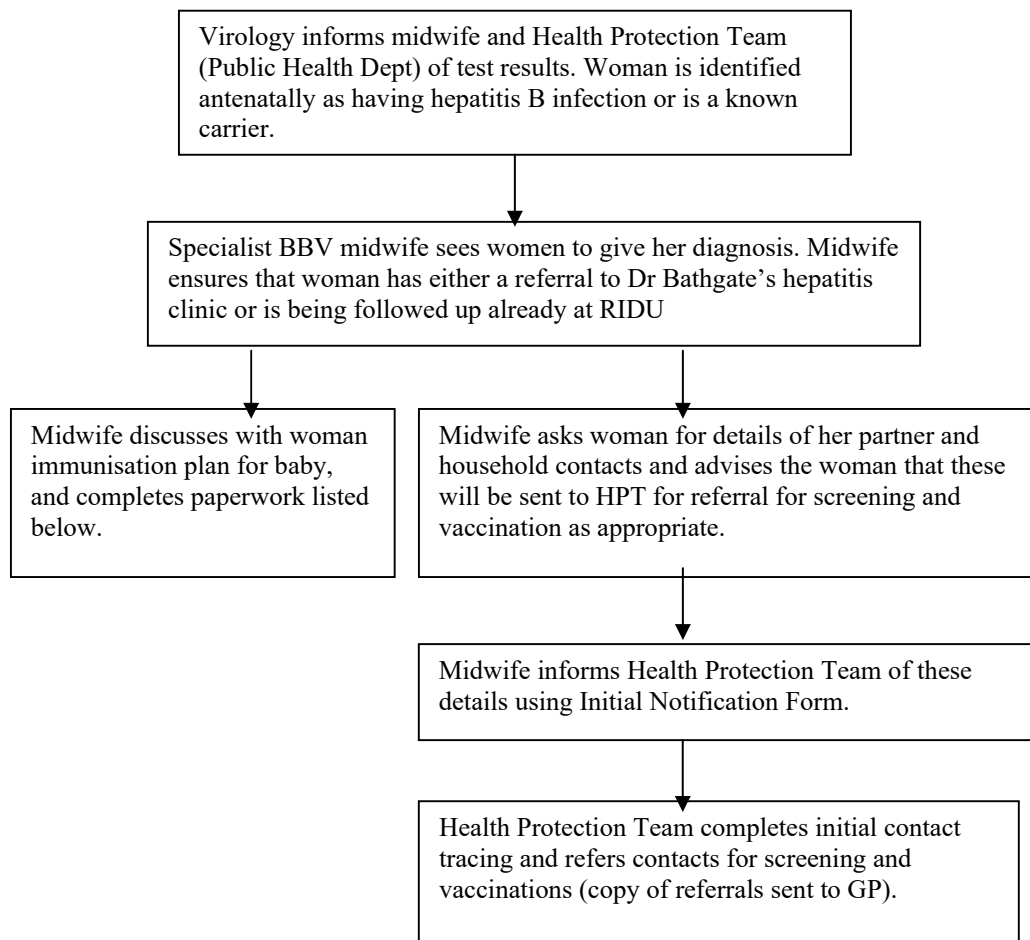
The first dose of monovalent hepatitis B vaccine should be administered by hospital staff within 24 hours of birth and before the baby is discharged from hospital. Subsequent doses will be given by community vaccination teams, or paediatric team if the baby stays in the neonatal unit or paediatric unit beyond 4 weeks of age. If a Hepatitis B infected mother chooses to have a home birth, HPT will work with the Midwives to ensure the baby is vaccinated at birth.

Table 1. Hepatitis B immunisation schedule – for routine childhood programme and for babies born to Hepatitis B infected mothers

Age	Routine Childhood Programme		Babies born to hepatitis B Infected Mothers	
At birth (in hospital)	X		✓	Monovalent HepB (with HBIG if indicated)
4 weeks	X		✓	Monovalent HepB
8 weeks	✓	Hexavalent	✓	Hexavalent
12 weeks	✓	Hexavalent	✓	Hexavalent
16 weeks	✓	Hexavalent	✓	Hexavalent
12 months	X		✓	Monovalent HepB
14 months (at hospital)	X		✓	Blood test
Pre- school hepatitis B Booster	X		X	

Outline of system for protection of babies born to mothers with hepatitis B infection

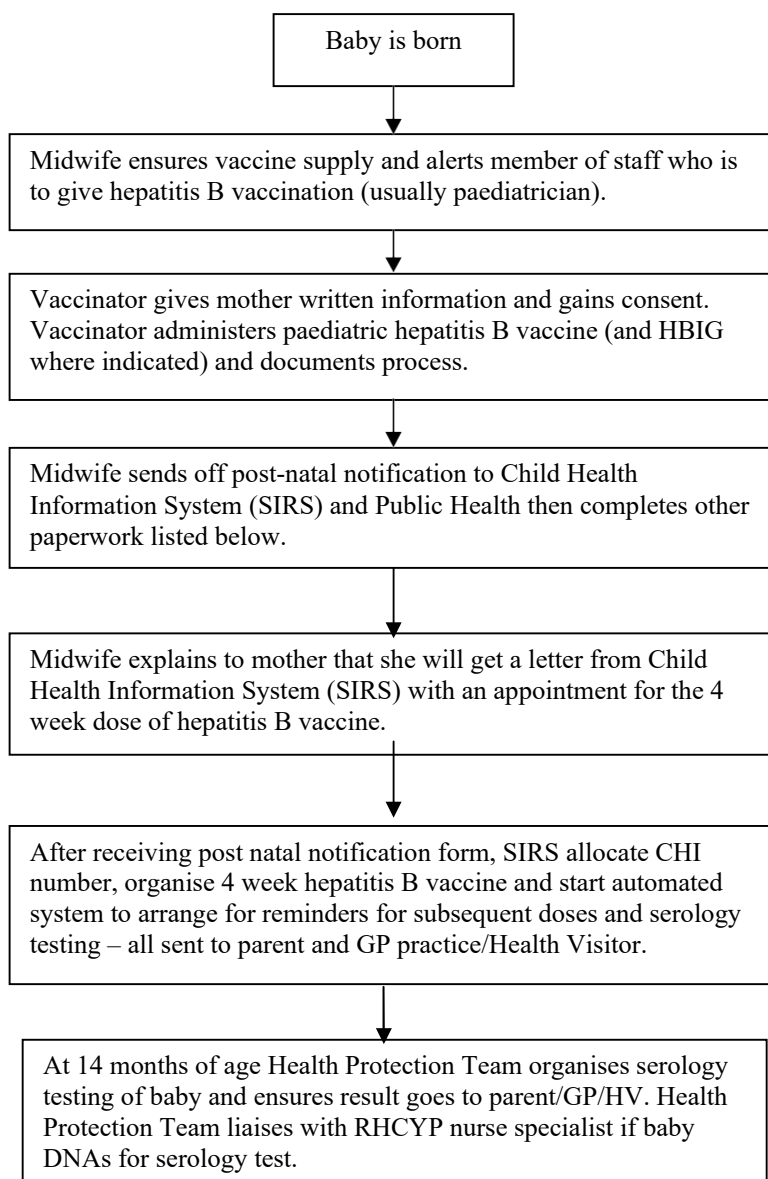
A. Ante-natal identification of infected mother



Paperwork to be completed by specialist midwife at this point:

- 1) Give the woman the NHS Scotland leaflet – *Hepatitis B immunisation for babies born to mothers with hepatitis B* – versions in English, easy read, Polish, Urdu and Chinese available on the NHS Inform website at <https://www.nhsinform.scot/healthy-living/immunisation>
- 2) Send Health Protection Team the initial notification form (page 8).
- 3) Ensure plan is documented on TRAK under Neonatal Management Plan a) hepatitis B vaccine schedule **for all babies** born to hepatitis B positive mothers and b) hepatitis B immunoglobulin (HBIG) **if indicated**.
- 4) Put sticker (page 15) on notes to remind labour ward/postnatal midwife that hepatitis B vaccine is required (and use additional sticker where HBIG is also indicated).
- 5) Insert this resource pack in woman's case notes to be used again at delivery.
- 6) Ensure that woman has either a referral to Dr Bathgate's hepatitis clinic or is being followed up already at RIDU.

B. Delivery of baby, vaccination, discharge and follow up



At birth:

- 1) Labour ward midwife to ensure vaccine is available and to alert the staff member trained in hepatitis B vaccination (usually paediatrician) that baby needs 1st dose of paediatric hepatitis B vaccine within 24 hrs (preferably at birth) for **all** babies born to hepatitis B infected mothers, and HBIG **if indicated**.
- 2) Staff member who gives the vaccine to:
 - a) Access maternity TRAK and neonatal management plan
 - b) Ensure mother has received written information *Hepatitis B immunisation for babies born to mothers with hepatitis B* – versions in English, easy read, Polish, Urdu and

Chinese available on the NHS Inform website at <https://www.nhsinform.scot>

Gain consent from mother (see page 9 for consent form).

- c) Administer the paediatric dose of hepatitis B vaccine (and HBIG where indicated).
- d) Document processes and outcome (including brand, batch number and expiry date of vaccine and site of vaccination).

Documentation:

Once vaccination has been given, midwife to:

3. Record information on 1st hepatitis B vaccine dose (and HBIG where indicated) on postnatal notification form (page 14) and send or email to Child Health Information Systems (SIRS) CHIS.EastMidlothian@nhslothian.scot.nhs. And Health Protection Team (Public Health) health.protection@nhslothian.scot.nhs.uk at email addresses given on form, or using labels (page 15). **This is very important** as once SIRS/HPT receive information on first dose they will notify GP and parent/carer when subsequent doses are due.
4. Complete required details on either
 - Letter A for babies receiving hepatitis B vaccine and HBIG (pages 10 & 11) or
 - Letter B for babies receiving hepatitis B vaccine only (no HBIG) (pages 12 & 13)and send to mother's GP. Give a copy to mother to give to GP when she registers her baby with the GP.
5. Document on baby section of the postnatal discharge part of TRAK that first dose of hepatitis B vaccine and HBIG (if indicated) has been given, with date.
6. Write vaccine schedule on yellow birth details form for health visitor.

Co-ordinator of system: Health Protection Nursing Team

It is the responsibility of everyone involved in the care of the pregnant woman to ensure that appropriate actions are taken and that communication with the woman herself and with clinical colleagues is maintained.

If you have any queries about any aspect of this system, please contact:

Health Protection Team
NHS Lothian, Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Tel 0300 790 6462
Email: health.protection@nhslothian.scot.nhs.uk

Initial Notification Form for Pregnant Women who are hepatitis B Positive

Specialist Midwife to send to Public Health Department after first hospital appointment

Patient Details <small>(Addressograph if available)</small>	
Name	_____
Address	_____ _____ _____
Postcode	_____
Phone no:	_____
Mobile no:	_____
D.O.B	__:__:__ CHI _____
Language	_____
GP Name	_____
Practice	_____ _____ _____
Phone no:	_____

Other Details	
Estimated Due Date	__:__:__
Booking sample date	__:__:__
Serology results:	Date
HBsAg:	__:__:__
Anti-HBc:	__:__:__
anti-HBe:	__:__:__
HBeAg:	__:__:__
load:	__:__:__
Viral load: _____	
Mother requires antivirals	YES / NO
Baby to receive	Vaccination HBIG <input type="checkbox"/>
Confirmed with Virology	__:__:__

Obstetric History:				
Names of other children (if this is not first child)	GP	D.O.B	CHI	Vaccination status
_____	_____	__:__:__	_____	_____
_____	_____	__:__:__	_____	_____
_____	_____	__:__:__	_____	_____
_____	_____	__:__:__	_____	_____
_____	_____	__:__:__	_____	_____

Names of household / sexual contacts	Relationship	GP	D.O.B	CHI	Vaccination status
_____	_____	_____	__:__:__	_____	_____
_____	_____	_____	__:__:__	_____	_____
_____	_____	_____	__:__:__	_____	_____
_____	_____	_____	__:__:__	_____	_____
_____	_____	_____	__:__:__	_____	_____
				Are these contacts aware of this patient's hepatitis B diagnosis?	YES / NO
				Has the patient given permission for these contacts to be followed up for testing and vaccination?	YES / NO

Any other important information:

Please forward the completed form to: Health.protection@nhslothian.scot.nhs.uk

CONSENT FOR HEPATITIS B IMMUNISATION

I have received written information on hepatitis B immunisation and have had an opportunity to discuss the immunisation being offered with a health professional.

I understand the reasons for the immunisation offer. I also understand the significance of my baby not having this immunisation. I am aware that my decision whether or not to have this immunisation will not affect the quality of care delivered by healthcare professionals.

Baby's name..... Date of birth.....

CHI number

I wish my baby to be immunised against hepatitis B

I **do not** wish my baby to be immunised against hepatitis B

Signature..... (Parent) Date.....

Signature (Witness: Healthcare professional)

Print name

Designation: Date.....

Lothian NHS Board

GP Letter A

Babies receiving Hep B Vaccine and HBIG

Directorate of Public Health and Health Policy
Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000

Our Ref Health Protection Team
Babies receiving HB vaccine and HBIG

Enquiries to Health Protection Team
Direct Line 0300 790 6264
Email: health.protection@nhslothian.scot.nhs.uk

Date

Dear Dr

PREVENTION OF HEPATITIS B TRANSMISSION IN AT-RISK INFANTS

MOTHER'S NAME:

MOTHER'S DOB:

BABY'S NAME:

BABY'S DOB:

BABY'S CHI:

Routine antenatal screening shows that this woman is infected with hepatitis B virus. Her baby requires to be protected against this infection by immunisation against hepatitis B.

Hospital staff have administered hepatitis B immunoglobulin (HBIG) and the first dose of hepatitis B monovalent vaccine before discharge.

The baby will receive a second (monovalent) paediatric hepatitis B vaccine at 1 month organised by Public Health, then continue on the routine vaccination schedule of hexavalent vaccine (which contains hepatitis B) at 2, 3, and 4 months of age. A further monovalent paediatric hepatitis B vaccine will be due at 12 months; the child will be sent SIRS reminders for all these vaccines by Child Health. The mother can be advised that if the child is being vaccinated, breastfeeding is safe.

You should have received a separate letter from the health protection team with details of other household and sexual contacts who have been referred to CTACs for testing and immunisation.

Yours sincerely

Hospital Team
On behalf of
Health Protection Team

cont..

GP Letter A cont.

Hepatitis B immunisation schedules

Age	Routine Childhood Programme		Babies born to hepatitis B Infected Mothers	
At birth (in hospital)	X		✓	Monovalent HepB (with HBIG if indicated)
4 weeks	X		✓	Monovalent HepB
8 weeks	✓	Hexavalent	✓	Hexavalent
12 weeks	✓	Hexavalent	✓	Hexavalent
16 weeks	✓	Hexavalent	✓	Hexavalent
12 months	X		✓	Monovalent HepB
14 months (at hospital)	X		✓	Blood test
Pre- school hepatitis B Booster	X		X	

Lothian NHS Board

GP Letter B

Babies receiving HB Vaccine only (No HBIG)

Directorate of Public Health and Health Policy
Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000

Our Ref Health Protection Team
Babies receiving HB vaccine only (No HBIG)

Enquiries to Health Protection Team
Direct Line 0300 790 6264
Email: health.protection@nhslothian.scot.nhs.uk

Date

Dear Dr

PREVENTION OF HEPATITIS B TRANSMISSION IN AT-RISK INFANTS

MOTHERS NAME:

MOTHERS DOB:

BABY'S NAME:

BABY'S DOB:

BABY'S CHI:

Routine antenatal screening shows that this woman is infected with hepatitis B virus. Her baby requires to be protected against this infection by immunisation against hepatitis B.

Hospital staff have administered the first dose of monovalent hepatitis B vaccine before discharge. Hepatitis B immunoglobulin (HBIG) was NOT indicated for this baby.

The baby will receive a second (monovalent) paediatric hepatitis B vaccine at 1 month organised by Public Health, then continue on the routine vaccination schedule of hexavalent vaccine (which contains hepatitis B) at 2, 3, and 4 months of age. A further monovalent paediatric hepatitis B vaccine will be due at 12 months; the child will be sent SIRS reminders for all these vaccines by Child Health. The mother can be advised that if the child is being vaccinated, breastfeeding is safe.

You should have received a separate letter from the health protection team with details of other household and sexual contacts who have been referred to CTACs for testing and immunisation.

Yours sincerely

Hospital Team
On behalf of
Health Protection Team

cont...

GP letter B cont.

Hepatitis B immunisation schedules

Age	Routine Childhood Programme		Babies born to Hepatitis B Infected Mothers	
At birth (in hospital)	X		✓	Monovalent HepB (with HBIG if indicated)
4 weeks	X		✓	Monovalent HepB
8 weeks	✓	Hexavalent	✓	Hexavalent
12 weeks	✓	Hexavalent	✓	Hexavalent
16 weeks	✓	Hexavalent	✓	Hexavalent
12 months	X		✓	Monovalent HepB
14 months (at hospital)	X		✓	Blood test
Pre- school Hepatitis B Booster	X		X	

Form for CHILD HEALTH INFORMATION SYSTEMS (SIRS) AND PUBLIC HEALTH

BABIES AT RISK OF HEPATITIS B : POST NATAL NOTIFICATIONS

This form must be completed and sent or emailed to Child Health and Public Health to ensure baby is called for subsequent doses of Hepatitis B. Please do not forget to send it.

RIE St. John's OTHER

MOTHER'S DETAILS

SURNAME FORENAME.....

DOB // ADDRESS.....
 POSTCODE

BABY'S DETAILS

SURNAME FORENAME
 DOB // CHI

HEPATITIS B VACCINE 1ST INJECTION: **DATE GIVEN** / /

Name of hepatitis B vaccine product given **Engerix B / HepBvaxPRO** (please circle)

HEPATITIS B IMMUNOGLOBULIN (HBIG) **NOT INDICATED**

(only indicated for specific groups of babies born to infectious hepatitis B positive mothers):

OR DATE GIVEN / /

REASON FOR HEPATITIS B IMMUNISATION

- Mother is hepatitis B positive
- Another close contact is hepatitis B positive
 Name DOB //

CONSULTANT HV NAME

GP NAME..... TEL.....

GP ADDRESS Postcode:

Please post or email one copy each of this form to

Child Health Information Systems
 SIRS Department
 Musselburgh Primary Care Centre
 Inveresk Road
 Musselburgh EH21 7BP
 Email: CHIS.EastMidlothian@nhslothian.scot.nhs
 (mark for the attention of Shona Oliver)

Health Protection Team
 Public Health Department
 NHS Lothian, Waverley Gate
 2-4 Waterloo Place, Edinburgh EH1 3EG
 Tel 0300 790 6462
 Email: health.protection@nhslothian.scot.nhs.uk

This infant requires protection against Hepatitis B by vaccination started at birth using this schedule:

1st dose: Hep B vaccine at birth
2nd dose: Hep B vaccine at 4 weeks of age
Hexavalent vaccine at 8, 12 and 16 weeks of age
Booster dose: Hep B vaccine at 12 months of age
Serology check at 14 months

Please write this schedule on yellow birth details

This infant requires protection against Hepatitis B by vaccination started at birth using this schedule:

1st dose: Hep B vaccine at birth
2nd dose: Hep B vaccine at 4 weeks of age
Hexavalent vaccine at 8, 12 and 16 weeks of age
Booster dose: Hep B vaccine at 12 months of age
Serology check at 14 months

Please write this schedule on yellow birth details

This infant requires protection against Hepatitis B by vaccination started at birth using this schedule:

1st dose: Hep B vaccine at birth
2nd dose: Hep B vaccine at 4 weeks of age
Hexavalent vaccine at 8, 12 and 16 weeks of age
Booster dose: Hep B vaccine at 12 months of age
Serology check at 14 months

Please write this schedule on yellow birth details

This infant requires protection against Hepatitis B by **administration of HBIG**

as well as Hepatitis B vaccination started at birth (also see other label)

This infant requires protection against Hepatitis B by **administration of HBIG**

as well as Hepatitis B vaccination started at birth (also see other label)

This infant requires protection against Hepatitis B by **administration of HBIG**

as well as Hepatitis B vaccination started at birth (also see other label)

Child Health Information Systems
SIRS Department
Musselburgh Primary Care Centre
Inveresk Road
Musselburgh EH21 7BP

Child Health Information Systems
SIRS Department
Musselburgh Primary Care Centre
Inveresk Road
Musselburgh EH21 7BP

Child Health Information Systems
SIRS Department
Musselburgh Primary Care Centre
Inveresk Road
Musselburgh EH21 7BP

Health Protection Team
NHS Lothian
Waverley Gate
2-4 Waterloo Place
Edinburgh EH1 3EG

Health Protection Team
NHS Lothian
Waverley Gate
2-4 Waterloo Place
Edinburgh EH1 3EG

Health Protection Team
NHS Lothian
Waverley Gate
2-4 Waterloo Place
Edinburgh EH1 3EG