

# Hepatitis B

## Pathway stages to protection

### Actions, roles, responsibilities and standards



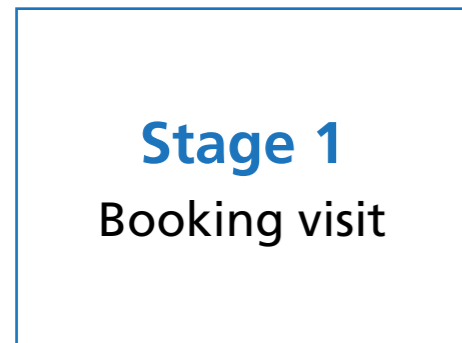
Pathway stages colour code:

Action • Midwifery role • Risk areas • Specialist services role • Primary care role • Paediatric services role  
• National screening standards • DH advice

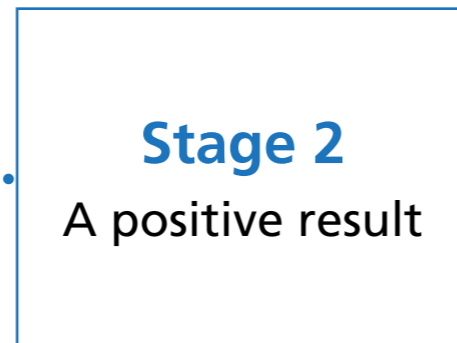
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# Pathway overview

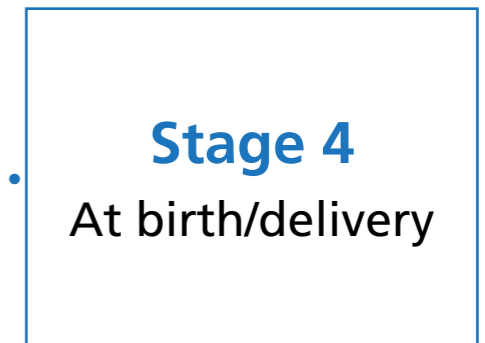
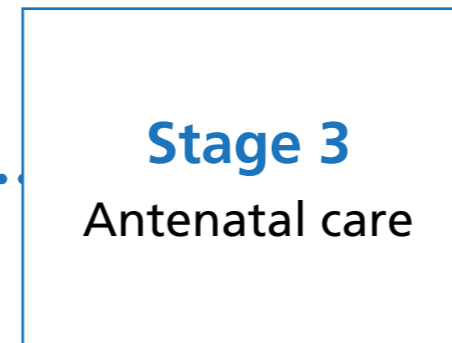
An effective screening programme



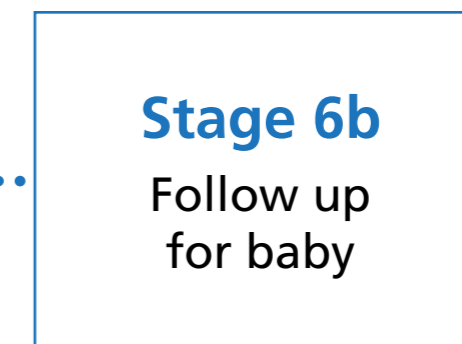
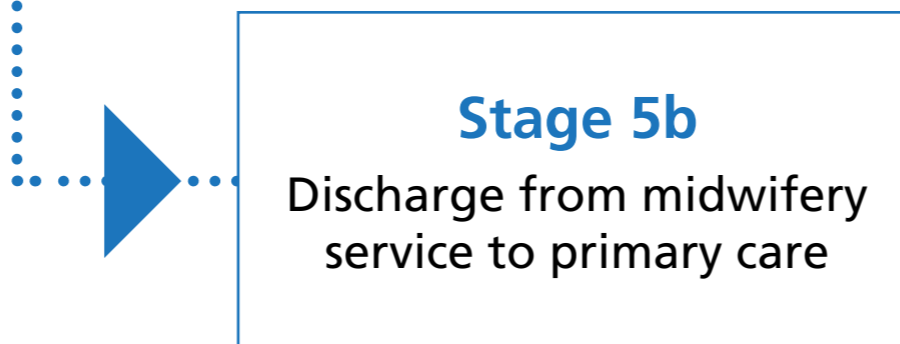
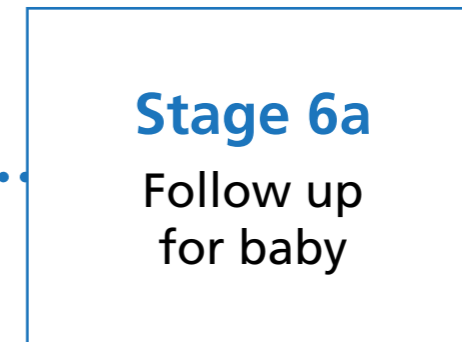
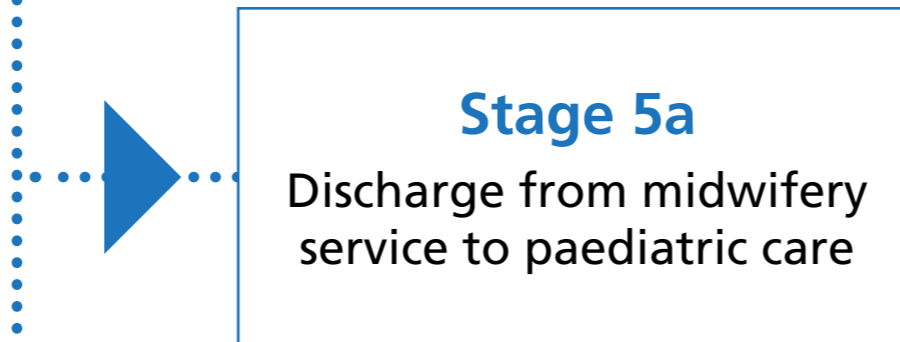
Systems for responding to positive results



Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth



Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age



# An effective screening programme

## Stage 1: Booking visit

### Hep B screening offered with appropriate information

PCTs should commission the screening service against a framework linked to the national standards (NSC 2010).

There should be written protocols and pathways in each trust identifying roles and responsibilities for screening and management of women with positive results (NSC 2010).

There should be a dedicated screening coordinator/midwife and deputy (NSC 2010).

The midwife should ensure that the woman consents for screening and has seen written information in an appropriate format (NSC 2010).

#### The accountable midwife:

- undertakes screening information provision and blood test
- refers to protocol when a woman refuses screening, or where a woman misses her appointment
- refers all known positive women to an appropriate specialist
- documents all processes and outcome.

#### Possible risk areas:

- the woman misses her appointment
- the midwife (MW) unable to obtain sample/bleed woman
- the screening tests refused/ no consent.

Fit for purpose sample sent to lab

#### Actions and accountabilities ◀

# An effective screening programme

## Stage 1: Booking visit

### Actions and accountabilities



Close

#### Action:

Hep B screening offered to all pregnant women

#### Accountable midwife:

- undertakes screening consultation and blood test
- refers to local protocol:
  - when a woman declines screening
  - where a woman misses her appointment
  - where a woman is already known to be hepatitis B positive
- documents all processes and outcome.

# Systems for responding to positive results

## Stage 2: A positive result

### Responding to a positive result

Processes should be in place to identify and follow up results that have not been received within ten working days (NSC 2010).

All hep B positive women should be referred for assessment and management by an appropriate specialist within six weeks of the screening results being received by maternity services (NSC 2010).

Immunisation leads should be informed of positive screening result at an early stage (NSC 2010).

HPU should be informed of all positive results and be given details of the clinician responsible for requesting diagnostic lab testing (NSC 2010).

Maternity services do not need to take a second blood sample – this should be taken by specialist clinical services (NSC 2010).

#### The accountable midwife:

- informs the woman of positive/negative result
- documents result in PHR/ midwifery notes
- notifies HPA of positive cases
- informs GP
- informs ANSC
- arranges follow-up and plans ongoing care.

#### Possible risk areas:

- the woman is not given the appropriate information so fails to understand the significance of a positive result and the need for ongoing care
- the woman misses her appointment for results
- positive results are missed or not acted upon, ongoing care planning not made
- the result not received lost
- the result not appropriately documented.

LABORATORIES MUST REFER ALL POSITIVE RESULTS TO HPA\*

#### Actions and accountabilities ◀

\*Health Protection (Notification) SI2010 No. 659

# Systems for responding to positive results

## Stage 2: A positive result

### Actions and accountabilities



#### Action:

Reporting and action for all specimens  
Lab to *inform HPU of all positive samples*  
in line with Health Protection Notifications  
Regulations 2010

#### Accountable midwife:

- accounts for result within ten working days of sample being taken
- informs women of results – where positive, provides further information and arranges follow on care with specialist services
- informs HPU of all positive results
- informs screening lead and immunisation lead of positive result
- informs woman's GP of positive result in order for GP to initiate contact tracing and subsequent family care
- documents all processes and outcome.

# Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth

## Stage 3: Antenatal care

For women booking at 24 weeks or later, screening blood samples should be marked as urgent and test results should be received within 24 hours of receipt from lab. If the result is positive, the woman should be referred immediately to specialist services (NSC 2010).

Local protocols should be in place to ensure multi-disciplinary links and close working relationships between maternity and specialist services.

It is essential that relevant information is available to staff during pregnancy and at delivery (NSC 2010).

### The accountable midwife:

- discusses result and future care plan with woman
- orders HBV/HBIG and amends order if multiple birth or loss of pregnancy
- refers to specialist for follow on care in event of loss of pregnancy
- requests consent for HBIG HBV
- processes late bookers as 'urgent' for antenatal screening
- refers to local protocol in case of movement in/out of area.

### Possible risk areas:

- the woman misses her appointments
- MW does not arrange follow up care
- where consent for HBIG/ HBV refused – refer to local protocols
- movement into area and not presenting – hep B status unknown
- movement into area not screened, hep B missed.

### DH suggests:

- routine administrative fail safes to be initiated:
- 24-28 weeks: MW to check hep B status documented
  - 32 weeks: MW to check vaccine +/- HBIG held on delivery suite.

## Actions and accountabilities ◀

# Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth

## Stage 3: Intrapartum care (for women with positive result)

### Actions and accountabilities



#### Action:

Ongoing management of care  
Preparations for delivery

#### Accountable midwife:

- plans ongoing care with woman
- orders HBIG/HBV
- amends order where loss of pregnancy or multiple births
- processes any 'late-bookers' as 'urgent'
- refers to protocol where women move in/out of area
- routinely administratively checks hepB status is documented within notes
- at 32/40 weeks routinely checks the availability of HBIG HBV on delivery suite
- ensures all relevant information is available for delivery team
- gains consent for vaccination. Where consent is refused refer to local protocol
- documents all processes and outcome.

3a



# Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth

## Stage 3a: Referral to appropriate specialist services

A second blood test should be taken as part of a comprehensive clinical assessment (NSC 2010).

Assessment by an appropriate specialist provides a comprehensive evaluation of maternal infection and determines the care for mother and baby (NSC 2010).

### Specialist services:

- should liaise with midwifery services and ensure all relevant information
- should liaise with primary care for contact tracing and ongoing care for family, partner and close contacts.

### Possible risk areas:

- MW fails to refer on
- woman finds multiple specialist care confusing as limited hep B specific information is given
- woman misses her appointment
- movement out of area/loss to follow up
- where discharged into primary care, GP services fail to follow up or woman misses her appointment.

### DH suggests:

Specialist services should have agreed protocols to follow up any missed appointment.



### Actions and accountabilities

# Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth

## Stage 3a: Referral to appropriate specialist services

### Actions and accountabilities



Close

#### Action:

Second blood tests for LFTs etc,  
U/S and care planning

#### Specialist clinician services:

- provide a comprehensive evaluation of maternal infection
- advise on follow-on care for mother and baby
- should liaise with midwifery services and ensure all relevant information is available for staff during pregnancy and at delivery
- should liaise with primary care for contact tracing and ongoing care for family, partner and close contacts.

# Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth

## Stage 4: At birth/delivery

5a

It is essential that all relevant information is available to the delivery team (NSC 2010).

Where there no evidence of booking, priority should be given to offer test for hep B, HIV and syphilis (NSC 2010).

The first dose of vaccination (+/- HBIG) should be administered within 24 hours birth.

Arrangements for completing schedule should be in place.

Maternal consent for vaccination schedule should be in line with the Green Book (NSC 2010).

**Home delivery:**  
accountable MW refers to hep B protocol for immunisation delivery.

**Immuniser completes documentation, including PCHR, and liaises with:**

- GP
- CHIS

**Possible risk areas:**

- unable to identify a person to immunise
- hep B status/HBV requirement not acted upon
- no consent, refer to local protocol
- mother/baby miss their vaccine appointment
- insufficient stock ordered for low birth weight baby.

**DH (2006) advises:**

Babies with a birth weight of 1500g or less born to infected mothers should receive HBIG and HBV within 24 hours of birth (DH2006).

5b

### Actions and accountabilities ◀

# Systems to ensure the first vaccination/ hepatitis B immunoglobulin is given at birth

## Stage 4: At birth/delivery

5a

### Actions and accountabilities



#### Action:

- Manage delivery to minimise risk of vertical transmission – by avoiding foetal blood sampling and foetal scalp electrodes where possible
- Assess and administer HBIG/HBV

#### Accountable midwifery team:

- should ensure first dose vaccination plus HBIG (where applicable) is given within 24 hours of birth
- should arrange for first dose vaccination as per local protocol, where home delivery occurs
- documents all processes and outcome.

#### Vaccinator/paediatric services:

- gain consent from mother in line with Green Book (DH 2006)
- administer HBV/HBIG
- ensure all immunisation information is documented in notes and PCHR (Red Book)
- plan and communicate clear follow up plan for future vaccinations with discharging midwifery team
- arrange for follow-up serology at 12 months.

5b

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 5a: Discharge from midwifery service to paediatric care

### NSC states: on discharge the midwife should:

- discuss baby's immunisation schedule and importance of completion and confirm follow-up appointments with mother
- complete all relevant vaccination forms
- record woman's hep B status and vaccinations in PCHR
- inform CHIS of status/vaccination
- notify GP, HV, HPU and PCT lead of vaccinations status and follow up
- It is of vital importance that the woman's discharge address is accurate as follow up will be compromised if a health visitor is not able to contact the woman (NSC 2010).

### Possible risk areas:

- where discharge details are incorrect missed/lost to follow up
- care not fully discussed.

Discharge summary including hep B care plan sent to primary care

### The accountable midwife:

- to check all appropriate information shared with paed, CHIS, GP,HV, ANSC, immunisation lead and is documented in PCHR
- to check discharge details and discuss ongoing care for mum baby
- to pass written info on to social worker where a baby is fostered/ adopted
- where a baby remains on SCBU, arrange second dose with paed.

### Paediatric services:

- should inform GP and CHIS when vaccinations are given
- where a woman/baby miss an appointment, paed to follow local protocol to chase and follow up
- to arrange all hep B vaccination call/recall and subsequent test for HBV infectivity at 12 months
- to refer HBV care to relevant health care professional where child is fostered/adopted.

## Actions and accountabilities

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 5a: Discharge from midwifery service to paediatric care

### Actions and accountabilities



#### Action:

MW transfers ongoing hep B care of baby to paediatrics

#### The accountable midwife:

- checks discharge details are accurate for ongoing care
- ensures mother is consulted and understands ongoing care plan
- ensures mother understands the importance of completing vaccination schedule on time
- confirms all processes for follow-up appointments
- liaises all relevant information and ongoing vaccination schedule with paed, CHIS, GP, HV, ANSC, immunisation lead and documented in PCHR
- passes written information to social worker where child is fostered/adopted
- where a baby remains on SCBU, arranges second dose with paed.

#### Paediatric team:

- ensures systems are in place for call/recall
- ensures all relevant information is shared with primary care and CHIS
- confirms process for follow up appointments – including arrangements for 12 months serology testing
- should have a clear protocol to actively follow up all who miss future appointments for hepB vaccination
- refers HBV care to relevant professional where child is fostered/adopted.

6a

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 6a: Follow up for baby

Immunisations given at 1, 2, 12 months and 3 years and 4 months by paed

The subsequent doses of the vaccination schedule are administered over a lengthy period. It is important that processes are in place to ensure the mother is aware of the immunisation schedule (NSC 2010).

A process to arrange appointments, issue prompts and identify missed appointments at each stage should take place to facilitate completion of the schedule (NSC 2010).

### Primary care:

- should ensure the hep B vaccination schedule is followed and mother is aware of the importance of timing and process
- movement into area; HV to check hep B status and plan future care and organise referral into paed service
- should have robust primary care protocol in situ to follow up those who miss appointment/ move out of area
- should ensure CHIS/imms lead submit COVER data at appropriate times.

### Possible risk areas:

- movement out of area/ loss of trace
- parent misses appointments
- not called/recalled for appointments
- vaccination schedule/ incomplete serology missed at 12 months bloods-hep B status unknown.

### Paediatric services:

- to arrange call/recall
- to actively follow up those who miss appointments
- liaise with primary care
- inform CHIS of immunisation information for COVER returns.

### DH suggests:

HV to check baby has follow up appointments for vaccination and serology.

## Actions and accountabilities

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 6a: Follow up for baby

### Actions and accountabilities



#### Action:

Administer subsequent immunisations and ensure serology is taken at 12 months

#### Paediatric services:

- call and recall for vaccination appointments
- actively follows up those who miss appointments
- liaise with primary care services
- inform CHIS of immunisation information for COVER returns.

#### Primary care:

- should liaise with paediatric services
- should have a system to trace those who miss hep B vaccination appointment or those who move in/out of area
- support CHIS/immunisation lead for timely COVER data submission
- all in contact with mother and baby should ensure the hep B vaccination schedule is followed and mum is aware
- of the importance of timing and process (NSC 2010).

#### DH advice:

- health visitor to check baby has follow up appointment for vaccinations and serology
- where child moves into/out of area mid schedule, health visitor to ensure all relevant immunisation is shared in order to continue to provide timely vaccination.



# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 5b: Discharge from midwifery service to primary care

### NSC states: on discharge the midwife should:

- discuss baby's immunisation schedule and importance of completion. Confirm process for follow-up appointments
- complete all relevant vaccination forms
- record woman's hep B status and vaccinations in PCHR
- inform CHIS of status/vaccination
- notify GP, HV, HPU and PCT lead of vaccinations status and follow-up
- It is of vital importance that the woman's discharge address is accurate as follow up will be compromised if a health visitor is not able to contact the woman (NSC 2010).

### The accountable midwife:

- to check all appropriate information shared with GP, HV/PN, CHIS, ANSC, immunisation lead and documented in PCHR
- to check discharge details are correct and discuss ongoing care for mother baby
- to pass written info on to social worker where a baby is fostered/adopted
- where a baby remains on SCBU, arrange second dose with paed.

Discharge summary/ standard template (to include hep B care) to be sent to:

- GP
- HV
- CHIS
- ANSC

### Possible risk areas:

- where discharge details are incorrect missed/lost to follow up, care not fully discussed.

## Actions and accountabilities

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 5b: Discharge from midwifery service to primary care

### Actions and accountabilities

X  
Close

#### Action:

MW transfers ongoing hep B care of baby to primary care

#### Accountable midwife:

- checks discharge details are accurate for ongoing care
- should ensure mother is consulted and understands ongoing care plan
- should ensure mother understands the importance of completing vaccination schedule on time
- confirms all processes for follow up appointments
- should share all relevant information and ongoing vaccination schedule with GP/practice nurse, HV, CHIS, ANSC, immunisation lead and documented in PCHR
- where a baby remains on SCBU, arrange second dose with paed.

6b

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 6b: Follow up for baby

### Immunisations given at 1, 2, 12 months and 3 years and 4 months by primary care

The subsequent doses of the vaccination schedule are administered over a lengthy period, usually within primary care. It is important that processes are in place to ensure the mother is aware of the immunisation schedule (NSC 2010).

A process to arrange appointments, issue prompts and identify missed appointments at each stage should take place... to facilitate completion of the schedule (NSC 2010).

#### Primary care:

- should arrange robust call and recall (via CHIS)
- should actively follow up those who miss appointments
- should arrange hep B infectivity testing at 12 months
- movement into area; HV to check hep B status and plan future care and organise referral into paed's service
- should ensure robust primary care protocol in situ to follow up those who miss appointment/ move out
- should send subsequent vaccination information to CHIS
- CHIS/imms lead submit COVER data.

#### Possible risk areas:

- parent misses appointments
- CHIS not sent vaccination information and subsequent immunisations delayed
- not called/recalled for appointment
- movement out of area/loss of trace
- vaccination schedule incomplete
- serology missed at 12 months bloods- hep B status unknown.

#### DH suggests:

HV to check baby has follow up appointments for vaccination and serology.

## Actions and accountabilities

# Systems to ensure all subsequent vaccinations are given and the child is tested for hepatitis B infection at 12 months of age

## Stage 6b: Follow up for baby

### Actions and accountabilities



#### Primary care:

- should ensure systems are in place for call/recall
- share all vaccination information with CHIS in a timely fashion in order to prevent subsequent scheduling delay
- should have a clear protocol to actively follow-up all who miss future appointments for hep B vaccination, or who move into/out of area mid schedule
- should liaise with paediatric services for ongoing serology at 12 months
- all in contact with mother and baby should ensure the hep B vaccination schedule is followed and mother is aware of the importance of timing and process (NSC 2010).

#### DH advice:

- health visitor to check baby has follow up appointment for vaccinations and serology
- where child moves into/out of area mid schedule, health visitor to ensure all relevant immunisation is shared in order to continue to provide timely vaccination.

#### CHIS:

- should ensure robust call/recall is in place
- should submit COVER data
- should liaise with immunisation coordinator.