

# Greater Manchester and Eastern Cheshire SCN

## Management of Positive Hepatitis B Screen in Mothers and Babies

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## Document Control

### Ownership

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### Version control

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# 1 Introduction

## 1.1 Why do I need to know?

Hepatitis B is a risk to public health. Around 25% of all liver disease cases in the UK are due to hepatitis infections. A major cause of hepatitis is infection with hepatitis B virus (HBV).

If a pregnant woman has an HBV infection then:

- There is a 70-90% likelihood that this infection will be transferred to the baby in the 10% of women who are highly infectious
- Around 90% of infected babies will develop persistent HBV infection and be at risk of serious liver disease in later life
- Timely immunisation schedule completion can prevent development of persistent HBV infection in over 90% of these babies.

## 1.2 Management of Positive Hepatitis screen in Mothers and Babies

The objectives of the **screening** programme are to ensure:

- That all pregnant hepatitis B positive women are identified
- That all pregnant hepatitis B positive women are referred and seen for assessment and management by an infectious disease specialist within six weeks of the screening test result being received by maternity services
- That the infant vaccination schedule is offered for new-born babies.

## 1.3 Information, Offer and Acceptance of Hepatitis B Screen

At the booking appointment the reason for offering Hepatitis B screening should be discussed and women given information about the benefits of the test for her health and that of the baby.

All screening tests offered, performed or declined must be documented in the maternal case notes and Personal Maternity Record (PMR).

- If a woman discloses that she is Hepatitis B positive, repeat the Hepatitis B Antibodies screen and ensure that a referral is made to Infectious Disease Consultant or hepatologist.

If the sample is taken on admission to Labour Ward please phone the Consultant Virologist or on call Microbiologist for instructions. Treat the sample as URGENT.

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## 2 Results

The result is usually available within 5 working days of the test being performed.

### 2.1 Negative Result

Women are informed of the result at their next scheduled appointment.

### 2.2 Positive Result

- If it is a new Hep B diagnosis ensure an urgent ante-natal appointment is made to give the woman the result and that an appointment is made to see an Infectious Disease Consultant (ID), hepatologist or gastroenterologist within 6 weeks of notification of the result.
- If a woman discloses that she is Hep B positive at booking the midwife should ensure that an appointment is offered with the ID consultant, hepatologist or gastroenterologist within 6 weeks of the notification of the result.

An appointment should also be arranged for a follow up with the Obstetrician.

## 3 Information sharing

The screening midwife should inform the obstetrician, neonatal consultant, public health team of the plan to immunise via available communications pathways. The UK National Screening Committee guidance recommends that *“there should be written protocols and pathways in each trust identifying roles and responsibilities for screening and management of women with positive results”*. Similarly, the immunisation programme should be organised against agreed protocols and pathways with key systems for process monitoring and regular auditing. These pathways should ensure vaccination administrations are timely, recorded accurately, and relevant failsafe solutions capture those who miss appointments or move in or out of the area.

## 4 Testing existing children

This should be discussed, encouraged and facilitated from the time the initial diagnosis is given and may be performed as soon as possible or deferred until testing the child of the current pregnancy.

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## 5 Referral and appointment

An appointment must be made and attended with the 'appropriate specialist eg infectious disease consultant, hepatologist or gastroenterologist' within 6 weeks of receiving the positive result.

At this appointment:-

- The Infectious Disease Consultant, hepatologist or gastroenterologist will discuss the result and arrange for further blood tests including liver function tests as appropriate
- Follow up appointments at the Infectious Disease ,hepatologist or gastroenterologist clinic will be arranged as appropriate
- The woman is given a written information leaflet 'Hepatitis B: how to protect your baby.
- Information and advice will be given with regard to the offer of screening for her partner and other family members
- Information should be given regarding the vaccination schedule for her baby.

## 6 Antenatal appointment with Consultant Obstetrician

Follow up appointments will be arranged with Consultant Obstetrician as appropriate. Appointments with Community Midwives should be agreed and arranged as appropriate.

## 7 Notification/Referrals

The woman should be informed that a number of health professionals need to be advised of the result to ensure that she receives optimum care:

Referral to an Infectious Diseases, hepatologist or gastroenterologist is recommended.

The results of Hepatitis B antibodies screening may influence management of mother and baby.

Those women who are late presenting to maternity services may miss out on this facility as at present there is no alternative. Advice should be sought as soon as possible from the Infectious Diseases Consultant if a woman presents late in pregnancy and is found to have a Hep B positive result.

She will need:

- Neonatal Paediatric alert
- GP and Community Midwife alert.

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## 8 Intrapartum Care

- Inform senior Obstetrician of admission
- Labour should be actively managed if Spontaneous Rupture of Membranes (SRM) occurs.
- Delay Artificial Rupture of Membranes (ARM) as long as possible (if appropriate).
- Avoid using Fetal Scalp Electrodes (FSE) and performing Fetal Blood Sampling (FBS)
- Avoid difficult operative vaginal delivery to minimise fetal/maternal trauma to minimise risk of vertical transmission. Therefore the senior obstetrician on site should assess and if possible conduct the delivery.
- The midwife responsible for the care of the woman on Labour Ward will notify the First On-Call Paediatrician on duty of any infant at risk of Hepatitis B transmission immediately following delivery.

## 9 Collection and administration of vaccine with/without immunoglobulin

The Paediatrician/ Neonatologist will administer Hepatitis B immunoglobulin (if indicated) within 24 hours of birth.

## 10 Postnatal Information

The mother should be advised that there is no contra-indication to breastfeeding when a baby is born to a mother with Hepatitis B and a course of immunisation is in progress, commencing at birth.

Testing for HBsAg at one year old is advised.

Parents should be given the leaflet 'Hepatitis B: how to protect your baby' downloadable from the internet in different languages.

<http://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectHepBYourBaby.pdf>

## 11 Unbooked Women

A woman arriving in labour whose Hepatitis B status is unknown should be offered screening and blood sent urgently to determine her status.

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## 12 Action if Positive result is received during labour/immediate

### 12.1 Postnatal period

- If Hepatitis B Immunoglobulin is indicated, it will need to be delivered by courier to the labour ward – confirm details with Virologist/on-call Microbiologist
- Please seek advice urgently from the Infectious Diseases physicians, hepatologist or gastroenterologist to establish whether HBV DNA levels need to be measured.
- Vaccine with/without immunoglobulin should be given if indicated before the baby is 24 hours old.
- If Hepatitis B test result is not available within 24 hours of delivery or before discharge contact the paediatric/Neonatal team.
- The woman should be given written information on the Hepatitis B immunisation schedule.
- The Obstetrician can offer postnatal referral to the ID team, hepatologist or gastroenterologist
- Women who withhold consent for screening during labour should be offered screening again after delivery.

## 13 Contraception

Women with liver disease require careful contraceptive management. . Oestrogen - containing oral contraceptives have been associated with cholestasis and development of hepatic adenoma and are contraindicated in women with acute liver disease.

Progestogen-containing hormonal methods appear to be safe, IUDs or barrier methods such as condoms and diaphragms can be selected, but they have lower efficacy rates.

If patients with chronic liver disease have completed their families, tubal ligation should be considered.

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## 14 Abbreviations & definitions of terms used

ANC	Antenatal Clinic
Anti-HB	Anti-hepatitis B antibodies
Anti-HC	Anti-hepatitis C antibodies
ARM	Artificial Rupture of Membranes
DNA	Deoxyribonucleic acid
ENB	Examination of the New-born
EDD	Expected Date of Delivery
FBS	Fetal Blood Sample
FSE	Fetal Scalp Electrode
g	gram
gms	grams
GP	General Practitioner
HBeAg	Hepatitis B e Antigen
HBIG	Hepatitis B Immune Globulin
HBsAg	Hepatitis B surface Antigen
HBV	Hepatitis B Virus
Hep B	Hepatitis B
HPA	Health Protection Agency
ID	Infectious Disease
IU	International Unit
Kg	Kilogram
LFT	Liver function test
ml	millilitre
NHSLA	NHS Litigation Authority
NICE	National Institute for Health and Clinical Excellence
PMR	Personal Maternity Records
PCR	Polymerase chain reaction
RNA	Ribonucleic acid
RCOG	Royal College of Obstetrics and Gynaecologists

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