

## **INTERDISCIPLINARY GUIDELINE**

**B-00-07-10032 – Hepatitis B Newborns at Risk**

### **Hepatitis B: Newborns at Risk, protocol**

#### **Related Documents and Resources:**

1. Prescriber's Orders – Newborn Care Orders (GPH500)
2. Consent for Transfusion of Blood and/or Blood products (PHCMR030)
3. Blood/Blood Product Administration [B-00-12-10065](#)

#### **Skill Level Specialized:**

Perinatal RN, NICU RN

Family Practice Physician, Pediatrician

Registered Midwife

#### **Need to Know**

- Hepatitis B is a preventable liver disease caused by the hepatitis B virus (HBV). It ranges in severity from a mild illness, lasting a few weeks (acute), to a serious long-term (chronic) illness that can lead to liver disease or liver cancer.
- Universal screening for all pregnant women for HBsAg, and screening for hepatitis B antigen for women who are HBsAg positive is completed in the antenatal period by the primary
- Perinatal transmission of hepatitis B virus may occur from an infected mother to the newborn at, or shortly after birth, if the mother:
  - is a carrier of the virus - demonstrated as hepatitis B surface antigen positive on serology (HBsAg positive)
  - has an acute episode of hepatitis B in the 3rd trimester
  - increases when the HBsAg positive mother is also hepatitis B antigen positive.
- The majority of younger British Columbians are now immune to hepatitis B due to the addition of the universal Grade Six immunization program that has been in effect since 1992 and the universal infant vaccine program since 2001.
- The hepatitis B infection can be prevented in newborns of HBV positive mothers by giving the baby Hepatitis B Immune Globulin and hepatitis B vaccine at delivery and complete the recommended vaccination series.

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#### Indications and Dosages

Indication	Prophylaxis
Infant born to known HBsAg-positive woman	Give HBIg 0.5 mL <b>immediately after birth</b> along with dose 1 of hepatitis B vaccine (t-free Recombivax HB) 0.5 mL IM <b>Use separate sites</b>
Infant born to woman at high risk for hepatitis B (i.e. intravenous drug use, sex trade worker) whose infectious status is unknown or negative (has possible window period)	Give HBIg 0.5 mL <b>immediately after birth</b> along with dose 1 of hepatitis B vaccine (t-free Recombivax HB) 0.5 mL IM <b>Use separate sites</b>
Primary caregiver or other household contact (e.g. father, nanny, etc) of infant has chronic hepatitis B virus infection	Give hepatitis B vaccine (t-free Recombivax HB) 0.5 mL IM <b>immediately after birth</b> <b>DO NOT GIVE HBIg</b>
If mother is at high risk for hepatitis B (other than intravenous drug user or sex trade worker) and her status is unknown or negative	Give hepatitis B vaccine (t-free Recombivax HB) 0.5 mL IM <b>immediately after birth</b> <b>DO NOT GIVE HBIg</b>
Father or primary caregiver is at high risk for hepatitis B and their status is unknown or negative	Give hepatitis B vaccine (t-free Recombivax HB) 0.5 mL IM <b>immediately after birth</b> <b>DO NOT GIVE HBIg</b>

**INFANRIX hexa** (diphtheria, tetanus, pertussis, hepatitis B, polio, and *haemophilus influenzae* type b) will be given at 2, 4, and 6 months of age.

The dose of the hepatitis B vaccine and/or HBIg will provide protection until the INFANRIX hexa is given at 2 months of age.

#### PRACTICE GUIDELINE

##### Equipment & Supplies:

- Hepatitis B vaccine (t-free Recombivax HB) (from Blood Bank)
- Hepatitis B immunoglobulin (if required) (from Blood Bank)
- 1 – 1 mL syringe
- 1 - blunt fill needle
- 2 – 25G 5/8 needles
- Medication labels
- Alcohol Swabs

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- Gauze

#### Procedure:

1. Gown and gloves should be worn until infant has received a bath.
2. The site of injection must be washed thoroughly. While a bath is preferable, in the interest of maintaining skin to skin with the mother in the first hour of life, ensuring that the legs are thoroughly washed with soap and water prior to administration is sufficient to prevent contaminants on skin from entering the body during injection.
3. Obtain order for hepatitis vaccine and HBIg if required.
4. Ensure physician has obtained and completed “Informed Consent Form”
5. Enter orders for Hep B Vaccine and HBIg in SCM.
6. Fill out “Blood Product Request Form” (No.NF166)
7. Take “Blood Product Request Form” to Blood Bank to retrieve vaccine and HBIg (may be retrieved by ward aide)
8. Check Lot #, expiry dates, and patient identifiers for HBIG and vaccine and Blood Bank Forms with a second RN (see [Blood/Blood Product Administration](#))
9. Administer HBIg 0.5 mL and hepatitis B vaccine 0.5 mL I.M. at separate sites at the same time with the assistance of a second RN
10. Observe for any reaction to vaccine - redness, swelling, etc.

#### Documentation:

NICU Flow Sheet or British Columbia Newborn Care Path  
Medication Administration Record  
Blood Bank Forms

#### References:

1. BC Centre for Disease Control. (June 2004). Hepatitis B Control From the website: [http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Hepatitis/Hep%20B/Epid\\_GF\\_HepBControl\\_June2004.pdf](http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Hepatitis/Hep%20B/Epid_GF_HepBControl_June2004.pdf) (accessed February 17, 2017)
2. BC Centre for Disease Control. (February 17, 2017). *Hepatitis B: Overview*. From the website: <http://www.bccdc.ca/health-info/diseases-conditions/hepatitis-b>
3. BC Children’s Hospital. (November 2015). Neonatal drug dosage guidelines. Retrieved February 17, 2017, from <http://teamsites.phsa.ca/sites/NeonatalProgram/Neonatal%20Drug%20Guidelines/Immunization%20Guidelines%202015.pdf>
4. Lok, A. & McMahon, B. (2009). Chronic Hepatitis B: Update 2009. *Hepatology*, Vol. 50,

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No. 3.

5. Public Health Agency of Canada. (February 17, 2017). *What you need to know about Hepatitis B*. From the website: [http://www.phac-aspc.gc.ca/hcai-iamss/bbp-pts/hepatitis/hep\\_b-eng.php](http://www.phac-aspc.gc.ca/hcai-iamss/bbp-pts/hepatitis/hep_b-eng.php)

### Persons/Groups Consulted

Director of Paediatrics, SPH

Clinical Pharmacist

Maternity Safety and Quality Council

### Revised By:

Patient/Nurse Educator Maternity

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