The following hepatitis B newborn prophylaxis protocols apply to:

A. Infants born to HBsAg-positive mothers
B. Infants born to unscreened mothers
C. Infants born to families with a household member known to be HBsAg-positive

NOTE: As follow-up of the newborn is determined by the parent/guardian’s area of residence, which may be in a First Nations Inuit Health jurisdiction, references to Public Health or instructions for Regional Public Health include First Nations Inuit Health.

At the time of prophylaxis, health care providers are asked to complete: 1) the Hepatitis B-Prophylaxis-Record Sheet for Infants and 2) the Manitoba Immunization Monitoring System (MIMS) Immunization Monitoring Form for Hospitals and Clinics. These forms are provided with each vial of hepatitis B immune globulin (HBIG) and hepatitis B pediatric vaccine and should be returned along with the infant’s post-partum referral form to the regional public health office of the parent/guardian’s region of residence for appropriate public health follow-up including:

- generating follow-up form letters (to be signed by Regional Medical Officer of Health or designate or First Nations Inuit Health) to the infant’s physician/practitioner and parent/guardian. The follow-up letters will advise that two additional doses of hepatitis B virus (HBV) vaccine should be given at birth as described below.

  A) Infants Born to HBsAg-positive Mothers

When a pregnant woman is identified as being HBsAg-positive from prenatal serology, Cadham Provincial Laboratory (CPL) will notify Manitoba Health who will forward the information to Regional Public Health. Regional Public Health will generate a follow-up form letter (to be signed by the Regional Medical Officer of Health or designate) to the mother’s prenatal care physician/practitioner. The follow-up letter will advise that hepatitis B virus (HBV) vaccine and HBIG should be given at birth as described below.

For the prevention of perinatal transmission of HBV in infants born to HBsAg-positive mothers, HBV vaccine and HBIG may be given at the same time but at different injection sites, using separate needles and syringes. Passive antibody from HBIG does not interfere with an active response to HBV vaccine.

1) Give HBIG (0.5 mL IM) in the anterolateral thigh immediately after birth (within 12 hours) (refer to product monograph).

2) Give HBV pediatric vaccine (0.5 mL) IM (refer to product monograph).

3) The infant will require two additional doses of vaccine at one and at six months of age. DTaP-HB-IPV-Hib vaccine can be used for the six month vaccine dose, subject to availability and current provincial eligibility criteria. The regional health authority of residence of the infant’s parent/guardian will send a letter to the parent/guardian as well as to the infant’s physician/practitioner indicating that two more doses of vaccine are required, along with ordering instructions and a reminder that immunizations should be entered into MIMS.

NOTE: The response to hepatitis B vaccine may be diminished in pre-term infants (less than 37 weeks gestation) weighing less than 2,000 grams at birth. Therefore, these infants require a total of four doses of hepatitis B vaccine, given at birth, and at one, two and six months of age.
4) Post-immunization testing for HBsAg and anti-HBs one month after administration of the last vaccine dose is recommended to ensure that the infant is not infected (HBsAg negative) and that protective antibody is present (anti-HBs positive). This recommendation is included in the letter to the infant’s parent/guardian as well as in the letter to the infant’s regular physician/practitioner.

B) Infants Born to Unscreened Mothers
• Pregnant women whose hepatitis B status is unknown at delivery should undergo blood (HBsAg) testing as soon as possible to determine their infection status (call Cadham Provincial Laboratory at 204-945-6123 to arrange).
• While awaiting test results, the infant should receive HBIG and the first dose of hepatitis B pediatric vaccine (0.5 mL) within 12 hours of birth (as described in steps 1 and 2 in Section A).

• If the mother is found to have hepatitis B infection (i.e., HBsAg-positive), the hepatitis B pediatric vaccine series should be completed in the infant and post-immunization testing performed as described above in steps 3 and 4 in Section A. If the mother tests HBsAg negative subsequent to initiation of immunoprophylaxis, completion of the hepatitis B vaccination series in the infant is still recommended; however, post-immunization testing of the infant is not necessary.

C) Infants Born to Families with a Household Member known to be HBsAg-positive
• If a household member of the infant’s family other than the mother is HBsAg-positive, hepatitis B pediatric vaccine (0.5 mL) should be administered to the infant as described above in steps 2 to 4 in Section A. HBIG is not indicated.