Protocol for the Prevention of Perinatal Hepatitis B
Perinatal Hepatitis B Prevention Program

The North Dakota Department of Health (NDDoH) Perinatal Hepatitis B Prevention Program is a program designed to eliminate the incidence of hepatitis B infection in infants born to hepatitis B positive women. This is done by following infants born to hepatitis B positive women to ensure they receive the hepatitis B birth dose and hepatitis B immune globulin (HBIG) within 12 hours of birth, receive the additional hepatitis B vaccine doses to complete the series, and are tested for hepatitis B infection and immunity after they have completed the hepatitis B vaccination series.

Prenatal Care Provider Responsibilities:

- All pregnant women should be screened for hepatitis B surface antigen
- All hepatitis B surface antigen positive pregnant women should be tested for hepatitis B virus deoxyribonucleic acid (HBV DNA).
- Hepatitis B positive women should be reported to the NDDoH by the health care provider using the Health Care Provider Report Form and faxing to the NDDoH’s confidential fax number: 701.328.0355.
- Pregnancy in a hepatitis B positive woman is a reportable condition in North Dakota. **Cases must be reported to the NDDoH.** It is important for the health care provider to report to the NDDoH, rather than relying on the laboratory so that no cases are missed.

Hospital Responsibilities

- The mother’s hepatitis B surface antigen laboratory results should be reviewed upon admission to the delivery hospital.
  - If these are not available, the woman should be tested as soon as possible.
- Infants born to hepatitis B positive women should receive the **hepatitis B vaccine birth dose along with hepatitis B immune globulin within 12 hours of birth, regardless of birthweight.** This greatly reduces the infant’s chances of becoming infected with hepatitis B virus.
- If mother’s status is still unknown, infant should receive hepatitis B vaccine birth dose within 12 hours of birth regardless of birthweight.
  - Infants < 2,000 grams should also receive HBIG if status isn’t determined within 12 hours.
  - Infants ≥ 2,000 grams should receive HBIG if mother is determined to be HBsAg+, as long as it has not been longer than 7 days.
- **After delivery, the Hospital Report Form should be completed and faxed to the NDDoH:** 701.328.0355.
Pediatric Providers

• When a child born to a hepatitis B positive woman receives the 2\textsuperscript{nd} and 3\textsuperscript{rd} doses of hepatitis B vaccine, the \textbf{Perinatal Hepatitis B Prevention Checklist} should be completed and faxed to the North Dakota Department of Health by the health care provider giving the vaccine.
• The child should receive post vaccination serological testing (PVST) to ensure the child has not developed hepatitis B infection (HBsAg) and has developed adequate antibody to hepatitis B surface antigen (anti-HBs) 1-2 months after the 3\textsuperscript{rd} dose and when the child is at least 9 months old.
• The \textbf{Perinatal Hepatitis B Prevention Checklist} should once again be completed and faxed to the NDDoH when PVST is completed.

NDDoH Perinatal Hepatitis B Prevention Program Responsibilities:

1. The NDDoH supplies hepatitis B vaccine for administration to all infants born in North Dakota.
2. When a pregnant woman tests positive for hepatitis B or a woman who is chronically infected with hepatitis B becomes pregnant. It is the health care provider’s responsibility to report the condition to the NDDoH.
3. The NDDoH then follows up with the woman to explain the perinatal hepatitis B program. The NDDoH also contacts the delivery hospital to ensure they are aware that a hepatitis B positive women will be delivering in their hospital and therefore, they need to have hepatitis B immune globulin (HBIG) on hand.
4. After delivery, the NDDoH ensures that the infant received both HBIG and the birth dose of the hepatitis B vaccine within 12 hours of birth. NDDoH then sends a letter to the infant’s pediatrician informing them that the child was born to a hepatitis B positive women and the hepatitis b vaccine series must be completed on schedule, along with the \textbf{Perinatal Hepatitis B Prevention Checklist}.
5. The NDDoH follows up with the mother and health care provider if the child falls behind on vaccinations. This is done in the form of letters and phone calls.
6. One to two months after the series is completed and when the child is at least nine months old, the NDDoH will send a letter to the primary care provider and mother, reminding them that the child will need post-vaccination serological testing (PVST). This is done to ensure the child has not developed hepatitis B infection (HBsAG) and has developed adequate antibody to hepatitis B surface antigen (anti-HBs).
7. If the testing shows the infant is immune to hepatitis B due to vaccination, the NDDoH will send the mother a letter explaining that her child is immune to hepatitis B, along with the child’s Certificate of Immunization.
8. If further vaccination and testing is necessary, the NDDoH will work with the health care provider to ensure the child is revaccination and retested.

Updated May 2018
Provider Documents:

Health Care Provider Hepatitis B Report Form:  

Hepatitis B Hospital Report Form:  

Provider Checklist:  

More resources on Perinatal Hepatitis B Prevention can be found at the following links:

CDC Perinatal Hepatitis B Transmission:  https://www.cdc.gov/hepatitis/hbv/perinatalxmtn.htm

CDC Post-vaccination serological testing (PVST) for infants born to hepatitis B positive women:  
https://www.cdc.gov/hepatitis/hbv/pvst.htm

Interpretation of hepatitis B serological test results:  

CDC Patient Education Fact Sheet on Perinatal Hepatitis B:  
https://www.cdc.gov/hepatitis/HBV/PDFs/HepBPerinatal-ProtectWhenPregnant.pdf

Immunization Action Coalition Hepatitis B Birth Dose Materials:  
http://www.immunize.org/birthdose/