

MEDICA®

Title: *Routine Prenatal Care*

This guideline was developed with input from specialists in obstetrics and gynecology and approved by the Medical Policy Committee.

Scope and Purpose

The purpose of this guideline is to provide evidence-based information to describe routine prenatal care in average risk pregnancies. It does not address prenatal care in high risk pregnancies.

Definitions

1. **Estimated Date of Delivery (EDD)** is the estimated date of confinement (EDC), otherwise known as due date.
2. **Fetal aneuploidy** is characterized by the presence of extra or missing chromosomes in one or more of the 23 pairs of chromosomes in the human genome. Aneuploidy occurs during cell division when the chromosomes do not separate properly between the two daughter cells. Chromosome abnormalities occur in approximately one of 160 live births, and can result in defined birth defects. Most cases of aneuploidy result in spontaneous fetal demise, but others often proceed to live births. The most common aneuploidies among live births are trisomy 13 (Patau syndrome), trisomy 18 (Edward syndrome), and trisomy 21 (Down syndrome).
3. **Gestational diabetes** is a type of diabetes that develops during pregnancy (gestation). This rise in maternal blood sugar can affect the pregnancy and the health of the fetus.
4. **Preeclampsia** is a condition in pregnancy associated with elevated blood pressure, edema, and/or proteinuria. Severity is determined by factors including central nervous system symptoms (headaches, visual changes), amount of proteinuria, degree of oliguria (i.e., abnormally small amount of urine production), elevated liver enzymes, decreased hemoglobin and/or platelets, and/or restricted fetal growth.
5. **Rhesus (Rh) factor** is an antigen (immunoglobulin) occurring on red blood cells of up to 85% of humans. Patients found to have immunoglobulin factor D are classified Rh (D) positive; those who lack the factor are classified Rh (D) negative. If the mother's Rh factor differs from that of the fetus (e.g., mother is Rh negative; fetus is Rh positive), hemolytic disease of the newborn and/or incompatibility in blood transfusions may develop.
6. **RhoGAM** is one brand of injectable Rh immunoglobulin. RhoGAM is administered at 28 weeks gestation to women who are Rh(D) negative. It is intended to prevent maternal Rhesus (D) sensitization and resulting fetal complications when the fetus is Rh(D) positive.

Comments

Frequency of prenatal visits should be individualized. A woman with an uncomplicated pregnancy is routinely seen every 4 weeks until 28 weeks of pregnancy. Thereafter, appointments are often every 2 weeks until 36 weeks of pregnancy, when they become weekly until delivery.

Prenatal Visits

FIRST PRENATAL VISIT

Frequency of prenatal visits can be individualized. Optimal number and frequency of visits has limited data. However, observational data suggests care can save lives.

First Prenatal Visit

1. Medical history and physical is obtained, and laboratory tests are performed at the first prenatal visit. The visit can include description of anticipated care, explanation of lab tests being ordered, introduction to the members of the care team, signs or concerns to be reported to the care team, how to contact the care team, and the labor and delivery coverage schedule.

2. Individual risks to the pregnancy are identified. There normally include status of the following: prior pregnancy losses, previous gestational diabetes, previous preterm labor, and previous preeclampsia.
3. Evaluation of additional risk factors is performed, including (1) the woman's exposure to tobacco and alcohol, (2) work safety, (3) risk for domestic violence, (4) assessment for depression, (5) nutrition status, and (6) activity level.
4. Optimal dietary or supplemental doses for folic acid and iron are recommended/prescribed.
5. The World Health Organization recommends all pregnant women receive an influenza vaccine, if pregnant during influenza season.
6. Importance of newborn care, immunizations, and feeding should be discussed, and the pregnant women should be encouraged to meet with a newborn care provider.
7. Pregnant women should be counseled on the benefits of breast feeding and be made aware of resources available to assist in decisions related to breast feeding.

Note: These opportunities vary by community, provider, and care delivery systems.

8. Estimated delivery date (EDD) is determined. EDD should be clearly documented in medical records and discussed with patient. EDD can be confirmed by various methods, including:

- A. First trimester ultrasound (i.e., measurement of fetal pole to determine gestational age)
- B. If reproductive technology used for conception, date of embryo transfer and age of embryo
- C. Calculation of EDD from last menstrual period (LMP).

NOTE: Preference is to confirm EDD with ultrasound dating.

- D. Discrepancy between ultrasound dating and LMP to determine optimal estimate of EDD.

9. Routine First Trimester laboratory testing.

- A. Centers for Disease Control recommends screening all pregnant women for:

- i. Human immunodeficiency virus (HIV)
- ii. Hepatitis B
- iii. Syphilis
- iv. Chlamydia
- v. Immunity to Rubella/Rubeola
- vi. Immunity to Herpes Varicella
- vii. Urine screening and culture if indicated.
- viii. Patients considered at risk may also be tested for *Neisseria gonorrhoea*.
- ix. Patients considered at risk may also be tested for tuberculosis.

- B. Other laboratory testing needing documentation in pregnant women include:

- i. Current assessment for cervical cancer
- ii. Blood type and Rhesus (Rh) factor
- iii. Cystic Fibrosis carrier status, as applicable
- iv. Tay-Sachs status, as applicable
- v. Sickle cell carrier status, as applicable
- vi. Thalassemia carrier status, as applicable.

10. Testing for fetal aneuploidy. All pregnant women should be offered the option of testing for aneuploidy. The choice of which test to perform is individualized based upon risk factors and discussion of indications between the patient and provider. (See Medica Utilization Management Policy, *Maternal Plasma Testing for Detection of Cell-Free Fetal DNA for Analysis of Chromosomal Aneuploidies (III-DIA.11)*).

- A. Noninvasive serum testing

- i. First trimester screening performed at 10 0/7 weeks and 13 6/7 weeks, to include ultrasound measurement to test nuchal translucency in conjunction with serum free beta- human chorionic gonadotropin (beta-hCG), or hCG and pregnancy associated plasma protein A (PAPP-A).
- ii. Quadruple Screen performed at 15 0/7 weeks and 22 6/7 weeks to assesses for aneuploidy as well as risk for neural tube defects. Serum measurements include levels of hCG, alpha fetoprotein, dimeric inhibin A, and unconjugated estriol.
- iii. Penta Screen, which includes serum tests in the quadruple screen, with the addition of hyperglycosylated hCG.
- iv. Triple screen, which includes serum hCG, alpha fetoprotein and unconjugated estriol.

NOTE: This test has lower sensitivity for down syndrome and has largely been replaced by Quadruple Screen.

- v. Cell free fetal DNA screening. (See Medica Utilization Management Policy, *Plasma Testing for Detection of Cell-Free Fetal DNA for Analysis of Chromosomal Aneuploidies (III-DIA.11)*).

B. Invasive testing

- i. Typically, invasive tests are not performed in routine low risk prenatal care. Rather, these tests are performed for definitive diagnosis of aneuploidy.
- ii. Noninvasive screening methods remain the most appropriate choice for first-line screening for most women in the general obstetric population.
 - a) If a fetal structural anomaly is identified on ultrasound examination, diagnostic testing should be offered rather than cell-free fetal DNA screening. Given the potential for inaccurate results and to understand the type of trisomy for recurrence-risk counseling, a diagnostic test should be recommended for a patient who has a positive cell-free DNA test result.
 - b) Parallel or simultaneous testing with multiple screening methodologies for aneuploidy is not cost-effective and should not be performed.
- iii. Invasive testing methods include chorionic villus sampling or amniocentesis. These procedures are performed to obtain a definitive karyotype following an unconfirmed diagnosis following non-invasive testing.

Note: A discussion of the risks, benefits, and alternatives of various methods of prenatal screening and diagnostic testing, including the option of no testing, should occur with all patients.

FIRST AND SECOND TRIMESTER CARE

1. Routine prenatal visits should include measuring patients' weight and blood pressure, assessment of fetal activity and fetal growth, and assessment of any developing, significant risk factors.
2. Testing for gestational diabetes should be performed on all pregnant women between 24 and 28 weeks gestation.
NOTE: Early testing for diabetes may be indicated for women with obesity, relative with diabetes, previous baby born weighing more than 4000 grams/9 pounds, previous gestational diabetes in prior pregnancy, hypertension, hyperlipidemia, and/or known glucose intolerance.
3. Serum testing for anemia should be assessed at 24-28 weeks. Evidence of iron deficiency anemia can be treated with supplemental iron sulfate or elemental iron.
4. In women who are Rh(D) negative, antibody screening should be repeated at 28 weeks and RhoGAM administered, if indicated.
5. The World Health Organization recommends all pregnant women receive updated pertussis vaccine at 28 weeks.
6. The World Health Organization recommends all pregnant women receive an influenza vaccine, if pregnant during influenza season.

THIRD TRIMESTER CARE

1. Routine prenatal visits should include measuring patients' weight, blood pressure, and assessment of fetal activity, assessment of fetal growth, assessment of fetal position, and assessment of any further significant risk factors.
2. All pregnant women between 35 and 37 weeks gestation should be tested for the presence of group B *Streptococcus* bacteria, a bacteria normally found in the vagina and/or rectum of up to 25% of healthy, adult women.
 - A. A laboratory culture is performed after obtaining a specimen using a recto-vaginal swab.
 - B. Women testing positive should receive antibiotics during labor.
3. Importance of newborn care, immunizations, and feeding should be discussed, and the pregnant women should be encouraged to meet with a newborn care provider.
4. Pregnant women should be counseled on the benefits of breast feeding and be made aware of resources available to assist in decisions related to breast feeding.
NOTE: These opportunities vary by community, provider, and care delivery systems.
5. Patients need to gain understanding of the importance of watching for signs of labor and/or ruptured membranes and how to monitor for these indications.

6. Patients should be oriented to the on call provider system.
7. Patients should be offered a tour of the birthing facility.

References:

11/2017 MPC:

1. American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologists (ACOG). *Guidelines for Perinatal Care*, 8th Edition. Washington, DC: ACOG. 2017.
2. Centers for Disease Control and Prevention (CDC). Pregnancy: During Pregnancy. Last updated July 2017. <https://www.cdc.gov/pregnancy/during.html>.
3. Lockwood CJ, Magriples U. Prenatal Care: Initial Assessment. Last updated June 30, 2017. In: *UpToDate*, Basow, DS (Ed), UpToDate, Waltham, MA, 2017.
4. Lockwood CJ, Magriples U. Prenatal Care: Initial Assessment. Last updated June 30, 2017. In: *UpToDate*, Basow, DS (Ed), UpToDate, Waltham, MA, 2017.
5. Lockwood CJ, Magriples U. Prenatal Care: Patient Education, Health Promotion, and Safety of Commonly Used Drugs. Last updated August 29, 2017. In: *UpToDate*, Basow, DS (Ed), UpToDate, Waltham, MA, 2017.
6. Lockwood CJ, Magriples U. Prenatal Care: Second and Third Trimesters. Last updated August 17, 2017. In: *UpToDate*, Basow, DS (Ed), UpToDate, Waltham, MA, 2017.
7. Minnesota Department of Health (MDH) Fact Sheet. Pregnant Women, Mothers, and Infants – Early and Adequate Prenatal Care. September 2009. Minneapolis, MN. <http://www.health.state.mn.us/divs/cfh/na/documents/prenatalcare2010.pdf>
8. U.S. Department of Health and Human Services. National Institutes of Health (NIH). Eunice Kennedy Shriver National Institute of Child Health and Human Development: Prenatal Care. <https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/Pages/prenatal-care.aspx#prenatal>.
9. U.S. Preventive Services Task Force (USPSTF). Final Recommendation Statement: Folic Acid for the Prevention of Neural Tube Defects: Preventive Medication. Current as of January 2017. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/folic-acid-for-the-prevention-of-neural-tube-defects-preventive-medication>.
10. World Health Organization (WHO) Recommendations on Antenatal Care for a Positive Pregnancy Experience. 2016. http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/.

DOCUMENT HISTORY

Original MPC Endorsement Date	November 2017
Subsequent MPC Endorsement Date(s)	

APPENDIX 1: Guidelines for Redating Based on Ultrasonography

Gestational Age Range*	Method of Measurement	Discrepancy Between Ultrasound Dating and LMP Dating that Supports Redating
$\leq 13 \frac{6}{7}$ wk <ul style="list-style-type: none"> • $\leq 8 \frac{6}{7}$ wk • $9 \frac{0}{7}$ wk to $13 \frac{6}{7}$ wk 	CRL	More than 5 d More than 7 d
14 $\frac{0}{7}$ wk to 15 $\frac{6}{7}$ wk	BPD, HC, AC, FL	More than 7 d
16 $\frac{0}{7}$ wk to 21 $\frac{6}{7}$ wk	BPD, HC, AC, FL	More than 7 d
22 $\frac{0}{7}$ wk to 27 $\frac{6}{7}$ wk	BPD, HC, AC, FL	More than 10 d
28 $\frac{0}{7}$ wk and beyond [§]	BPD, HC, AC, FL	

Abbreviations: AC, abdominal circumference; BPD, biparietal diameter; CRL, crown-rump length; FL, femur length; HC, head circumference; LMP, last menstrual period

*Based on last menstrual period.

[§]Because of the risk of redating a small fetus that may be growth restricted, management decisions based on third-trimester ultrasonography alone are especially problematic and need to be guided by careful consideration of the entire clinical picture and close surveillance.

*Source: American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologists (ACOG).
 Guidelines for Perinatal Care, 8th Edition. Washington, DC: ACOG. 2017.*

APPENDIX 2: Routine Laboratory Testing in Pregnancy

Certain laboratory tests are performed routinely in pregnancy women in order to identify conditions that may affect the outcome of the pregnancy for the mother or fetus. The results of these tests should be reviewed in a timely manner, communicated to the woman, and documented in the medical record. Abnormal test results prompt some action on the part of the health care provider.

The Centers of Disease Control and Prevention (CDC) recommends screening all pregnant women for human immunodeficiency virus (HIV), hepatitis B, syphilis, and chlamydial infection during the first prenatal visit. In addition, the CDC recommends that, when indicated, pregnant women should be screened for *Neisseria gonorrhoeae* at the first prenatal visit. Women at high risk of tuberculosis also should be screened early in pregnancy. Other laboratory tests that are routinely performed early in pregnancy follow.

Routine Laboratory Tests Early in Pregnancy

Laboratory Test	Potential Actions for Abnormal Results
Blood Type	There is no abnormal result here. Blood type is documented for information only, should urgent blood transfusion be necessary at a later time and in order to communicate to the pediatric care provider the risk of ABO blood incompatibility in the neonatal period.
D (Rh) Type	Patients who are Rh negative are at risk of developing isoimmunization to D antigen. Further steps depend on results of the antibody screening. Weak rhesus-positive (formerly Du-positive) patients are not at risk of isoimmunization.
Antibody Screen	Any positive antibody test result requires obtaining a titer and further action by the health care provider.
Complete blood count (CBC) (hematocrit/hemoglobin for iron deficiency, or treated with supplemental iron, or both MCV and platelets)	Women with microcytic anemia should be evaluated further and retested in 3-4 weeks. Women who are of African descent, Asian, or Mediterranean should have a hemoglobin electrophoresis test performed to rule out thalassemia or sickle cell disease. Further testing may be warranted pending the results of these interventions and tests.
VDRL/RPR (nontreponemal tests)	Evaluate to confirm active syphilis status with treatment as needed. False-negative serologic test results may occur in early primary infection, and infection after the first prenatal visit is possible. False-positive nontreponemal test results can be associated with various medical conditions unrelated to syphilis; therefore, persons with a reactive VDRL or RPR test result should receive a treponemal test to confirm the diagnosis of syphilis.
Urine culture (if performed)	Treat asymptomatic bacteriuria and then do a test of cure*. If results are positive for GBS bacteriuria, document this on the patient's chart and do not perform third-trimester GBS screening but administer prophylactic antibiotics in labor instead.
Urine screening	Obtain baseline screening for urine protein content (dipstick) to assess renal status.
HBsAg	If positive, counsel patient regarding her health risks; document clearly in the chart so that the infant's physician know to treat the infant with hepatitis B vaccination and hepatitis B immune globulin.

Routine Laboratory Tests Early in Pregnancy (*continued*)


Laboratory Test	Potential Actions for Abnormal Results
HIV counseling/testing	Affirm your state’s laws. If the patient is HIV positive, counsel and refer her to an infectious disease clinic or maternal-fetal medicine specialist for further management. Discuss safe-sex practices.
Chlamydia	Women found to have chlamydial infection during the first trimester should be retested within approximately 3-6 months, preferably in the third trimester.
Gonorrhea (when indicated)	Pregnant women found to have gonococcal infection during the first trimester should be retested within approximately 3-6 months, preferably in the third trimester. Uninfected pregnant women who remain at high risk for gonococcal infection also should be retested during the third trimester.
Mantoux tuberculin skin test or interferon-gamma release assay (when indicated)	Women with a positive or intermediate test result should be evaluated with a chest X-ray and review of their pertinent history to determine the need for additional evaluation.

Abbreviations: GBS, group B streptococcus; HBsAg, hepatitis B surface antigen; HIV, human immunodeficiency virus; MCG, mean corpuscular volume; RPR, rapid plasma regain; VDRL, venereal disease research laboratory.

*In this case, test of cure refers to retesting the patient’s urine after completion of antibiotic therapy to determine if the bacteria have been eliminated. Although this practice is recommended in the literature, more data are needed to determine the effectiveness of this strategy.

Source: American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologists (ACOG). *Guidelines for Perinatal Care*, 8th Edition. Washington, DC: ACOG. 2017.

APPENDIX 3: Blood Lead Screening Guidelines for Pregnant Women in Minnesota



Minnesota
 Department of Health

Quick Reference Guide: Blood Lead Screening Guidelines for Pregnant and Breastfeeding Women in Minnesota


A risk questionnaire should be administered at the first prenatal visit for each pregnant woman, or if possible, during a pre-conception visit. Some health care providers who serve high-risk populations may choose to conduct blood lead testing on all pregnant women rather than administer the questionnaire. Overt signs of lead exposure are often not present. Therefore, a lack of clinical signs should not be used as a justification for not conducting a blood lead test.

Risk Screening Questionnaire for Pregnant Women			
Yes	No	Don't Know	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Do you or others in your household have an occupation that involves lead exposure?*
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Do you or others in your household have hobbies or activities likely to cause lead exposure?*
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. During the last 12 months, did you move to Minnesota from another country or from a major metropolitan area?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Do you use any traditional folk remedies?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Do you live in a house built before 1978 that is currently being renovated?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Do you use handmade pottery, imported pottery, or leaded crystal?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Do you eat or chew on any nonfood items, such as clay, crushed pottery, soil, or paint chips?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Do you eat venison or other game that was harvested with lead bullets?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Do you have any bullets in your body from past gunshot wounds?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Were you ever diagnosed with lead poisoning in the past?

Pregnant women who answer "Yes" or "Don't Know" to ANY of the above questions should have a blood lead test. Women should also be tested if they have any concerns about lead not addressed by this questionnaire.

*Examples of Lead-Related Hobbies, Occupations, and Industries	
Artists, including painters, ceramics makers, jewelry makers and repairers, stained glass makers, and print makers (materials used may contain lead) Auto repairers (car parts may contain lead) Battery manufacturers (batteries contain lead) Bridge reconstruction workers (old paint may contain lead) Construction workers (materials used may include lead) Demolition workers Firing range workers and gunsmiths (ammunition contains lead) Glass manufacturers (lead may be used in glass production) Lead abatement workers Lead figurine makers Lead manufacturers, refiners, and smelters Lead miners Manufacturers of bullets, fishing sinkers, ceramics, industrial machinery, and electrical components (all may contain lead) Painters (old paint and commercial paint may contain lead)	Paint and pigment manufacturers Plastic manufacturers (materials made may contain lead) Plumbers and pipe fitters (pipes may contain lead) Police officers and armed forces members (ammunition contains lead) Practitioners of Bleiglessen (German tradition of dropping molten lead into water to make predictions) Radiator repairers (radiators may contain lead) Recyclers of metal, glass, electronics, and batteries (may contain lead) Remodelers, repainters, and renovators of houses or buildings Restorers or refinishers of antique products/furniture Rubber product manufacturers (process contains lead) Shipbuilders (materials used may include lead) Solid waste incinerator operators (waste may contain lead) Splicers, manufacturers, and strippers of cable or wire Steel welder (galvanized steel is coated in part with lead)

Additional information on blood lead testing and follow-up can be found in the complete Blood Lead Screening Guidelines for Pregnant and Breastfeeding Women in Minnesota at www.health.state.mn.us/divs/eh/lead



Minnesota
 Department of Health


For more information about lead, contact:
 Minnesota Department of Health
 Environmental Health Division
 Lead and Healthy Homes Program
 PO Box 64975
 St. Paul, MN 55164-0975
 651-201-4620

If you require this document in another format,
 call: 651-201-5000 • 1-800-657-3908

Funded by CDC Grant CDC-RFA-EH14-1408PPHF14
 Revised 8/2015
 Item # 52596

Source: www.health.state.mn.us/divs/eh/lead/reports/pregnancy/pregnancy1page.pdf

APPENDIX 4: Perinatal Hepatitis B Prevention Program



MINNESOTA DEPARTMENT OF HEALTH
 PERINATAL HEPATITIS B PREVENTION PROGRAM

Minnesota Perinatal Hepatitis B Prevention Program

What is perinatal transmission of hepatitis B?

Perinatal transmission of the hepatitis B virus (HBV) from mother to child at birth is very efficient. The risk of infection can be as high as 70-90 percent. The hepatitis B virus is transmitted by blood exposures. Up to 90 percent of perinatally infected babies will develop a chronic hepatitis B infection. An estimated 15-25 percent of these individuals will ultimately die of liver failure secondary to chronic hepatitis, liver cirrhosis, or primary liver cancer. Treatment initiated within 12 hours after birth, followed by completion of the 3-dose vaccine series, is up to 95 percent effective at preventing this serious infection.

Approximately 20,000 new hepatitis B cases are diagnosed in the U.S. each year. Before routine hepatitis B vaccination programs, an estimated 30-40 percent of chronic infections were believed to have been acquired from perinatal or early childhood transmission. The disease is largely preventable through treatment of infants born to infected mothers, routine childhood immunization, as well as vaccination of individuals at risk for infection.

Since 1988, the Centers for Disease Control's Immunization Practices Advisory Committee (ACIP) has recommended that all pregnant women be screened for hepatitis B infection. Testing should be performed with each pregnancy, regardless of patient history or previous testing results. The cost effectiveness of universal hepatitis B screening of pregnant women compares with other prenatal and neonatal screening programs (including hypothyroidism and phenylketonuria).

What is the Perinatal Hepatitis B Prevention program in Minnesota?

The Minnesota Department of Health (MDH) implemented a perinatal hepatitis B prevention program in 1990. Our goal is to **identify and treat infants born to hepatitis B-positive women** in an effort to prevent perinatally acquired infection. The benefits of this cost-effective strategy are:

- preventing potential long-term health consequences for the child, and
- eliminating a potential source of infection to others in the future.

To prevent perinatal transmission:

1. Obstetric patients are evaluated and screened for HBV infection early in each pregnancy regardless of past test results and/or immunization status. HBsAg (hepatitis B surface antigen) serology testing is used for screening. If the patient is uninfected but identified as high risk, screening tests are repeated later in the pregnancy.
2. Hepatitis B-positive women receive further medical evaluation and follow-up.
3. Hepatitis B serology results are documented in the patient's prenatal record. A copy of the original HBsAg lab is forwarded to the hospital to be placed in the mother's and infant's charts.
4. Pregnancies in hepatitis B-positive women are reported to MDH within one working day of knowledge of the pregnancy.
5. Local public health nurses receive referrals from MDH and follow up with the expectant mother to educate her about her infection and the recommended preventive treatment for her baby.
6. Infants born to hepatitis B-positive women receive:
 - Hepatitis B immune globulin (HBIG) and HBV vaccine within 12 hours of birth,

- Additional doses of HBV vaccine to complete the series in accordance with the recommended schedule, and
- Post-vaccination serology at 9-12 months of age

7. All treatment is documented in the infant's medical record and reported to local or state health departments.
8. Infants who are not infected and do not demonstrate an immune response in post-vaccination serologic testing receive a second vaccine series.
9. Hepatitis B-positive infants are referred for further medical evaluation and follow-up.
10. Household members and other close contacts of the mother and infant are screened; HBV-susceptible individuals are vaccinated; and infected individuals receive further medical evaluation and follow-up.


Minnesota Department of Health
 Perinatal Hepatitis B Prevention Program
 PO Box 64975, St. Paul, MN 55164
 651-201-5414, 1-877-676-5414
www.health.state.mn.us/hepatitis

To obtain this information in a different format, call: 651-201-5414.

<http://www.health.state.mn.us/macros/search/index.html?q=Minnesota+Perinatal+Hepatitis+B+Prevention+Program&cx=001025453661958716519%3Aj2323tveixc&cof=FORID%3A10&ie=UTF-8&submit=Search>

Source: www.health.state.mn.us/divs/idepc/diseases/hepb/perinatal/perinatalprog.html

APPENDIX 5: Perinatal Hepatitis B Birth Report

Perinatal Hepatitis B Birth Report		MDH Use Only Record Number
Hospitals should use this form to report perinatal hepatitis B births to the Minnesota Department of Health.		
Fax completed form to: (651) 201-5502 Perinatal Hepatitis B Coordinator Minnesota Department of Health P.O. Box 64975 St. Paul, MN 55164-0975	Person Completing: _____ Phone: _____ Date Faxed: ____ / ____ / ____	
For women known to be HBsAg Positive: Administer hepatitis B immune globulin (HBIG) and hepatitis B vaccine , within 12 hours of birth, to all infants born to hepatitis B positive mothers.		
Name of hospital: _____		
Mother's hospital record no: _____		
Mother's information		HBsAg(+) Test date: ____ / ____ / ____
Last name: _____		First name: _____
Address: _____		Phone: _____
City: _____	Zip code: _____	Alternate phone (i.e. relative): _____
Physician's name: _____		Clinic name: _____
Mother's date of birth: ____ / ____ / ____		Clinic phone: _____
Race: <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> Unknown <input type="checkbox"/> American Indian <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Other _____		Ethnicity: <input type="checkbox"/> Hispanic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Somali
Client hepatitis treatment: Monitored by physician for HepB? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Treated for HepB during this pregnancy? <input type="checkbox"/> Yes If yes, treatment start date: ____ / ____ / ____ <input type="checkbox"/> No <input type="checkbox"/> Unknown Anti-viral treatment brand/dose: _____		
Infant's Information		Infant's hospital record no.
Last name: _____		First: _____
Date of birth: ____ / ____ / ____	Time of birth: <input type="checkbox"/> AM <input type="checkbox"/> PM	Birthweight: _____ Sex: <input type="checkbox"/> M <input type="checkbox"/> F
Date of HBV1: ____ / ____ / ____	Time of HBV1: <input type="checkbox"/> AM <input type="checkbox"/> PM	Date of HBIG: ____ / ____ / ____ Time of HBIG: <input type="checkbox"/> AM <input type="checkbox"/> PM
HBV1 Brand: <input type="checkbox"/> Engerix <input type="checkbox"/> Recombivax		
Important! Clinic where infant will receive HBV2: _____		City of Clinic: _____
Infant's physician (Include phone if known): _____		
Infant's insurance: <input type="checkbox"/> CHIP <input type="checkbox"/> Medicare <input type="checkbox"/> Military/VA <input type="checkbox"/> Medicaid/State assistance program <input type="checkbox"/> Indian Health Services <input type="checkbox"/> Private/HMO/PPO/Managed care plan <input type="checkbox"/> Unknown <input type="checkbox"/> Uninsured <input type="checkbox"/> Other _____		
 MINNESOTA MDH <small>DEPARTMENT OF HEALTH</small>		Perinatal Hepatitis B Prevention Program P.O. Box 64975 St. Paul, MN 55164-0975 www.health.state.mn.us/hepatitis 651-201-5557
		(1/28/15)

Available at: <http://www.health.state.mn.us/divs/idepc/diseases/hepb/perinatal/hcp.html>

Clinical guidelines are intended to be used to encourage quality patient care, but cannot guarantee specific patient outcome, and should be used only as a reference guide. The guidelines are not intended to replace a clinician's own judgement with regard to the care needed by individual members or to establish protocols for the care of all members. Coverage of specific services may vary based on the terms of specific member/enrollee contracts (including state and federal government program contracts), administrative policies, and state/federal mandates.