NOVA SCOTIA PRENATAL RECORD
COMPANION DOCUMENT

July 2007
Table of Contents

ASSEMBLING THE PRENATAL RECORD…………………………………………………3
GLOSSARY OF TERMS……………………………………………………………………5
DEMOGRAPHIC INFORMATION…………………………………………………………10
PREGNANCY DATING……………………………………………………………………11
OBSTETRICAL HISTORY………………………………………………………………11
PRESENT PREGNANCY/PAST ILLNESS………………………………………………12
PHYSICAL ASSESSMENT………………………………………………………………15
PSYCHOSOCIAL/ENVIRONMENTAL……………………………………………………15
GENETIC SCREENING…………………………………………………………………16
EDUCATION/DISCUSSION……………………………………………………………17
PRENATAL EDUCATION………………………………………………………………17
NEWBORN SCREENING………………………………………………………………17
PARENTING/LABOUR BIRTH & PREGNANCY EXPECTATIONS/CONCERNS…....17
BREASTFEEDING………………………………………………………………………18
HEALTHY EATING……………………………………………………………………18
ACTIVITY………………………………………………………………………………19
FLU VACCINE…………………………………………………………………………19

ANTENATAL SCREENING……………………………………………………………20
FIRST PRENATAL VISIT………………………………………………………………21
9-13th WEEKS…………………………………………………………………………26
15-20th WEEKS………………………………………………………………………26
18-21 WEEKS…………………………………………………………………………26
24-28 WEEKS…………………………………………………………………………26
28 WEEKS……………………………………………………………………………28
35-37 WEEKS………………………………………………………………………..28
POST TERM MANAGEMENT (41 WEEKS)…………………………………………28

PROBLEM LIST/CARE PLAN…………………………………………………………30
PRENATAL VISITS……………………………………………………………………30
REFERENCES…………………………………………………………………………31
APPENDICES…………………………………………………………………………34
ASSEMBLING THE PRENATAL RECORD

The prenatal record will arrive to your office/facility in three separate duplicate sheets and requires assembly prior to use by the primary care provider. The sheets are numbered/titled in order: Nova Scotia Prenatal Record 1, 2 and 3. The third sheet is intended for ongoing documentation at each prenatal visit. If this sheet is completed, additional Nova Scotia Prenatal Record 3 sheets may be added as needed.

If you require additional Nova Scotia prenatal record forms please contact:

Reproductive Care Program of Nova Scotia
5991 Spring Garden Road, Suite 700
Halifax, NS B3H 1Y6
Tel: (902) 470-6798
Email: rcp@nshealth.ca

July 2007
Purpose: The NS Prenatal Record offers prenatal care providers a standardized format to document assessment, investigation and treatment during pregnancy. The prenatal record:

- Provides a systematic, sequential approach to prenatal care
- Provides information regarding screening and testing at specific gestational ages.
- Documents the prenatal care provided
- Provides information to referring physicians and other care providers
- Is a medico-legal document
- Is a teaching and research tool and is a data source for the Nova Scotia Atlee Perinatal Database
- Is a source of information to assess quality of care
- Is a means of maintaining a pregnancy-related problem list/care plan.
- Is a record that the woman has the option to carry a copy of. (Many prenatal care providers offer a copy of the prenatal record to women after 36 weeks and some provide a copy for the entire pregnancy).

The Reproductive Care Program of Nova Scotia would like to acknowledge the contributions of prenatal care providers throughout Nova Scotia who provided feedback during the revisions of the Nova Scotia Prenatal Record. In particular, we would like to thank the following:

Nova Scotia Prenatal Record Working Group: Dr. Heather Scott, Dr. Kim Murray, Fran Topple, RN, Heather Cameron, RN, Ronda Smith, RN, Annette Ryan, RN

Pilot sites: Obstetrical Clinics in Bridgewater and Yarmouth and the Perinatal Centre at the IWK Health Centre

Marilyn Muise, Program Manager, RCP
RCP Action Group
RCP Provincial Advisory Board
Glossary of Terms and Abbreviations

**Patient:** Biological mother of the fetus.

**Partner:** Partner is anyone the woman (patient) identifies as her partner. For the purpose of genetic screening, race/ethnic information is in regards to the biological father of the child.

**Marital Status:** May include single/divorced/common-law/married or any other partnership identified by the patient.

**Highest Level of Education:** The highest level completed by the patient.
- Some highschool
- Completed highschool
- Trade/business or community college
- University
- Other

**Baby’s Physician:** Refers to the physician who will be caring for the baby after discharge from hospital.  
*Note:* This may be different from the attending family physician caring for the baby in the hospital.

**EDD:** Estimated date of delivery calculated by date of LMP and/or confirmed by ultrasound.

**ART (Assisted Reproductive Technology):** Procedures performed in a laboratory that includes handling of eggs, sperm, and/or embryos, which facilitate pregnancy. An example of ART is in vitro fertilization (IVF).

**IVF (In-vitro fertilization):** A method of assisted reproduction that involves combining an egg with sperm in a laboratory. If the egg fertilizes and begins cell division, the resulting embryo is transferred into the woman's uterus where it will hopefully implant in the uterine lining and further develop. IVF may be performed in conjunction with medications that stimulate the ovaries to produce multiple eggs in order to increase the chances of successful fertilization and implantation.

**Gravida:** Total number of pregnancies for this mother, including this pregnancy

**Para:** Total number of pregnancies that have resulted in a living child or children or in stillbirths which are greater than or equal to 500g or 20 weeks gestation. For twins, there is one pregnancy, therefore gravida is 1 and para is 1 (G1P1).

**Abortus:** Total number of pregnancies that were spontaneous losses (before 20 weeks gestation) or planned terminations.

**Stillbirth:** Total number of fetal deaths born to this mother at or after 20 weeks gestation OR with a birth weight of 500grams or more.

**NND (Neonatal Death):** Early: neonatal deaths prior to 7 days of age.  
Late: neonatal deaths prior to 28 days of age.
LMP: First day of the last menstrual period as reported by the patient.

Consanguinity: A relationship between two people who are related to each other because they share a common ancestor: a "shared blood" relationship. For example, a relationship between two cousins. This should be investigated if there is history of an autosomal disorder.

TPTL (Threatened Preterm Labour): Uterine activity prior to 37 weeks gestation without cervical change that does not become preterm labour.

Preterm Labour: Uterine activity prior to 37 weeks gestation with cervical change.

fFN (Fetal Fibronectin): Glycoprotein found in cervico-vaginal secretions in response to inflammation or separation of the amniotic membranes from the decidua. Negative fFN after 24-35 weeks indicates a 98-99% chance that the woman will not deliver within 14 days.

GBS (Group B Streptococcus): A bacteria that normally lives in the intestinal, vaginal and rectal areas. Approximately 15-40% of all healthy women carry GBS and are asymptomatic. Can be passed on to baby during delivery, therefore universal screening with a recto-vaginal swab between 35-37 weeks gestation is recommended.

Glucose Screen: The screening test for Gestational Diabetes Mellitus (GDM) is a 1-hour plasma glucose (1hPG) measurement following a 50g glucose load given at any time of the day. If the 1h plasma glucose (PG) is ≥10.3 mmol/L, GDM is confirmed. This screening test is often referred to as the TruTol™

GTT (Glucose Tolerance Test): If the 1hPG is 7.8 to 10.2 mmol/L, a 75-g oral glucose tolerance test (OGTT) should be conducted. If two or more plasma glucose values are equal to or exceed the following, GDM is confirmed: Fasting 5.3 mmol/L, 1-hour 10.6 mmol/L, 2-hour 8.9 mmol/L.

A single abnormal value indicates glucose intolerance of pregnancy (IGTP). See page 27 of this document for more information.

Ammniocentesis: An ultrasound guided procedure in which a needle is directed in to the gestational sac and a sample of amniotic fluid is withdrawn. Women who have amniocentesis have an additional 1/200 to 1/400 risk of miscarriage.

CVS (Chorionic Villus Sampling): An ultrasound guided procedure in which a sample of chorionic villi is obtained either transvaginally using biopsy forceps or transabdominally using a needle. Women who have CVS have an additional 1% (1/100) risk of miscarriage.

Maternal Serum Testing (MST): These are blood tests that measure naturally occurring substances that are produced by all pregnancies. They are offered to all women. The first is completed between 9-13th weeks gestation and the second is completed between 15-20th weeks gestation.

Integrated Maternal Serum Testing (IMST): This test incorporates maternal age, first trimester maternal serum test (MST) and second trimester maternal serum test (MST) into a combined or integrated assessment.
of risk for fetal chromosomal abnormalities (i.e.: Down syndrome), open fetal defects such as spina bifida and placental abnormalities.

**Early Pregnancy Review (EPR):** Women with specific risk factors and all women over age 35 years at their EDD should be offered an early pregnancy review in the Fetal Assessment and Treatment Centre (FATC) at the IWK Health Centre. An EPR is an ultrasound that reviews viability, dates, and early development and assesses for fetal abnormalities through specific markers, particularly a nuchal translucency. This review is best if used in conjunction with the maternal serum test for assessment of risk for Trisomy 21.
<table>
<thead>
<tr>
<th>Weight</th>
<th>Height in Inches</th>
<th>Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>4'10&quot;</td>
<td>1.57</td>
</tr>
<tr>
<td>Normal</td>
<td>5'6&quot;</td>
<td>1.68</td>
</tr>
<tr>
<td>Overweight</td>
<td>6'2&quot;</td>
<td>1.88</td>
</tr>
<tr>
<td>Obese</td>
<td>6'8&quot;</td>
<td>2.08</td>
</tr>
<tr>
<td>Very Obese</td>
<td>7'0&quot;</td>
<td>2.13</td>
</tr>
</tbody>
</table>

For those patients with a pre-pregnancy weight greater than 245 lbs or 111.1 kg, there is an alternate imperial metric chart in the companion document (Appendix H) that includes pre-pregnancy weight up to 328 lbs. The BMI may also be calculated using kilograms and inches, multiply your weight by 703, divide by your height in inches, and then divide by your height again (% kg/inches/inches).
1. DEMOGRAPHIC INFORMATION

New topics added:
Race & ethnicity

Individuals of certain ethnic groups have an increased risk of being carriers and of having a child with specific genetic conditions. Carriers of these conditions are generally healthy. In order to perform appropriate carrier screening, asking each partner’s ethnic background is important.

May ask patient directly or patient may self-report (i.e.: if the patient is given the first page of the prenatal record to fill out the top portion prior to being seen by the prenatal care provider).

May ask partner race/ethnicity or can be reported by patient, if known.

Language
Added Arabic as it is becoming more prominent in NS

Baby’s Doctor
Please include the name of the doctor who will care for the baby once mother and baby have been discharged from the hospital.
If this is different from the in-hospital physician who is caring for the baby, please indicate the names of both physicians, if known.
2. PREGNANCY DATING

Prompts included for pregnancy tests, LMP, cycle length/regularity, contraception history, ultrasound information and assisted reproductive technology.

The LMP is the first day of the last menstrual period and is felt to be an accurate method of dating the pregnancy if the patient is certain about the dates and her periods are regular with a normal cycle length. Naegele’s Rule: First day of LMP + 7 days minus 3 months.

Fetal heart tones (usually heard by Doppler between 7-12 weeks gestation) may also assist with clinical dating.

Ultrasound dating is only used if there is an uncertain LMP, cycles are irregular/long, the periods are abnormal and/or the patient was using oral contraceptives during conception.

Ultrasound dating may also be used if there is discordance between menstrual and ultrasound assessment. (i.e.: >5 days difference in the first trimester or >10 days difference at the 18-20 week u/s). Re-dating should be done cautiously if patient is certain of LMP and cycles.

Accurate pregnancy dating is necessary as there are a number of prenatal tests that are offered only during certain weeks of the pregnancy.

3. OBSTETRICAL HISTORY

Similar to the previous record.

Opportunity to gather information about previous pregnancies, stillbirths, terminations, neonatal deaths etc. It is important to document gestational age at delivery, mode of delivery, weight of newborn, and any complications that might have occurred antepartum, intrapartum and/or postpartum.

2. PREGNANCY DATING

Prompts included for pregnancy tests, LMP, cycle length/regularity, contraception history, ultrasound information and assisted reproductive technology.

The LMP is the first day of the last menstrual period and is felt to be an accurate method of dating the pregnancy if the patient is certain about the dates and her periods are regular with a normal cycle length. Naegele’s Rule: First day of LMP + 7 days minus 3 months.

Fetal heart tones (usually heard by Doppler between 7-12 weeks gestation) may also assist with clinical dating.

Ultrasound dating is only used if there is an uncertain LMP, cycles are irregular/long, the periods are abnormal and/or the patient was using oral contraceptives during conception.

Ultrasound dating may also be used if there is discordance between menstrual and ultrasound assessment. (i.e.: >5 days difference in the first trimester or >10 days difference at the 18-20 week u/s). Re-dating should be done cautiously if patient is certain of LMP and cycles.

Accurate pregnancy dating is necessary as there are a number of prenatal tests that are offered only during certain weeks of the pregnancy.

3. OBSTETRICAL HISTORY

Similar to the previous record.

Opportunity to gather information about previous pregnancies, stillbirths, terminations, neonatal deaths etc. It is important to document gestational age at delivery, mode of delivery, weight of newborn, and any complications that might have occurred antepartum, intrapartum and/or postpartum.
4. PRESENT PREGNANCY

New topics added:
- Pre-pregnancy and current medications
- Depression/anxiety
- GBS status
- Nausea & vomiting
- Wishing to quit smoking
- Substance Use

Information formerly in this section that is now captured elsewhere on the form:
- Age > 35 years
- Ethnic risk
- Plan to breastfeed
- Healthy Eating/Activity

5. ALLERGIES

If additional space is needed please document in Problems/Comments/Details/Referrals.

6. PAST ILLNESS

New topics added:
- Respiratory
- Substance use
- Gynecologic history

If additional space is needed, please document in Problems/Comments/Details/Referrals
# Nova Scotia Prenatal Record 2

## Physical Assessment

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>BP</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abdomen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Psychological/Environmental

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal care/Food security</td>
<td></td>
<td>No need to improve nutrition, all dates</td>
</tr>
<tr>
<td>Alcohol use</td>
<td></td>
<td>None tocolytic therapy/doctoral</td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td>Time to inform doctor/given</td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
<td>Time to inform doctor/given</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td></td>
<td>Genetic screening offered</td>
</tr>
<tr>
<td>Referral</td>
<td>Yes</td>
<td>Genetic screening offered</td>
</tr>
</tbody>
</table>

## Antenatal Screening: See Reverse for Guidelines

### First Prenatal Visit

<table>
<thead>
<tr>
<th>Month</th>
<th>Offered to All Women</th>
<th>Offered to Some Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

### Weekly

- **9-10 Weeks**: NTI, ultrasound, completed, completed, Results
- **11-12 Weeks**: NTI, ultrasound, completed, completed, Results
- **12-13 Weeks**: NTI, ultrasound, completed, completed, Results
- **13-14 Weeks**: NTI, ultrasound, completed, completed, Results

### 24-26 Weeks

- **24-26 Weeks**: Offered to All Women, Offered to Some Women

### 30-37 Weeks

- **30-37 Weeks**: Offered to All Women, Offered to Some Women

### Special Procedures/Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Yes/No</th>
<th>Date</th>
<th>Results</th>
</tr>
</thead>
</table>

## Reproductive Care Program of Nova Scotia

http://www.mcmaster.ca/5012-4504758

July 2007 13
Guidelines for Antenatal Screening and Testing

First Prenatal Visit
- High risk: antenatal, Sphyg, etc.
- Group B strep: urinary tract infection
- Rh immune status: unknown; vaccination is recommended at part I of 2nd trimester.
- Ultrasound: to assess fetal size, shape, and position. 
- Urine tests: for glycosuria, proteinuria, and pyuria.
- Fetal heart rate monitoring.

11-13+ Weeks
- Abruption: If first trimester screening testing should be offered to all women regardless of age. Note: 2nd trimester testing must be performed in conjunction with 1st trimester testing for an integrated screen.

11-13+ Weeks
- Early pregnancy: Women with specific risk factors and all women over age 35 years at their EDD should be offered an early pregnancy screening (EPS) in the Maternal and Child Health Centre (MCHC) at the HMO Health Centre. An EPS is an ultrasound that reviews viability, date, early development and assesses for fetal abnormalities through specific markers, particularly cardiac transmural. This review is best used in conjunction with the maternal serum alpha-fetoprotein (MSA) for assessment of risk for Trisomy 21.

15-20+ Weeks
- MRI: 2nd trimester testing should be offered to all women regardless of age. 
- Integrated Maternal Serum Test: This test incorporates maternal age, first trimester maternal serum test (MST) and second trimester maternal serum test (MST) into a combined or integrated assessment of risk for fetal congenital abnormalities, upon fetal defects such as open cerebral and neural abnormalities.

18-21 Weeks
- Ultrasound should include fetal anatomy, amniotic fluid volume, placenta, anatomical review for anomalies, and markers for fetal aneuploidy (offered to all women).

24-28 Weeks
- Repeat high-risk: Dilation and curettage: For women over age 40 years at their EDD.
- Urine tests: For women who are Rh- (see below for Rh+ women).
- HIV: Women at risk for HIV or those who declined first trimester screening should be offered the opportunity for screening.

Please note the
- For Rh- women: Repeat antenatal screening, regardless of partner's Rh type. If partner is Rh+ or has an unknown Rh status, the antibody screen should be done prior to the administration of RhOG immune globulin.

35-37 Weeks
- Group B strep: Vaginal/rectal swab by patient or physician.

After 37 weeks
- Biophysical profile or NST and amniotic fluid volume
- Induction of labour

BIBLIOGRAPHY
- Reproductive Care Program of Nova Scotia
- http://www.reprocaresc.ca/ RCPC/RCPC_0507.html

July 2007 14
The Nova Scotian population is at risk for a number of acute and chronic illnesses due to increasing rates of obesity (Fell, 2005). Obesity has significant associated maternal and perinatal health risks as well (Atlee Perinatal Database, 2005). Some of these risks include: gestational diabetes mellitus, hypertension, anesthetic risks, placental dysfunction and risk for cesarean section delivery (O’Brien, 2003; Nattingus, 1998; Ray, 2005). It is important for primary care providers to counsel women about strategies for healthy eating and activity during pregnancy as well as the appropriate weight-gain for each individual woman’s BMI. The appropriate weight gain varies from woman to woman and should be based on the pre-pregnancy Body Mass Index (BMI), which reflects the mother's weight-to-height ratio. In general, optimal growth of the unborn baby occurs if women with a low pre-pregnancy BMI (< 20) gain more weight and women with a high pre-pregnancy BMI (> 27) gain less weight than women who enter pregnancy with a healthy body weight (BMI between 20 and 25). It is important that counselling regarding increased BMI and restrictive diets occur preconceptually. It is not recommended that pregnant women participate in energy or protein restricted diets during pregnancy, as this may be harmful to the developing fetus (Kramer, 2007).

Information about housing, employment and social assistance can be obtained from the community services website at: http://www.gov.ns.ca/coms/ or the toll-free number 1-877-424-1177.
9. GENETIC SCREENING

Some genetic conditions associated with specific ethnicities include:
- Ashkenazi Jewish: Canavan, Familial Dysautonomia, Tay-Sachs
- Bas-St-Laurent French: Tay-Sachs
- Saguenay-Lac-St-Jean French: ARSACS, COX-SLSJ, Cystic Fibrosis, HMSN, Tyrosinemia
- Yarmouth County Acadian: Alström, Niemann-Pick type C

Further information and definitions of the above conditions are available on the Maritime Medical Genetics website at http://www.iwk.nshealth.ca click on Care Services then M, choose Maritime Medical Genetics Service or call (902) 470-8754. A genetic counsellor is available Monday to Friday 8:30am-4:30pm. A prenatal genetics referral form and a family tree template can be found in Appendix A.
10. EDUCATION/DISCUSSION  
This section provides prompts for discussion and education related to pregnancy.

PRENATAL EDUCATION  
Varies in format and content from district to district. This may include: prenatal classes, prenatal fairs, direct counselling from public health, community resource centres or information from another care provider. May require referral to public health.

NEWBORN SCREENING  
The Nova Scotia Newborn Screening Service at the IWK Health Centre offers newborn screening as a service to families with new babies. This service identifies newborns with certain serious disorders of body chemistry that are treatable. For further information please see the website at: http://www.iwk.nshealth.ca/index.cfm?objectID=3322B736-AC27-6644-E9E1-B683E787EA15. See Appendix A for a brochure on newborn screening.

PARENTING AND LABOUR/BIRTH/ PREGNANCY EXPECTATIONS  
Helpful resources for parents and care providers may include: Public Health education publications found at: http://www.gov.ns.ca/hpp/publichealth/default.htm The Society of Obstetricians and Gynecologists of Canada (SOGC) provide a resource for women, families and care providers entitled Healthy Beginnings: Your handbook for pregnancy and birth. Please see the website for further information: http://www.sogc.org/healthybeginnings/ Health Canada has released a resource for women and families entitled Sensible Guide to a Healthy Pregnancy found at: http://www.phac-aspc.gc.ca/hp-gs/guide_e.html

PRENATAL EDUCATION  
Varies in format and content from district to district. This may include: prenatal classes, prenatal fairs, direct counselling from public health, community resource centres or information from another care provider. May require referral to public health.

NEWBORN SCREENING  
The Nova Scotia Newborn Screening Service at the IWK Health Centre offers newborn screening as a service to families with new babies. This service identifies newborns with certain serious disorders of body chemistry that are treatable. For further information please see the website at: http://www.iwk.nshealth.ca/index.cfm?objectID=3322B736-AC27-6644-E9E1-B683E787EA15. See Appendix A for a brochure on newborn screening.

PARENTING AND LABOUR/BIRTH/ PREGNANCY EXPECTATIONS  
Helpful resources for parents and care providers may include: Public Health education publications found at: http://www.gov.ns.ca/hpp/publichealth/default.htm The Society of Obstetricians and Gynecologists of Canada (SOGC) provide a resource for women, families and care providers entitled Healthy Beginnings: Your handbook for pregnancy and birth. Please see the website for further information: http://www.sogc.org/healthybeginnings/ Health Canada has released a resource for women and families entitled Sensible Guide to a Healthy Pregnancy found at: http://www.phac-aspc.gc.ca/hp-gs/guide_e.html
BREASTFEEDING

In Nova Scotia, we have adopted a provincial breastfeeding policy aimed at supporting and promoting breastfeeding and the Baby Friendly Initiative (BFI) throughout the province. It is recommended that:

• Infants are **exclusively breastfed for the first six months of life**, with continued breastfeeding to two years and beyond with appropriate introduction of complementary foods at six months (Canadian Pediatric Society)

• Healthy term breastfed infants should receive a daily supplement of 400 IU of Vitamin D until the infant is getting this level of Vitamin D from other dietary sources.

• The BFI recommends that **information not be distributed universally about formula feeding**. There is a resource being developed by Public Health with detailed information for women and families who choose to formula feed.

If you would like more information about breastfeeding or would like to refer a woman for counselling regarding breastfeeding, please contact your local public health office.

HEALTHY EATING

Canada’s Food Guide recommendations for women of childbearing age include:

• **Folic acid**: The recommended **dietary intake** of folate is 600 micrograms for women who are pregnant and 500 micrograms for breastfeeding women.

• **It is recommended that most women take supplemental folic acid**:
  - 0.4-1.0 mg at least 12 weeks prior to conception
  - 0.4-1.0 mg for the first 12 weeks of pregnancy
  - High-risk women (i.e.: family or personal history of open neural tube defects, those medicated for epilepsy) may require higher doses.

• **Iron**: Pregnant women should make sure they are taking a daily multivitamin that also contains an adequate amount of iron.

• **Calories**: Women need about 350 extra calories per day in the second trimester and 450 extra calories per day in the third trimester.

HEALTHY EATING

Canada’s Food Guide recommendations for women of childbearing age include:

• **Folic acid**: The recommended **dietary intake** of folate is 600 micrograms for women who are pregnant and 500 micrograms for breastfeeding women.

• **It is recommended that most women take supplemental folic acid**:
  - 0.4-1.0 mg at least 12 weeks prior to conception
  - 0.4-1.0 mg for the first 12 weeks of pregnancy
  - High-risk women (i.e.: family or personal history of open neural tube defects, those medicated for epilepsy) may require higher doses.

• **Iron**: Pregnant women should make sure they are taking a daily multivitamin that also contains an adequate amount of iron.

• **Calories**: Women need about 350 extra calories per day in the second trimester and 450 extra calories per day in the third trimester.
The amount of additional calories women need when breastfeeding depends on the rate of milk production and how much weight the woman loses. Generally, women need about 350 to 400 extra calories per day for the first year of breastfeeding.

**ACTIVITY**

A joint position statement by the Society of Obstetricians of Canada and the Canadian Society for Exercise Physiology recommends that:

- All women without contraindications should be encouraged to participate in aerobic and strength-conditioning exercises as part of a healthy lifestyle during their pregnancy.
- Reasonable goals of aerobic conditioning in pregnancy should be to maintain a good fitness level throughout pregnancy without trying to reach peak fitness or train for an athletic competition.
- Women should choose activities that will minimize the risk of loss of balance and fetal trauma.
- Women should be advised that adverse pregnancy or neonatal outcomes are not increased for exercising women.
- Initiation of pelvic floor exercises in the immediate postpartum period may reduce the risk of future urinary incontinence.
- Women should be advised that moderate exercise during lactation does not affect the quantity or composition of breast milk or impact infant growth.


**FLU VACCINE**

Although universal vaccination of all pregnant women is not explicitly recommended in Canada, the Canadian National Advisory Committee on Immunization (NACI) recommends the following pregnant women be offered an influenza vaccination: all high-risk pregnant women, pregnant women who have chronic illnesses, or are health care workers or pregnant women who will deliver during the flu season and thus, be a household contact for the newborn.

In Nova Scotia, all pregnant women are encouraged to receive flu immunization to protect themselves and their newborn infant. All pregnant women in Nova Scotia are eligible to receive publicly funded flu vaccine.
11. ANTENATAL SCREENING/TESTING

There are two types of prenatal tests available: screening tests and diagnostic tests. Screening tests include first and second trimester maternal serum testing, integrated maternal serum testing, early pregnancy review, ultrasound, and integrated prenatal testing.

Maternal Serum Testing (MST)*: These are blood tests that measure naturally occurring substances that are produced by all pregnancies. They are offered to all women. The first is completed between 9-13\(^{+6}\) weeks gestation and the second is completed between 15-20\(^{+6}\) weeks gestation.

Integrated Maternal Serum Testing (IMST)*: This test incorporates maternal age, first trimester maternal serum test (MST) and second trimester maternal serum test (MST) into a combined or integrated assessment of risk for fetal chromosomal abnormalities (i.e.: Down syndrome), open fetal defects such as spina bifida and placental abnormalities.

Early Pregnancy Review (EPR)*: Women with specific risk factors and all women over age 35 years at their EDD should be offered an early pregnancy review in the Fetal Assessment and Treatment Centre (FATC) at the IWK Health Centre. For information about FATC please call (902) 470-6654. A family risk questionnaire may be found in Appendix C.

Diagnostic tests include: CVS (chorionic villus sampling) and amniocentesis

CVS involves the removal of a small sample of placental tissue, chorionic villi, which contain cells of fetal origin. It is usually done between 11-13 weeks of pregnancy. The procedure is ultrasound-guided. Depending on factors such as the location of the placenta, this procedure may be done either by inserting a needle through the abdomen (like an amniocentesis) or by small biopsy forceps inserted through the cervical canal. CVS can detect a chromosome abnormality. In some circumstances it may also be used to detect other genetic conditions that have previously been identified in a family.

The results of testing take 2-3 weeks for chromosome abnormalities. For other genetic conditions the results can sometimes take a bit longer. The chance of miscarriage for any woman at this stage of pregnancy without CVS, is about 4%. Women who have a CVS have an additional 1% (procedure-related risk) chance to have a miscarriage.

Amniocentesis is an ultrasound-guided procedure in which a needle is directed into the gestational sac and a sample of amniotic fluid is withdrawn. This fluid contains cells of fetal origin that are isolated and cultured in the lab. It is usually done between 16 to 18 weeks of pregnancy. An amniocentesis can detect a sample of amniotic fluid is withdrawn. This fluid contains cells of fetal origin that are isolated and cultured in the lab. It is usually done between 16 to 18 weeks of pregnancy. An amniocentesis can detect a chromosome abnormality. In some circumstances it may also be used to detect other genetic conditions that have previously been identified in a family.

The results of testing take 2-3 weeks for chromosome abnormalities. For other genetic conditions the results can sometimes take a bit longer. The chance of miscarriage for any woman at this stage of pregnancy without CVS, is about 4%. Women who have a CVS have an additional 1% (procedure-related risk) chance to have a miscarriage.

Amniocentesis is an ultrasound-guided procedure in which a needle is directed into the gestational sac and a sample of amniotic fluid is withdrawn. This fluid contains cells of fetal origin that are isolated and cultured in the lab. It is usually done between 16 to 18 weeks of pregnancy. An amniocentesis can detect a chromosome abnormality. In some circumstances it may also be used to detect other genetic conditions that have previously been identified in a family.
It usually takes 2-3 weeks to obtain the results of chromosome testing. Results for other genetic conditions may take longer. The risk of miscarriage for any woman at this stage of pregnancy is about 2-3%. Women who have an amniocentesis have an additional 1/200 to 1/400 chance of miscarriage. This additional risk is called the procedure-related risk.

**First Prenatal Visit**

**For ALL Women**

**HEMOGLOBIN**

Recognition of anemia. Recommendations and education re: diet and/or vitamin and iron supplements may be indicated. Some research indicates that women with increased pre-pregnancy BMI may be at higher risk for postpartum anemia.

A CBC also allows measurement of platelets. This may be useful information later in pregnancy.

**HEPATITIS B SURFACE AG (HBsAg)**

Recommended by the National Advisory Committee on Immunization. Seroprevalence HBsAg positive study in Halifax County (1990-1991) determined HBsAg screening is cost effective for the Nova Scotia population. Supported in the Canadian Immunization Guide, 2006.*

*Hepatitis C (HCV) is more prevalent than Hepatitis B in Nova Scotia. However, routine screening for HCV is not recommended as there is no known therapy that prevents vertical transmission nor is there an intervention for the neonate.

- Please note that women who identify risk factors for blood borne pathogens during prenatal health screening should be screened for HCV (for more information contact the office of the Provincial Medical Officer of Health @ 424-8698).
- The Canadian Pediatric Society (CPS) recommends that children born to HCV-infected mothers receive HBV vaccine in the first month of life. Current information indicates that breastfeeding should not be discouraged in women who are HCV positive. However, the unequivocal safety of breastfeeding has not been established.

**SYPHILIS SCREEN/VDRL**

Incidence low but implications significant. Recent concern about increasing frequency in general population. Women at risk for sexually transmitted infections (STIs) should be screened again in the third trimester. Note: False positive screens may reflect the presence of Anti-phospholipid Antibody Syndrome which has serious implications in pregnancy.

July 2007

---

It usually takes 2-3 weeks to obtain the results of chromosome testing. Results for other genetic conditions may take longer. The risk of miscarriage for any woman at this stage of pregnancy is about 2-3%. Women who have an amniocentesis have an additional 1/200 to 1/400 chance of miscarriage. This additional risk is called the procedure-related risk.

**First Prenatal Visit**

**For ALL Women**

**HEMOGLOBIN**

Recognition of anemia. Recommendations and education re: diet and/or vitamin and iron supplements may be indicated. Some research indicates that women with increased pre-pregnancy BMI may be at higher risk for postpartum anemia.

A CBC also allows measurement of platelets. This may be useful information later in pregnancy.

**HEPATITIS B SURFACE AG (HBsAg)**

Recommended by the National Advisory Committee on Immunization. Seroprevalence HBsAg positive study in Halifax County (1990-1991) determined HBsAg screening is cost effective for the Nova Scotia population. Supported in the Canadian Immunization Guide, 2006.*

*Hepatitis C (HCV) is more prevalent than Hepatitis B in Nova Scotia. However, routine screening for HCV is not recommended as there is no known therapy that prevents vertical transmission nor is there an intervention for the neonate.

- Please note that women who identify risk factors for blood borne pathogens during prenatal health screening should be screened for HCV (for more information contact the office of the Provincial Medical Officer of Health @ 424-8698).
- The Canadian Pediatric Society (CPS) recommends that children born to HCV-infected mothers receive HBV vaccine in the first month of life. Current information indicates that breastfeeding should not be discouraged in women who are HCV positive. However, the unequivocal safety of breastfeeding has not been established.

**SYPHILIS SCREEN/VDRL**

Incidence low but implications significant. Recent concern about increasing frequency in general population. Women at risk for sexually transmitted infections (STIs) should be screened again in the third trimester. Note: False positive screens may reflect the presence of Anti-phospholipid Antibody Syndrome which has serious implications in pregnancy.

July 2007
Counsel seronegative women about the risks if preconception was associated with exposure, there was exposure during pregnancy or status is not known.

Vaccinate susceptible women in the postpartum. For those women who are Rh negative and rubella non-immune, rubella vaccination can be provided in the postpartum BEFORE hospital discharge. However, for women who are Rh negative and varicella non-immune, they should receive their first dose of varicella vaccine at their 6 week postpartum visit and their second dose 4 or more weeks later.

Pregnant Woman is Rubella Non-Immune

**Rh Positive**
- Woman immune to rubella
  - Give MMR postpartum before hospital discharge
  - Check rubella immunity at the 6 week postpartum appointment
  - Woman immune to rubella
    - Verify rubella immunity 6 weeks after MMR
      - Woman immune to rubella
        - Repeat dose of MMR

**Rh Negative**
- Did not require Rho(D) Immune Globulin
  - Woman immune to rubella
  - Give MMR postpartum before hospital discharge
- Received Rho (D) Immune Globulin
  - Woman immune to rubella
  - Give MMR postpartum before hospital discharge

**BLOOD GROUP (ABO) AND RH TYPE (ANTIBODY SCREEN)**

Identify women who are Rh negative or have antibodies associated with Hemolytic Disease of the Newborn. Women with antibodies require regular testing.
HIV screening should be presented to all pregnant women as a recommended part of prenatal care. Although it is recommended, women have the right to decline HIV screening or any laboratory test offered. Prenatal care providers have an important role to play in stressing the importance of testing in preventing disease, in emphasizing that this is considered a standard of care for all women, and in helping to allay concerns about confidentiality and any perceived stigma associated with accepting HIV screening. Discussion regarding HIV screening and either acceptance or refusal of screening should be documented clearly on the prenatal record.

Please note: Anonymous testing for HIV is available in Halifax at the Halifax Sexual Health Centre (formerly known as Planned Parenthood) [http://www.halifaxsexualhealth.ca/](http://www.halifaxsexualhealth.ca/) and in rotating sites in Cape Breton through the AIDS Coalition of Cape Breton (1-877-597-9255 or http://www.accb.ns.ca/pages/HIVTestinginNS_files/frame.htm).

All provincial laboratories can accommodate both nominal testing (sample labelled with identifying information) and non-nominal testing (sample identified by a numeric code or initials). Breastfeeding is contraindicated in women who are HIV-positive.

CERVICAL SCREENING FOR GONORRHEA OR CHLAMYDIA

Universal screening has not been done in the past. There are still many primary care providers across Canada who do not screen universally but do so based on women who are symptomatic or considered at risk for STIs (e.g., < 25 years of age, multiple sexual partners, previous STD – see Centre for Disease Control

July 2007 23

regardless of Rh type (see Rh program of Nova Scotia guidelines in Appendix D or at [http://rcp.nshealth.ca/files/RhGuidelines.pdf](http://rcp.nshealth.ca/files/RhGuidelines.pdf))

Urine culture or urinalysis

Identify women with asymptomatic bacteriuria. Treatment should be based on sensitivity. Culture if urinalysis positive. Urinary tract infections are significant complications in pregnancy as this increases the risk of pyelonephritis and preterm labour.

Cervical cytology

Ideal opportunity to screen women who do not have regular Pap smears or if a Pap smear has not been done in the last 12 months. Cancer of the cervix is the most prevalent reproductive tract malignancy associated with pregnancy.

Human immunodeficiency virus (HIV) serologic testing

Requires appropriate pre- and post-test counselling and informed consent. Note that the ability of health care providers to identify those likely to be at risk for HIV has NOT been well demonstrated. There are a number of resources to assist prenatal care providers with information needed for pre- and post-test HIV counselling (see Appendix E for SOGC HIV Screening Recommendations or contact [www.cma.ca](http://www.cma.ca) or [www.cfpc.ca](http://www.cfpc.ca)).

HIV screening should be presented to all pregnant women as a recommended part of prenatal care. Although it is recommended, women have the right to decline HIV screening or any laboratory test offered. Prenatal care providers have an important role to play in stressing the importance of testing in preventing disease, in emphasizing that this is considered a standard of care for all women, and in helping to allay concerns about confidentiality and any perceived stigma associated with accepting HIV screening. Discussion regarding HIV screening and either acceptance or refusal of screening should be documented clearly on the prenatal record.

Please note: Anonymous testing for HIV is available in Halifax at the Halifax Sexual Health Centre (formerly known as Planned Parenthood) [http://www.halifaxsexualhealth.ca/](http://www.halifaxsexualhealth.ca/) and in rotating sites in Cape Breton through the AIDS Coalition of Cape Breton (1-877-597-9255 or http://www.accb.ns.ca/pages/HIVTestinginNS_files/frame.htm).

All provincial laboratories can accommodate both nominal testing (sample labelled with identifying information) and non-nominal testing (sample identified by a numeric code or initials). Breastfeeding is contraindicated in women who are HIV-positive.

CERVICAL SCREENING FOR GONORRHEA OR CHLAMYDIA

Universal screening has not been done in the past. There are still many primary care providers across Canada who do not screen universally but do so based on women who are symptomatic or considered at risk for STIs (e.g., < 25 years of age, multiple sexual partners, previous STD – see Centre for Disease Control

July 2007 23

regardless of Rh type (see Rh program of Nova Scotia guidelines in Appendix D or at [http://rcp.nshealth.ca/files/RhGuidelines.pdf](http://rcp.nshealth.ca/files/RhGuidelines.pdf))

Urine culture or urinalysis

Identify women with asymptomatic bacteriuria. Treatment should be based on sensitivity. Culture if urinalysis positive. Urinary tract infections are significant complications in pregnancy as this increases the risk of pyelonephritis and preterm labour.

Cervical cytology

Ideal opportunity to screen women who do not have regular Pap smears or if a Pap smear has not been done in the last 12 months. Cancer of the cervix is the most prevalent reproductive tract malignancy associated with pregnancy.

Human immunodeficiency virus (HIV) serologic testing

Requires appropriate pre- and post-test counselling and informed consent. Note that the ability of health care providers to identify those likely to be at risk for HIV has NOT been well demonstrated. There are a number of resources to assist prenatal care providers with information needed for pre- and post-test HIV counselling (see Appendix E for SOGC HIV Screening Recommendations or contact [www.cma.ca](http://www.cma.ca) or [www.cfpc.ca](http://www.cfpc.ca)).

HIV screening should be presented to all pregnant women as a recommended part of prenatal care. Although it is recommended, women have the right to decline HIV screening or any laboratory test offered. Prenatal care providers have an important role to play in stressing the importance of testing in preventing disease, in emphasizing that this is considered a standard of care for all women, and in helping to allay concerns about confidentiality and any perceived stigma associated with accepting HIV screening. Discussion regarding HIV screening and either acceptance or refusal of screening should be documented clearly on the prenatal record.

Please note: Anonymous testing for HIV is available in Halifax at the Halifax Sexual Health Centre (formerly known as Planned Parenthood) [http://www.halifaxsexualhealth.ca/](http://www.halifaxsexualhealth.ca/) and in rotating sites in Cape Breton through the AIDS Coalition of Cape Breton (1-877-597-9255 or http://www.accb.ns.ca/pages/HIVTestinginNS_files/frame.htm).

All provincial laboratories can accommodate both nominal testing (sample labelled with identifying information) and non-nominal testing (sample identified by a numeric code or initials). Breastfeeding is contraindicated in women who are HIV-positive.

CERVICAL SCREENING FOR GONORRHEA OR CHLAMYDIA

Universal screening has not been done in the past. There are still many primary care providers across Canada who do not screen universally but do so based on women who are symptomatic or considered at risk for STIs (e.g., < 25 years of age, multiple sexual partners, previous STD – see Centre for Disease Control

July 2007 23

regardless of Rh type (see Rh program of Nova Scotia guidelines in Appendix D or at [http://rcp.nshealth.ca/files/RhGuidelines.pdf](http://rcp.nshealth.ca/files/RhGuidelines.pdf))

Urine culture or urinalysis

Identify women with asymptomatic bacteriuria. Treatment should be based on sensitivity. Culture if urinalysis positive. Urinary tract infections are significant complications in pregnancy as this increases the risk of pyelonephritis and preterm labour.

Cervical cytology

Ideal opportunity to screen women who do not have regular Pap smears or if a Pap smear has not been done in the last 12 months. Cancer of the cervix is the most prevalent reproductive tract malignancy associated with pregnancy.

Human immunodeficiency virus (HIV) serologic testing

Requires appropriate pre- and post-test counselling and informed consent. Note that the ability of health care providers to identify those likely to be at risk for HIV has NOT been well demonstrated. There are a number of resources to assist prenatal care providers with information needed for pre- and post-test HIV counselling (see Appendix E for SOGC HIV Screening Recommendations or contact [www.cma.ca](http://www.cma.ca) or [www.cfpc.ca](http://www.cfpc.ca)).

HIV screening should be presented to all pregnant women as a recommended part of prenatal care. Although it is recommended, women have the right to decline HIV screening or any laboratory test offered. Prenatal care providers have an important role to play in stressing the importance of testing in preventing disease, in emphasizing that this is considered a standard of care for all women, and in helping to allay concerns about confidentiality and any perceived stigma associated with accepting HIV screening. Discussion regarding HIV screening and either acceptance or refusal of screening should be documented clearly on the prenatal record.

Please note: Anonymous testing for HIV is available in Halifax at the Halifax Sexual Health Centre (formerly known as Planned Parenthood) [http://www.halifaxsexualhealth.ca/](http://www.halifaxsexualhealth.ca/) and in rotating sites in Cape Breton through the AIDS Coalition of Cape Breton (1-877-597-9255 or http://www.accb.ns.ca/pages/HIVTestinginNS_files/frame.htm).

All provincial laboratories can accommodate both nominal testing (sample labelled with identifying information) and non-nominal testing (sample identified by a numeric code or initials). Breastfeeding is contraindicated in women who are HIV-positive.
recommendations for focused screening). However, the rates of chlamydia in particular have been increasing in the last several years.

While still controversial, there is fair evidence to support screening pregnant women during their first trimester for chlamydia and to treat as required (Davies and Wang, 1996). Neither the Society of Obstetricians of Canada nor the American College of Obstetricians and Gynecologists recommend universal screening of chlamydia and/or gonorrhea. Therefore, prenatal care providers must consider the evidence and the woman’s risk factors and history in determining whether or not screening is appropriate.

**DIABETIC SCREEN**

Those at risk for gestational diabetes (glycosuria, obesity, maternal age ≥ 35, previous gestational diabetes mellitus, hypertension, previous large for gestational age (LGA) baby, history of unexplained stillbirth, family history of diabetes in a first degree relative, member of an ethnic group predisposed to diabetes [e.g. First Nations women], polyhydramnios) should consider glucose screening as early in pregnancy as feasible.

If the 1-hour pc plasma glucose is:

- ≤ 7.8 mmol/L, it is normal
- ≥ 7.8 mmol/L but ≤ 10.2 mmol/L, a full 2 hour 75g oral glucose tolerance test (OGTT) is recommended
- ≥ 10.3 mmol/L, GDM is present and the OGTT is unnecessary and contraindicated.
### First Prenatal Visit

#### For Some Women

**Varicella**

Screening tests should be completed for all women whose immune status is uncertain or unknown.

- All women who are varicella non-immune should be vaccinated in the postpartum period but the timing is dependent on Rh status

### Pregnant Woman is Varicella Non-Immune

<table>
<thead>
<tr>
<th>Rh positive</th>
<th>Rh negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give first dose of varicella vaccine postpartum, before hospital discharge</td>
<td>Did not require Rho (D) Immune Globulin</td>
</tr>
<tr>
<td>Give 2nd dose varicella vaccine &gt;= 4 weeks after 1st dose (i.e.: at 6 week postpartum appointment)</td>
<td>Give 1st dose varicella vaccine before hospital discharge</td>
</tr>
<tr>
<td>Give 1st dose varicella vaccine at the 6 week postpartum appointment</td>
<td>Give 2nd dose of varicella vaccine &gt;= 4 weeks after 1st dose</td>
</tr>
<tr>
<td>Woman immune to varicella</td>
<td>Woman immune to varicella</td>
</tr>
</tbody>
</table>

**NOTE:** If a woman is Rh positive, she should receive rubella and/or varicella as needed in the immediate postpartum period while still in hospital. If the woman is Rh negative and has received WinRho, the rubella vaccine should be given before hospital discharge but the varicella vaccine should be delayed until their 6-week postpartum visit. The first dose of varicella vaccine can be given at the 6-week visit and the second dose should be given 4 or more weeks later.

#### Babys' Biological Father's Rh Status

If the woman is Rh negative and the father is Rh negative, the baby will also be Rh negative and

**July 2007**

25

---
WinRho™ will not be required. This only applies when the certainty of paternity is known.

9-13+6 weeks: First Trimester MST and EPR
15-20+6 weeks: Second Trimester MST
18-21 weeks: Second Trimester Diagnostic Ultrasound

MATERNAL SERUM TESTING
EARLY PREGNANCY REVIEW
AND DIAGNOSTIC ULTRASOUND

There are detailed definitions for first trimester and second trimester maternal serum testing (MST) and early pregnancy review (EPR) included on the reverse side of the prenatal record page two. This testing is in keeping with current practice across the country, the testing guidelines were developed in consultation with experts in this area and they are in keeping with prenatal testing guidelines were released from the SOGC in 2007.


• The first MST may be offered between 9-13+6 weeks gestation. It is offered to all women regardless of age.
• The second MST may be offered between 15-20+6 weeks gestation and should also be offered to all women regardless of age. It is important that second trimester MST be performed in conjunction with the first trimester MST in order to obtain an integrated test.
• At 18-21 weeks gestation all women should be offered a diagnostic ultrasound.

24-28 WEEKS
For ALL Women

REPEAT HEMOGLOBIN
Recognition of anemia. Recommendations regarding diet and/or vitamin supplements may be indicated.

DIABETIC SCREEN
Both the SOGC and the Diabetes Care Program of Nova Scotia recommend universal screening. Women with known risk factors should have early screening and possibly a repeat screen.

July 2007
To determine the presence of antibodies. Many women with antibodies identified during pregnancy are Rh positive. Implications for fetal and neonatal health warrant repeating the antibody screen in these women (coordinate with other lab tests if possible).

For Rh negative women:

**REPEAT THE ANTIBODY SCREEN**

Rh negative women require Rho(D) Immune Globulin at 28 weeks gestation unless the partner’s Rh status is definitely negative. If partner is Rh positive or has an unknown Rh status, an antibody screen should be done prior to administration of Immune Globulin. Women who develop antibodies associated with Hemolytic Disease of the Newborn (HDN) need careful follow-up. See Rh Program guidelines for Rho(D) Immune Globulin recommendations related to testing and management. (Appendix D) (coordinate with other lab tests if possible).

For SOME Women

**HIV COUNSELING AND SCREENING**

If HIV was not discussed, completed or declined during the first prenatal visit, this is an opportunity for primary care providers to counsel women about HIV testing.

**28 WEEKS**

Please see Appendix D for guidelines for Antibody Screening and Rho (D) Immune Globulin Administration (WinRhoSDF™).

**GROUP B STREPTOCOCCUS (GBS) SCREEN**

Should be completed between 35-37 weeks. Women who agree to screening for GBS should have a culture done from a single swab first to the vagina then to the rectal area.
- If the woman has a known allergy to penicillin, SOGC recommends noting this on the requisition and requesting sensitivity testing for clindamycin and erythromycin.
- Since GBS colonization status can change, the SOGC recommends repeating the GBS culture after 5 weeks. Some clinicians may decide to delay collecting the GBS swab to 36 weeks so that the results will be valid until 41 weeks gestation. If a woman goes into labour and her culture result is > 5 weeks old, her GBS status should be considered unknown.
- SOGC recommendations found in Appendix F.

**POST TERM MANAGEMENT (41 WEEKS)**

The following tests are appropriate for certain pregnant women and/or certain clinical situations:

<table>
<thead>
<tr>
<th>Test/Assessment</th>
<th>Time (weeks)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biophysical profile and/or</td>
<td>41 weeks</td>
<td>After 41 weeks, current information suggests that women should be offered induction of labour. Care should be taken in assessing the evidence for gestational age beyond 41 weeks. Some women may elect to delay induction. If expectant management is chosen, a biophysical profile is indicated between 41-42 weeks and twice weekly thereafter. If a biophysical profile is not available, ultrasound examination to determine amniotic fluid volume and a non-stress test is an acceptable alternative. Women should also understand the importance of adequate fetal movement.</td>
</tr>
<tr>
<td>Non-Stress Test (NST)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

July 2007 28

**35-37 WEEKS**

**GROUP B STREPTOCOCCUS (GBS) SCREEN**

Should be completed between 35-37 weeks. Women who agree to screening for GBS should have a culture done from a single swab first to the vagina then to the rectal area.
- If the woman has a known allergy to penicillin, SOGC recommends noting this on the requisition and requesting sensitivity testing for clindamycin and erythromycin.
- Since GBS colonization status can change, the SOGC recommends repeating the GBS culture after 5 weeks. Some clinicians may decide to delay collecting the GBS swab to 36 weeks so that the results will be valid until 41 weeks gestation. If a woman goes into labour and her culture result is > 5 weeks old, her GBS status should be considered unknown.
- SOGC recommendations found in Appendix F.

**POST TERM MANAGEMENT (41 WEEKS)**

The following tests are appropriate for certain pregnant women and/or certain clinical situations:

<table>
<thead>
<tr>
<th>Test/Assessment</th>
<th>Time (weeks)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biophysical profile and/or</td>
<td>41 weeks</td>
<td>After 41 weeks, current information suggests that women should be offered induction of labour. Care should be taken in assessing the evidence for gestational age beyond 41 weeks. Some women may elect to delay induction. If expectant management is chosen, a biophysical profile is indicated between 41-42 weeks and twice weekly thereafter. If a biophysical profile is not available, ultrasound examination to determine amniotic fluid volume and a non-stress test is an acceptable alternative. Women should also understand the importance of adequate fetal movement.</td>
</tr>
<tr>
<td>Non-Stress Test (NST)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

July 2007 28
## Nova Scotia Prenatal Record 3

### Problem List/Care Plan

<table>
<thead>
<tr>
<th>From</th>
<th>Plan (Follow-up/Consult)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

### Prenatal Visits

<table>
<thead>
<tr>
<th>Date</th>
<th>Weight</th>
<th>urine pH</th>
<th>BP</th>
<th>fetal heart</th>
<th>Prog.</th>
<th>FHR</th>
<th>'est.'</th>
<th>Gest.</th>
<th>Prev.</th>
<th>Next visit</th>
<th>Comments</th>
</tr>
</thead>
</table>

---

Reproduced by Woman's College

Digital Author: Insight Booth / Copy: Office/Shared.

Reproductive Care Program of Nova Scotia

http://www.ccchub.ca (000)-12345678

July 2007
12. PROBLEM LIST/CARE PLAN

In this section, care providers are encouraged to include physical and psychosocial issues that pertain to perinatal care. Examples include: gestational diabetes, history of depression, community service involvement with previous children, advanced maternal age, previous cesarean section, preeclampsia, placental location, Ith status, GBS status etc.

13. PRENATAL VISITS

The basic prenatal visit not including relevant discussion about antenatal screening and testing is comprised of maternal weight assessment, urine dip for protein and glucose, blood pressure monitoring, gestational age in weeks, measurement of fundal height, fetal presentation (using Leopold’s maneuvers), auscultation of fetal heart sounds, query about fetal movement, number of cigarettes per day if applicable and the date of the next prenatal visit.

The initial prenatal visit should occur as soon as pregnancy is suspected in order to offer comprehensive antenatal screening.

After the initial visit, the Society of Obstetricians and Gynecologists of Canada recommends women with low-risk pregnancies see the prenatal care provider every 4-6 weeks up to 30 weeks gestation, every 2-3 weeks after 30 weeks gestation and every 1-2 weeks after 36 weeks gestation until labour occurs or up until 41 weeks when a post-dates assessment should be conducted (i.e. biophysical profile or induction of labour, see pages 28 for more details).

Women with risk factors in pregnancy should be seen more frequently.
References


July 2007 32


Appendix A Newborn Screening

What is this service?
The Nova Scotia Newborn Screening Service at the IWK Health Centre offers testing for new babies to identify newborns with certain rare, serious disorders of body chemistry that are treatable. The vast majority of babies in Nova Scotia are healthy at birth. However, occasionally a baby is born with a disorder that may be dangerous to his/her health. Early diagnosis and treatment can result in normal growth and development. It can also prevent many of the medical problems associated with these disorders.

Who is tested?
All newborns within Nova Scotia. Most parents want to be informed and participate in decisions about what is important to their baby’s health, so they can be sure that their child receives the best medical care available. Testing newborns for these disorders is an important part of good healthcare.

How is my baby tested?
A few drops of blood are taken from your baby’s heel in the first two days of life, usually before he/she goes home from hospital. The blood is placed on a special type of absorbent paper and sent to the laboratory at the IWK Health Centre for testing.

How much will these tests cost?
These tests are free of charge.

Why should my baby be tested?
Babies with these disorders often appear perfectly normal at birth and are generally from healthy families. These disorders are quite rare, and your baby will not likely have any of them. However, by the time problems arise; permanent damage may already have been done. The safest thing to do is to have your baby tested. If one of the disorders is present, your baby can begin treatment immediately.

What is my baby being tested for?
Tests are carried out for several disorders. These disorders can be effectively treated if discovered early in life.

Your baby will be tested for the following common disorders:

PKU (Phenylketonuria)
This disorder is caused when a baby’s body is not able to break down the amino acid, phenylalanine that is found in the protein of foods. If detected early and the baby is started on a special low protein diet, severe brain damage can be prevented.
Congenital Hypothyroidism

This disorder is caused by the lack of thyroid hormone, which can lead to poor growth and mental development. If found early and treated with thyroid medication, a child will grow and develop normally.

MCAD (Medium Chain acyl-CoA Dehydrogenase) Deficiency

Babies with MCAD deficiency are healthy under normal circumstances. However, they can become very ill, or even die, during illnesses when the child does not eat properly. These complications are prevented with simple dietary measures such as frequent feedings during illnesses.

Other disorders include:
- Carnitine Reuptake Deficiency
- CPTI and CPTII (Carnitinepalmitoyl Transferase Type I and II)
- CTL (Carnitinepalmitoyl Translocase Deficiency)
- GAI and GAII (Glutaric Acidemia Type I and II)
- Homocystinuria
- Isovaleric Acidemia
- LCHAD (Long Chain Hydroxy acyl-CoA Dehydrogenase Deficiency)
- MSUD (Maple Syrup Urine Disease)
- VLCAD (Very Long Chain acyl-CoA Dehydrogenase Deficiency)

How will I be given test results?

Your baby’s test results are sent back to your family doctor and/or the hospital where the baby was born. You will not be called if they are normal (negative). If additional testing is needed to determine if your child has one of these disorders, your family doctor is informed immediately. If you are notified that your baby needs additional testing, do not delay. In many cases, the repeat test will show that your baby is, in fact, not affected.

I was called and told that my baby’s test needs to be repeated. Does this mean my baby has a disorder?

Not always. There are several reasons why your baby’s doctor may have asked to have your baby retested including:
- Unsatisfactory specimen: There was not enough blood to complete all the required screening tests, or the sample does not work for other reasons.
- "Too Early" specimen: If the blood specimen was taken before your baby was 16 hours old, a second sample will have to be taken as soon as possible to ensure accurate test results.
- Abnormal Test Result: An initial positive test result does not mean that your baby has a disorder. It does mean that your baby needs further testing to determine whether or not he/she has one of these disorders.
What does a “negative” test result mean?

A negative test result means your baby does not have any of the disorders he/she was screened for. Newborn screening only provides information about certain rare disorders of body chemistry. It is very important for your baby to have regular check-ups with your family doctor. This is an opportunity for you to talk about any concerns you have about your baby’s health.

The Nova Scotia Newborn Screening Service is designed to identify babies with rare, serious disorders within a few weeks of birth. This service has been available to Nova Scotia families since 1979. Currently 99.9% of babies born in the province are being tested.

As a parent, you can help to assure the health of your child and of the next generation by participating in the Newborn Screening Service.
Along with your referral letter, include any relevant family history, test results, etc., that would ensure prompt triage of this form.

FAILURE TO PROVIDE REQUIRED INFORMATION WILL DELAY THE PROCESSING OF THIS REFERRAL.

Patient Information:  (PLEASE PRINT CLEARLY)

★NAME:  _______________________________________
★FRANCOPHONE:  Y _____   N  _____
★MAIDEN/OFFER NAME: (if known) ________________
★DATE OF BIRTH: (dd/mm/yy) __________________________
★PROVINCIAL HEALTH CARE #:  ____________________   EXPIRY DATE:  __________
★ADDRESS:  _____________________________________________________________
_____________________________________________________________
(postal code please)
★HOME PHONE:____________________
★WORK/OTHER:  __________________
★LMP: __________________  ★EDC: ______________
★G _____   P _____   ★SA _____   ★TA _____
★Blood Type: __________  ★Had Ultrasound? __________
★Date:  ______________
PARTNER/SPOUSE:  ____________________     DATE OF BIRTH:  ______________
NEXT OF KIN (if other than spouse):  _____________________________________________
(First and last name please)          (Address & Phone number)
★REFERRING PHYSICIAN:  _____________________
(First and last name please)          (Phone number)
★REFERRING PHYSICIAN'S ADDRESS:  __________________________
★REASON FOR REFERRAL: __________________________________________
FAMILY PHYSICIAN:  ______________________
(First and last name please, if known)

PLEASE FAX ALL REFERRALS WITH REQUIRED DOCUMENTATION TO:
Maritime Medical Genetics Service, IWK Health Centre
5850/5980 University Avenue, PO Box 9700 Halifax, NS  B3K 6R8
FAX #:(902) 470-8709  Phone 8(902) 470-8754
Appendix C  Family Risk Questionnaire

Prenatal Family History Questionnaire

The purpose of this form is to determine whether any additional testing or information should be offered to you during your pregnancy. Please complete this form and bring it with you to your appointment. This form will become part of your permanent record at the IWK Health Centre.

Mother of baby: Full Name
Date of birth
Ethnic Origin (ancestry)
Occupation

Please list any personal health problems (present or past)

Are you and the baby's father related? (example: Cousins) If so please describe how?

Father of baby: Full Name
Date of Birth
Ethnic origin (ancestry)
Occupation

Please list any personal health problems (present or past)

Your Children:
List the names, ages and any health problems (present or past) of any previous children.
Note: If the child has a different mother or father from this baby, please indicate.

Pregnancy History:
When did you find out you were pregnant (approximate date or weeks gestation is fine)?

Was this a planned pregnancy? □ No □ Yes

Are you a smoker? □ No □ Yes If yes, how many cigarettes a day do you smoke?

Have you consumed any alcohol during your pregnancy? □ No □ Yes

Please indicate the number of drinks per week.

Were you taking any medication or drugs prior to finding out you were pregnant?
□ No □ Yes (please provide names)

Have you been taking any medication or drugs since learning you were pregnant?
□ No □ Yes (please provide names)

Were you taking folic acid prior to or during pregnancy? □ No □ Yes

When did you start?

Form # 4850 07/01 Page 1 of 2 PERMANENT RECORD Prenatal Family History Questionnaire Women's and Maternity Services
**FAMILY HISTORY:**

Please indicate "yes" or "no" using a check mark (✓). Does anyone in your (the baby’s mother) or the baby's father's family have any of the following conditions? By family we mean: brothers, sisters, children, parents, aunts, uncles, and cousins. If yes, please provide details (how is person related to you, type of condition etc)

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>NO (✓)</th>
<th>YES (✓)</th>
<th>Please provide details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental retardation or learning disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Down syndrome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other chromosome abnormality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial malformation (example: cleft lip and/or palate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neural tube defect (example: spina bifida, anencephaly)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurological disorder (example: brain or nerve problem or mental illness)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deathness and eye problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone disorder or abnormal limbs (example: dwarfism, multiple fractures)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscle problems (example: muscular dystrophy)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hormone problems (example: thyroid diseases)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach &amp; bowel problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood disorder (example: hemophilia, sickle cell anemia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer (under the age of 50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two or more miscarriages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stillbirth or early childhood death</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are there any conditions in either side of the family that were not mentioned here but that you are concerned about? If so, please describe them here.

Has anyone in your family been seen by genetics? If so, please describe why:

What questions or concerns would you like to have answered during your appointment?

---

**FAMILY HISTORY:**

Please indicate "yes" or "no" using a check mark (✓). Does anyone in your (the baby’s mother) or the baby's father's family have any of the following conditions? By family we mean: brothers, sisters, children, parents, aunts, uncles, and cousins. If yes, please provide details (how is person related to you, type of condition etc)

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>NO (✓)</th>
<th>YES (✓)</th>
<th>Please provide details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental retardation or learning disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Down syndrome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other chromosome abnormality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial malformation (example: cleft lip and/or palate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neural tube defect (example: spina bifida, anencephaly)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurological disorder (example: brain or nerve problem or mental illness)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deathness and eye problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone disorder or abnormal limbs (example: dwarfism, multiple fractures)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscle problems (example: muscular dystrophy)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hormone problems (example: thyroid diseases)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stomach &amp; bowel problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood disorder (example: hemophilia, sickle cell anemia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer (under the age of 50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two or more miscarriages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stillbirth or early childhood death</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are there any conditions in either side of the family that were not mentioned here but that you are concerned about? If so, please describe them here.

Has anyone in your family been seen by genetics? If so, please describe why:

What questions or concerns would you like to have answered during your appointment?

---
Rho(D) Immune Globulin (WinRho SDF™)

Indications for administration to Rho(D) negative women (without allo anti-D antibodies) unless father of the baby is known to be Rho(D) negative:

Always obtain antibody screen BEFORE administering WinRho SDF™. Confirm Rho(D) type, but no need to wait for screen result.

+ 28 weeks gestation: give 300 μg. If given between 28 weeks a repeat injection is required 12 weeks later.
+ Postpartum: obtain Kleihauer prep: 120 μg if infant is Rho(D) positive or Rho unknown. May withhold injection if WinRho SDF™ has been given within the previous 5 weeks provided Kleihauer™ is negative AND anti-D antibodies (due to Rh(D) ImmunoGlobulin) are detected in maternal serum.
+ Splenectomy or indwelled abscissa, ectopic pregnancy, partial moiler abortion up to 12 weeks gestation, give 300 μg after 12 weeks gestation, give 200 μg.
+ Antepartum bleeding (threatened abortion): up to 12 weeks gestation, give minimum of 120 μg after 12 weeks, give 100 μg, repeat every 5 days if bleeding continues. Continue WinRho™ for bleeding episodes in second and third trimester.
+ Antenatal screening, concomitant, endovascular endoscopy (ICE): give 200 μg. Kleihauer after and prior to antibiotic screen if procedure is reported within 6 weeks; and, if, and after 60 μg, if diabetic.
+ External version, ablation, amputation, placenta periventricially with bleeding time minimum of 120 μg. In combination with Kleihauer™ testing due to risk of infection and hemorrhage.
+ Platelet transfusion: 120 μg covers up to 12 transfused platelet units; 200 μg covers up to 30 platelet units, and 400 μg covers up to 40 platelet units. Increased dose is required to add additional platelet units are transfused and repeat it more than 1 week has passed. Reticulated platelets should be removed from the previous unit and contain a vast amount of red blood cells.
+ Administration of Rho(D) positive blood to Rho(D) negative recipients: 20 μg per mL red blood cells. Cautions: see product insert for warnings, or consult Rh Program.

KLEHAUER TEST POSITIVE for fetomaternal hemorrhage (FMH) of Rh(D) positive red blood cells:
- 100 μg protects for FMH of 0.03% to 0.2%.
- 100 μg protects for FMH of 0.2% to 0.8%.
- 200 μg protected for FMH of 0.8% to 1.6%.

Two product result or consent with Rh Program in antenatal care is required.

NOTE:
1. Administer within 72 hours of event to ensure effectiveness (if omitted, give as soon as possible up to 24 hours later).
2. Avoid Rh(D) INTRAVENOUS or DEEP INTRAMUSCULAR route to ensure absorption. Absorption is near 10% from the deep muscle route and offer major subcutaneous tissues, hence decreases absorption, and potentially the effectiveness of WinRho SDF™. If necessary, use alternate parenteral route or reconstitute.
3. WinRho SDF™ is a blood product. Patients should be informed of the source and safety, and informed consent should be obtained. A consent form is also available from the Rh Program. Refer to Rh Program pamphlet Pregnancy and the Rh Factor.


For further information contact the Rh Program of Nova Scotia. 98655900 University Avenue, PO Box 9700, Halifax, NS B3K 6B9.
Telephone: (902) 410-6440  Fax: (902) 410-7460
Revised April, 2004

July 2007 42
February 2006

Dear Physicians, Nurses, Midwives, and Laboratory Staff:

Re: New information regarding the administration of Rho(D) immune globulin (WinRho SDF™)

The Nova Scotia Provincial Blood Coordinating Program has released a Nursing Policy and Procedure for Blood, Blood Component and Plasma Derivative Administration as of September, 2005. Following discussions with the Blood Coordinating Program, the Rho Program has recommended a protocol for monitoring women receiving WinRho SDF™ for Rh incompatibility prophylaxis. This protocol is also contained in a draft Blood Administration Policy by the W & H Health Centre.

There are some points to consider when administering WinRho SDF™:

- Since WinRho SDF™ is a blood product, consent should be obtained. We suggest using the consent form specifically designed by the Rh Program, since it contains information that will be helpful in answering questions.
- The woman should be asked if she has had previous blood or blood products, and if she has had any adverse reactions.
- Since there is a possibility of a reaction to this product, women should be asked to remain for close observation for 15 to 30 minutes post administration.
- An antibody screen should be obtained at the first prenatal visit, and within two weeks prior to any administration of WinRho SDF™.
- A repeat antibody screen should be obtained at 26-28 weeks gestation, prior to the routine 28 week injection of WinRho SDF™, since the absence of antibodies at the first prenatal visit does not guarantee that antibodies will not be found at 26-28 weeks. In a ten year period in Nova Scotia, 23 out of 67 newly sensitized women (34.3%) developed anti-D antibodies before 28 weeks gestation.3
- Any reactions to this blood product should be recorded on the blood transfusion reporting and a copy should be returned to your Blood Transfusion Service department.

Thank you for considering these details in the administration of WinRho SDF™ for the prevention of Rh(D) alloimmunization in the perinatal period.

Sincerely,

M. C. Van den Hof, MD FRCS (C)
Director, Rh Program of Nova Scotia


Endorsed by the Medical Society of Nova Scotia, supported by the Department of Health, Province of Nova Scotia, and Dalhousie University Departments of Obstetrics and Paediatrics
Appendix E SOGC HIV Screening Recommendations

HIV Screening in Pregnancy

This guide has been reviewed by the Indigenous Fetal Alcohol Committee and approved by the Executive and Council of the Society of Obstetricians and Gynecologists of Canada.

**INDISPENSABLE WORKS**

Lisette V. H. H. van der Poel, MD, FRSC, Toronto ON

INFECTIONS/DISEASES/COMORBIDITIES

Marie L. Murphy, MD, FRCSG, Vancouver BC

Geraldine Roque, MD, MSc, Toronto ON

Catherine J. Stack, MD, FRCSG, Winnipeg MB

Maria S. B. M. B. van der Poel, MD, FRCSG, Toronto ON

Abstract

Objective: The purpose of this guideline is to provide recommendations to clinical practice guidelines and to clinical care providers on HIV screening in pregnant women, including all possible complications of HIV infection and its care in the state of vertical transmission from mother to baby. Secondary outcomes include confirmation of HIV infection in the woman, which also optimizes her health and that of the long-term management.

Evidence: The Cochrane Library and Medline were searched for English-language articles published related to HIV screening and pregnancy. Additional articles were included through the references of these articles. Only type was non-revised.

Key Words: HIV, AIDS, pregnancy, perinatal screening, counseling.

This guideline reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be intended as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictat adherence to their policies. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the SOGC.


July 2007 44
THE PREVENTION OF EARLY-ONSET NEONATAL GROUP B STREPTOCOCCAL DISEASE

PREPARED BY

DUANNE N. HRIGHT NSP, FRCSC, RMCIC, RCSC
LINDA E. JONES NSP, FRCSC, RMCIC, RCSC
GORDON K. McKEE NSP, FRCSC, RMCIC, RCSC
CARL WILKINSON NSP, FRCSC, RMCIC, RCSC

INFECTIOUS DISEASES COMMITTEE

DUANNE N. HRIGHT NSP, FRCSC, RMCIC, RCSC
LINDA E. JONES NSP, FRCSC, RMCIC, RCSC
GORDON K. McKEE NSP, FRCSC, RMCIC, RCSC
CARL WILKINSON NSP, FRCSC, RMCIC, RCSC

Canadian Paediatric Society Infectious Diseases Committee

JULY 2007

Appendix F SOGC GBS Recommendations

THE PREVENTION OF EARLY-ONSET NEONATAL GROUP B STREPTOCOCCAL DISEASE

PREPARED BY

DUANNE N. HRIGHT NSP, FRCSC, RMCIC, RCSC
LINDA E. JONES NSP, FRCSC, RMCIC, RCSC
GORDON K. McKEE NSP, FRCSC, RMCIC, RCSC
CARL WILKINSON NSP, FRCSC, RMCIC, RCSC

INFECTIOUS DISEASES COMMITTEE

DUANNE N. HRIGHT NSP, FRCSC, RMCIC, RCSC
LINDA E. JONES NSP, FRCSC, RMCIC, RCSC
GORDON K. McKEE NSP, FRCSC, RMCIC, RCSC
CARL WILKINSON NSP, FRCSC, RMCIC, RCSC

Canadian Paediatric Society Infectious Diseases Committee

JULY 2007

Appendix F SOGC GBS Recommendations

THE PREVENTION OF EARLY-ONSET NEONATAL GROUP B STREPTOCOCCAL DISEASE

PREPARED BY

DUANNE N. HRIGHT NSP, FRCSC, RMCIC, RCSC
LINDA E. JONES NSP, FRCSC, RMCIC, RCSC
GORDON K. McKEE NSP, FRCSC, RMCIC, RCSC
CARL WILKINSON NSP, FRCSC, RMCIC, RCSC

INFECTIOUS DISEASES COMMITTEE

DUANNE N. HRIGHT NSP, FRCSC, RMCIC, RCSC
LINDA E. JONES NSP, FRCSC, RMCIC, RCSC
GORDON K. McKEE NSP, FRCSC, RMCIC, RCSC
CARL WILKINSON NSP, FRCSC, RMCIC, RCSC

Canadian Paediatric Society Infectious Diseases Committee

JULY 2007
## Appendix G Alternate BMI Chart from the Perinatal Centre at the IWK Health Centre

<table>
<thead>
<tr>
<th>Height (in.)</th>
<th>Weight (lb.)</th>
<th>BMI (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'10&quot;</td>
<td>19</td>
<td>91</td>
</tr>
<tr>
<td>4'11&quot;</td>
<td>20</td>
<td>96</td>
</tr>
<tr>
<td>4'12&quot;</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>5'</td>
<td>22</td>
<td>105</td>
</tr>
<tr>
<td>5'1&quot;</td>
<td>23</td>
<td>110</td>
</tr>
<tr>
<td>5'2&quot;</td>
<td>24</td>
<td>115</td>
</tr>
<tr>
<td>5'3&quot;</td>
<td>25</td>
<td>120</td>
</tr>
<tr>
<td>5'4&quot;</td>
<td>26</td>
<td>125</td>
</tr>
<tr>
<td>5'5&quot;</td>
<td>27</td>
<td>130</td>
</tr>
<tr>
<td>5'6&quot;</td>
<td>28</td>
<td>135</td>
</tr>
<tr>
<td>5'7&quot;</td>
<td>29</td>
<td>140</td>
</tr>
<tr>
<td>5'8&quot;</td>
<td>30</td>
<td>145</td>
</tr>
<tr>
<td>5'9&quot;</td>
<td>31</td>
<td>150</td>
</tr>
<tr>
<td>5'10&quot;</td>
<td>32</td>
<td>155</td>
</tr>
<tr>
<td>5'11&quot;</td>
<td>33</td>
<td>160</td>
</tr>
<tr>
<td>5'12&quot;</td>
<td>34</td>
<td>165</td>
</tr>
<tr>
<td>6'</td>
<td>35</td>
<td>170</td>
</tr>
<tr>
<td>6'1&quot;</td>
<td>36</td>
<td>175</td>
</tr>
<tr>
<td>6'2&quot;</td>
<td>37</td>
<td>180</td>
</tr>
<tr>
<td>6'3&quot;</td>
<td>38</td>
<td>185</td>
</tr>
<tr>
<td>6'4&quot;</td>
<td>39</td>
<td>190</td>
</tr>
<tr>
<td>6'5&quot;</td>
<td>40</td>
<td>195</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Height (in.)</th>
<th>Weight (lb.)</th>
<th>BMI (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'10&quot;</td>
<td>91</td>
<td>96</td>
</tr>
<tr>
<td>4'11&quot;</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>4'12&quot;</td>
<td>100</td>
<td>105</td>
</tr>
<tr>
<td>5'</td>
<td>105</td>
<td>110</td>
</tr>
<tr>
<td>5'1&quot;</td>
<td>110</td>
<td>115</td>
</tr>
<tr>
<td>5'2&quot;</td>
<td>115</td>
<td>120</td>
</tr>
<tr>
<td>5'3&quot;</td>
<td>120</td>
<td>125</td>
</tr>
<tr>
<td>5'4&quot;</td>
<td>125</td>
<td>130</td>
</tr>
<tr>
<td>5'5&quot;</td>
<td>130</td>
<td>135</td>
</tr>
<tr>
<td>5'6&quot;</td>
<td>135</td>
<td>140</td>
</tr>
<tr>
<td>5'7&quot;</td>
<td>140</td>
<td>145</td>
</tr>
<tr>
<td>5'8&quot;</td>
<td>145</td>
<td>150</td>
</tr>
<tr>
<td>5'9&quot;</td>
<td>150</td>
<td>155</td>
</tr>
<tr>
<td>5'10&quot;</td>
<td>155</td>
<td>160</td>
</tr>
<tr>
<td>5'11&quot;</td>
<td>160</td>
<td>165</td>
</tr>
<tr>
<td>5'12&quot;</td>
<td>165</td>
<td>170</td>
</tr>
<tr>
<td>6'</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>6'1&quot;</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>6'2&quot;</td>
<td>185</td>
<td>185</td>
</tr>
<tr>
<td>6'3&quot;</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>6'4&quot;</td>
<td>195</td>
<td>195</td>
</tr>
</tbody>
</table>

Body weight in pounds according to height and body mass index
This table uses the kg/m² formula to calculate BMI. It has been converted to pounds and inches for your convenience.

---

July 2007 46