The New Prenatal Screening Program Saskatchewan

The Saskatchewan Centre for Disease Control (Provincial Laboratory) is pleased to announce an improvement in the prenatal screening program in Saskatchewan. Every pregnant woman must be offered the opportunity to have screening and, if the risk is found to be high enough, diagnostic testing for the presence of chromosomal abnormalities. This is universal care for all pregnant women as prescribed by National guidelines. The purpose of prenatal screening is to help the pregnant woman, with her family, decide whether or not to have invasive diagnostic testing.

The screening program can evaluate the risk of the fetus having Trisomy 21 (Down syndrome), Trisomy 18 or an open neural tube defect (ONTD). Some women already know they will have invasive testing (eg. because of higher risk) or that they will not have an amniocentesis (eg. because of risk of the procedure). In either case, screening for chromosomal problems is not indicated, although an alpha feto-protein for neural tube defect (ONTD) screening may be done.

The preferred test includes first and second trimester serum biochemistry and may use ultrasound to refine the risk in certain situations. Depending on the gestational age at presentation the following options are available:

**Option 1 Patient presents before 14 weeks gestation**

First trimester serum screening is offered. If the results indicate a very high risk of aneuploidy, the care giver will be notified and nuchal translucency ultrasound will be recommended. If the results indicate an average or low risk of aneuploidy, no report will be issued until second trimester serum screening is completed and then a second trimester serum integrated report will be issued reporting the risk of aneuploidy and open neural tube defect. The reason for combined testing is because a single first trimester test (whether ultrasound alone or biochemistry alone) is not good enough to meet the standards for detection of chromosomal abnormalities. Patients at higher risk or with multiple pregnancies may elect to have combined first trimester nuchal translucency and serum screening.

**Option 2 Patient presents at 14-20 weeks gestation**

Second trimester serum screening is offered between 15 and 20 weeks gestation. It is preferable to do the test as soon after 15 weeks as possible. The risk of aneuploidy and ONTD is reported.

**Option 3 Patient presents after 20 weeks gestation**

No serum screening may be offered at this gestation. Sonographic screening for fetal malformations should be offered.

**How will the test result be reported?**

Results will indicate either increased or decreased risk for a fetus having aneuploidy or an open neural tube defect. Increased risk in this program is reported as “risk above cut off”. Decreased risk is anything less than that, and is reported as “risk below cut off”.

Sonographic evaluation for fetal markers for aneuploidy may also be used to further refine risk but cannot offer definitive diagnosis. Invasive diagnostic testing, most commonly by amniocentesis with some unavoidable risk, is required to make a diagnosis.

A physician education package and patient education pamphlets will be distributed soon by the Provincial Laboratory. It is anticipated that the program will be in place by October 1st 2010.

Dr. M. J. Martel, Dr. K. Mytopher, Dr. G. Carson and Dr. D. Lehotay
Midwifery Care in Saskatchewan: The Saskatoon Health Region Experience—Debbie Mpofu, RM

Saskatchewan was the seventh province in Canada to regulate midwifery in 2008. The Saskatchewan College of Midwives (SCM) was formed out of the Midwifery Transitional Council to oversee midwifery governance. The SCM serves to protect the public. The Midwifery Association of Saskatchewan (MAS) supports midwife members. For more information, you can connect to the SCM website at www.saskmidwives.ca to view quarterly newsletter updates and for details on the SCM role and information.

The Saskatoon Health Region (SHR) Midwifery services commenced on January 20th 2009. Up to five midwives have provided midwifery services to 204 clients from February 2009 to June 2010.

- 91 women had normal vaginal deliveries with midwives at home
- 81 women had normal vaginal deliveries in hospital with midwives
- Approximately 14% of women required transfer of care during the third trimester for medical/obstetrical complications or for conditions arising during labour and birth that required medical services.

Only residents of SHR can access that health region’s midwifery program. Each midwife recruits 4-5 women/month, so caseloads fill-up quickly. Clients call a central intake number (306) 655-5371 and attend a two hour “midwifery information session.” Topics covered at this session range from details on the philosophy of midwifery, midwife education and training, info about each of the Health Region Midwives, the screening process for client intake, balancing clinic and home visits as part of care, use of evidence based information, informed choice, continuity of care, choice of birth place, and more. Eligibility into midwifery care is based on prioritization of women challenged by various factors and low risk obstetric clients’. Midwives are further guided by the SCM guideline on “Indications for Discussion, Consultation and Transfer of Care.” Midwives order all prenatal tests that family physicians can order, prescribe medications as set out by the SCM and perform normal vaginal deliveries in both hospital and out-of-hospital (home) settings.

Clients report tremendous satisfaction with midwifery care.

“*I felt very comfortable with all decisions we made because I had discussed options with my midwife*”

“*Physicians and nurses were very quick and very helpful when we needed them*”

“*These midwives are phenomenal! I think that it would benefit the program and clients if the midwives had their own clinic or birthing centre or at least a bigger space*”

Other regions of Saskatchewan continue to advertise for midwives. Both Cypress Health Region and the All Nations Healing Hospital in Fort Qu’Appelle have one midwife and are actively recruiting for additional midwives. The Regina Qu’Appelle Health Region has just recruited a midwife and is advertising for more midwives. Prince Albert Parkland Health Region has completed a midwifery feasibility study and should be looking to recruit midwives in the future. Recruiting of Canadian registered midwives, providing Saskatchewan College of Midwifery approved education and training, as well as supporting rural women continue to be big challenges in midwifery for Saskatchewan today.
MotherFirst Report Advocates for Better Mental Health Care For Mothers

Following a very successful meeting with Health Minister McNorris, representatives from the MotherFirst Working Group were advised to carry the project further though the development of a provincial advisory group to move the recommendations of the group throughout the health regions.

The MotherFirst Working Group was established in the Fall, 2009 in response to a call for the development of a comprehensive provincial policy to address maternal mental health within the Province. Head by project leader Dr. Angela Bowen, Associate Professor with the College of Nursing, University of Saskatchewan and with funding from a Canadian Institute of Health Research Grant, the MotherFirst Working Group brought together diverse stakeholders from professional health associations, community organizations, First Nations groups, academia, and the Ministry of Health who recognize this as an important health issue. The MotherFirst Report was developed through research and consultation by this group. The Report addresses the inconsistent care of new mothers experiencing mental health problems and proposes policy recommendations for better support, including education, screening and treatment.

Maternal mental health problems are the leading cause of disability in childbearing women. One in five women suffer from depression or anxiety during pregnancy or postpartum. When left untreated, maternal mental health problems cause serious and widespread personal, social and economic problems. Beyond the psychological and emotional suffering of mothers, their partners are more likely to develop depression and their children may experience developmental delays. There are significant direct costs to the health care system, and less obvious expenses of decreased workplace productivity and long term care for negatively affected children.

Saskatchewan currently lacks a provincial policy for identifying and treating maternal depression and anxiety. Each health region has varying practices for identifying and treating maternal mental health problems, which means that services are inconsistent for women. Education, screening and treatment have been identified as the top policy priorities for improved maternal mental health care.

Education will provide women, their families, and health providers with evidence-based information. Greater awareness will decrease the stigma of maternal mental health problems and promote early identification and intervention. In partnership with the Saskatchewan Prevention Institute, print materials have been developed and distributed across the province. Information on Maternal Mental Health is now included on the HealthLine Online and Ministry of Health websites.

Screening is important to identify mothers at risk for developing depression or anxiety. The Edinburgh Postnatal Depression Screen (EPDS) is a validated, reliable tool that asks 10 questions to assess mental health. It is suggested that this be administered regularly during pregnancy and postpartum to gauge mental health status. The MotherFirst report endorses the use of the EPDS twice during pregnancy and three times during the postpartum period. Every health region should develop a referral template to have a protocol for referrals following the screen.

Timely and accessible care is an essential component for reducing the impact of maternal mental health problems and is critical for restoring the wellbeing of mothers and their families. It is recommended that Mental Health Services prioritize pregnant women and new mothers due to the multifaceted effects of untreated depression and anxiety. Women also need accessible, effective treatment options. These include peer support, psychotherapy, and medication, among others.

The MotherFirst Report also outlines an implementation and governance strategy that will ensure maternal mental health is maintained as a health priority. Health regions will be given autonomy in their own regional advisory groups to develop resources and specific protocols. A provincial advisory group will also be created to provide guidance and current information. This will ensure local services are responsive, while providing more consistent care across the province. These advisory groups will involve diverse stakeholders from each community.

Currently, the MotherFirst Report is in the process of publication. Once published, it will be accessible on the MotherFirst Website www.skmaternalmentalhealth.ca, along with other educational resources and informational materials developed by the Saskatchewan Prevention Institute. Dr. Angela Bowen and Lindsey Bruce
Ultrasound Scans in Pregnancy: How Many, For What?
George D. Carson MD, FRCSC
Director of Maternal Fetal Medicine, Regina Qu’Appelle Health Region

Ultrasound is one of the great innovations in obstetrics. It has transformed practice and created the concept of the fetal patient. Many benefits have been achieved.

Increasing numbers of scans being done, however it is not apparent that the nature of the patient population has changed significantly recently or that there are recent new applications for ultrasound. Outcomes have not improved in proportion to the increased number of scans. Resources for ultrasound scans are finite, so scans that do not help with patient management can impede access to scans that would provide benefit for patients and the management of their care.

The following is a suggestion of good indications for scans, including when and how many are needed for the care of all pregnant women.

<table>
<thead>
<tr>
<th>INDICATION</th>
<th>SCAN(S) NEEDED</th>
<th>Estimated Proportion of women having an ultrasound [% patients with condition ≠ scans per woman = total scans]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsure Dates</td>
<td>One scan as soon as possible at or after estimated 8 weeks, preferably before 20 weeks. Use that scan as definitive for dating.</td>
<td>0.15</td>
</tr>
</tbody>
</table>
| Suspect Ectopic (Not necessarily every patient with first trimester bleeding) | One Scan  
  • If intrauterine pregnancy, then ectopic excluded  
  • If not seen ("unknown location") get serial hCGs | 0.1                                                                                           |
| Aneuploidy Screening                  | One scan at 11-14 weeks gestation at an accredited unit for nuchal translucency. A significant proportion of women will decline screening. For those who choose it, in Saskatchewan, a combined first and second trimester biochemistry assessment is the preferred option. | 0.29                                                                                           |
| Guide genetic amniocentesis            | One scan at ~14 weeks | 0.03                                                                                           |
| Anatomy scan                         | One scan at 18-20 weeks for every pregnant woman | 1.0                                                                                           |
| Serial for growth because of suspected placental insufficiency (e.g., hypertension [>5% of pregnancies], abruptio [~2% of pregnancies], thrombophilia [~1% of pregnancies]) | Scans at 24, 28, 32 and 36 weeks (An interval of 4 weeks is needed between scans to detect growth restriction.) | 0.08 X 4 = 0.32 |
| Serial for Fetal Well-being if placental insufficiency is found (Biophysical profile and Dopplers) | Scans weekly from diagnosis, after 24 weeks, until ~37 weeks or indicated delivery earlier | 0.05 X ~6 scans = 0.3 |
| Diabetes, pre-existing for growth and symmetry | Scans every 4 weeks at 24, 28, 32, 36 | 0.01 X 4 = 0.04 |
| Diabetes, gestational for growth and symmetry | Scans every 4 weeks at 28, 32, 36 | 0.05 X 3 = 0.15 |
| Increased BMI, serial for growth | Scans at 24, 28, 32 and 36 weeks for growth of fetuses because physical exam cannot be reliable | 0.1 of pregnancies X 4 = 0.4 |
| Twins                               | One scan when twins are suspected or after assisted reproduction. Determine the chorionicity. Then offer for aneuploidy screening (Biochemistry not reliable for multiples) | 0.05                                                                                           |
| Dichorionic Twins (The aneuploidy and anatomy scans are included above) | Scans at 24, 28, 32 and 36 weeks for growth of fetuses, to detect non-concordant growth | 0.62 of pregnancies X 4 = 0.24 |
| Monochorionic Twins (The aneuploidy and anatomy scans are included above) | Scans for suspected Twin To Twin Transfusion Syndrome every 2 weeks from 20 weeks  
  Scans at 24, 28, 32 and 36 weeks, which include TTTS screening, for growth of fetuses | 0.065 of pregnancies X 10 = 0.65 |
| Third Trimester Bleeding            | One scan for placental localization (If abruption, follow as above.) | 0.05                                                                                           |
| Unsure presentation                  | For presentation | 0.1                                                                                           |
| Breech near term                     | For eligibility for vaginal birth. (Type of breech, estimated weight, attitude of fetal head) | 0.04                                                                                           |
| Miscellaneous (e.g., Middle Cerebral Doppler for suspected fetal anemia; thickness of lower segment for VBA; actual TTTS) | Serial weekly for actual TTTS, every 3 weeks for suspected and weekly for actual anemia, once for lower segment | 0.02                                                                                           |

TOTAL SCANS: 3.11

The column on the right lists the proportion of women estimated to have each indication for a scan times the number of scans in the pregnancy for that indication which equals the total number of scans recommended for each specific indication. That is a total of 3.11 scans per woman, although many women of course should have only the anatomy scan and, if chosen, a scan for aneuploidy screening. One or more other scans, according to the indication(s) should be done for specific indications for some women.

With the number of women giving birth in Saskatchewan at about 14,500/year, the total number of obstetrical ultrasound scans that should be done is approximately 3.11 X 14,500 or 45,095. There were actually less scans done than that and in fact, 653 women, who certainly should have had at least one scan, had none. On the other hand, 70 women had more than 15 scans. These statistics suggest that there are opportunities to use obstetrical ultrasound scans more appropriately to better manage patient care.
What’s New in Neonatal and Infant Care: An Interview with Dr. Sankaran

Following the April 23 Neonatal Resuscitation Program (NRP) Instructor course, we had the opportunity to ask Dr. K. Sankaran, Director of the NICU in Saskatoon’s Royal University Hospital some questions about his presentation “What’s New in Neonatal Care.”

Q What exactly is the “Golden Hour” that is used when describing the importance of neonatal resuscitation and stabilization?

The “Golden hour” refers to the first hour of life when a neonate transitions from intrauterine to extrauterine life. Recognition of variation from normal transition and prompt and effective care during this time has a significant impact on mortality and morbidity. In Preterm infants, interventions during this period can decrease the rate of complications such as intraventricular hemorrhage, bronchopulmonary dysplasia (BPD), hospital acquired infections, necrotizing enterocolitis and others. Gentle resuscitation, an lung open strategy and non invasive surfactant administration are some examples. In late pre term and term infants, prevention of air leaks and pulmonary hypertension is the key. In asphyxiated term infants, moderate controlled hypothermia may also help. Avoid active over heating by keeping the temperature in the low range of normal.

Q It seems that many adults can’t start their day without coffee, but what is the role of caffeine in the treatment of newborns?

A large RCT of over 2000 infants weighing under 1 Kg revealed significant benefits, such as decreased need for ligation of patent ductus arteriosis, decreased brain injury, long term (2yrs) developmental benefits and decreased lung injury using caffeine. Early use of caffeine along with early Continuous Positive Airway Pressure (CPAP) decreases the need for intubation and decreases BPD. A better lung paves the way for a better brain! Side effects are minimal.

Q We hear a lot about the Late Pre-Term Infant these days. About 75% of Preterm babies born in Saskatchewan are born between 34 – 36 weeks. Why is this group of infants such a concern?

Births of late preterm infants are increasing along with increasing Caesarean section rates. Air leaks, Respiratory Distress Syndrome (RDS), pulmonary hypertension, jaundice and bilirubin encephalopathy are some of the serious consequences for infants born at this period of gestation. Generally these infants are at serious risk to fall between the cracks mostly because they are appear like, and are treated like term infants. These infants also have difficulty feeding because their suck and swallow is immature.

Q We have been taught how important it is to keep infants warm. Can you tell us about some of the new thinking on using hypothermia for certain, select infants to actually help protect their brain?

There is mounting evidence that mild to moderate hypothermia in moderate to severe Hypoxic Ischemic Encephalopathy (HIE) decreases brain injury and long term disability. As I alluded to earlier, in term infants suffering from moderate to severe asphyxia, it is prudent to not actively heat, but to try and wrap normally and maintain the skin temp in the lower range of normal (35.5 to 35.8 or so). Active cooling has to be with appropriate monitoring and with continuous rectal or oesophageal temperatures of 34 to 35 degree C.

Q We are hearing a lot about Vitamin D these days. What do we know about Vitamin D and the health of the fetus and newborn?

Vitamin D is largely transported across placenta in the third trimester, so pretty well all preterm infants are Vit. D insufficient. In addition, nearly all Saskatchewan women in the reproductive age group are Viit. D insufficient because of lower sun exposure (north) and not consuming enough Vit. D of plant or animal origin. So the fetus is highly vulnerable to being Vit D deficient. We know that vitamin D is crucial for immunity modulation and development, prevention of osteopenia and rickets, appropriate bone mineral accretion, prevention of severe infections (like TB and severe pneumonia), the prevention of chronic illnesses such as asthma, rheumatoid arthritis, multiple sclerosis, and diabetes and for the prevention of certain cancers, such as prostate and ovarian. At Royal University Hospital, we recommend 800 to 1000 IU of Vit. D for preterm and 400—800 IU for term infants. Vitamin D supplementation for pregnant women in Saskatchewan is also important. The Canadian Pediatric Society has a great parent website “Caring for Kids” that discusses Vitamin D during pregnancy and for infants and can be accessed at http://www.cps.ca/caringforkids/pregnancybabies/VitaminD.htm. An ounce of prevention really does goes a long way!

Q What exactly is delayed cord clamping? Which babies benefit from delayed cord clamping?

Delayed cord clamping has been an old practice which has taken front row recently mainly because of new evidence showing benefits. Infants in which cord clamping was delayed for at least 60 seconds were shown to have a smoother neonatal transition, higher BP, better urine output and were able to lay down increased iron stores. Additional benefits for preterm infants may also include a decrease in intraventricular hemorrhage and necrotizing enterocolitis. Delayed cord clamping can provide the infant with additional blood volume beneficial in cases of poor perfusion and can be done during the initial steps of resuscitation. This will likely become a recommendation for the next revision of NRP this fall.
The Canadian Neonatal Network™ is a group of Canadian researchers who collaborate on research issues relating to neonatal care. The Network was founded in 1995 by Dr. Shoo Lee, and now includes members from 30 hospitals and 17 universities across Canada. The Network maintains a standardized Neonatal Intensive Care Unit database and provides a unique opportunity for researchers to participate in collaborative projects on a national and international scale. Health care professionals, researchers and administrators participate in improving efficacy and efficiency of neonatal care. Research results are published in Network reports and in peer-reviewed journals.

The goals of the CNN are to:
- Establish a national network of multi-disciplinary Canadian researchers interested in neonatal-perinatal research
- Establish and maintain a national neonatal-perinatal database and provide the infrastructure to facilitate collaborative research
- Study outcomes and costs of various medical care practices
- Develop innovative research methods that can lead to improvement in health and quality of healthcare

Both of the Level II/III NICU’s in Saskatchewan at Royal University Hospital and Regina General Hospital are members of CNN. Interdisciplinary teams work collaboratively on projects as part of the Evidenced based Practice, Intervention and Quality Improvement (EPIQ) groups. Many centers are in phase II of EPIQ, which is a five year collaboration to improve outcomes for mothers and infants in Maternal Infant Care initiatives. Through the recent installment of Virtual Research Community, we can access and share documents, research and intervention strategies with all other centers from computers. CNN continues to be a valuable organization that has linked all Level III NICU’s across Canada into one collaborative group that can share research and innovations in a timely manner, as well becoming an international leader in perinatal-neonatal care.

Evidence-based Practice for Improving Quality (EPIQ)
EPIQ provides an interesting online tutorial as a brief practical guide to help health care teams perform reviews. This scientific process uses evidence to target clinical or process-based practices for improvement. An example, using the premature “baby in a bag” for temperature control, is illustrated. This stepwise guide is available at [www.canadianneonatalnetwork.org/EPICPHS/EPIQ%20videos/EPIQ_flash/EPIQ(flash).html](http://www.canadianneonatalnetwork.org/EPICPHS/EPIQ%20videos/EPIQ_flash/EPIQ(flash).html).

The Neonatal Resuscitation Program (NRP) is Changing!
Did you know that the NRP program is updated every 5 -6 years? Following an extensive review process by world experts in neonatal care, guidelines for neonatal resuscitation are revised to ensure infants receive the best care possible based on current evidence.

The new recommendations for neonatal resuscitation will be published on October 18, 2010 and will be published in a number of international journals. The 6th edition “Textbook of Neonatal Resuscitation” should be completed by spring of 2011, with all courses required to incorporate the new guidelines by January 1, 2012. Although we don’t know what the changes to the course itself will be, changes are in store for how NRP courses will be conducted. Participants in the course will complete an on-line exam prior to attending the course. The focus of the course will be on the development of hands-on skills and working as a team to conduct an efficient, effective resuscitation. Using realistic and complex scenarios, team members will engage in a simulated and immersive learning experience designed to foster critical thinking and effective communication. The NRP Instructor will serve as facilitator in assisting the group evaluate their individual performance and the functioning of their team as a whole through the use of debriefing.

The Goals of NRP are:
One person whose primary responsibility is the baby will be present at every delivery and be capable of initiating resuscitation. That person or someone else who is immediately available should have the skills required to perform a complete resuscitation. A NRP training program is available to every hospital that provides obstetrical services.
The Perinatal Education Program Maternal Transfer Form has been revised (July 2010). It can be downloaded from the program website at http://www.usask.ca/nursing/cne/perinatal/guidelines.php

Updating of the Newborn Transport Form and Guidelines for Neonatal Post-Resuscitation Stabilization and Preparation are underway. Revisions will be posted to the program website as above once complete.

The phone number for the Regina General Hospital Neonatal Transport Team has changed. Please call the Bedline at 1-866-766-6050 and ask to speak to the Neonatologist or Midlevel coverage on call. Both the NICU (Phone: 766-6161) and L&B (Phone: 766-6150) Units at RGH have relocated to new, renovated facilities. The Mother-Baby Unit plans to move in the fall.

Breech Birth Online Training
A free training tool, Vaginal Delivery of Breech Presentation, SOGC Clinical practice Guideline, is now available at www.advancingin.com. This program is an Accredited Group Learning Activity. Learning Objectives:

1. Review the physiology of breech birth
2. Understand the risks and benefits of a trial of labour vs planned Cesarean Section
3. Understand the criteria, Intrapartum management parameters and delivery techniques for a trial of vaginal breech birth
4. Review protocols regarding informed consent and appropriate alternatives for women who refuse recommended care

The Saskatchewan Prenatal Record has been revised. These forms (# H19-42) are available from SPMC Distribution Centre, 110 Henderson Dr. Regina. S4P 3V7. Phone (306)787-2056. or FAX (306)787-0194.

Newborn Screening
Saskatchewan now screens newborns for over 30 metabolic and endocrine disorders. Information handouts are available from the Saskatchewan Ministry of Health at www.health.gov.sk.ca/newborn-testing or phone the Saskatchewan Disease Laboratory at 306-787-3142.
- Information for Health Care Providers
- Parent Information brochure

The Saskatchewan Prenatal Record has been revised. These forms (# H19-42) are available from SPMC Distribution Centre, 110 Henderson Dr. Regina. S4P 3V7. Phone (306)787-2056. or FAX (306)787-0194.

PRIMA Resource
This resource is designed to assist Canadian health professionals to provide care for women with problematic substance use during pregnancy and after delivery. Pregnancy Related Issues in the Management of Addictions: A Reference for Care Providers is available at www.addictionpregnancy.ca/lnr/downloads/PRIMAlaminate.pdf. The reference guide provides an overview of standards of care, identifies and explains care related to specific substances, discusses labour and delivery and postpartum care issues. It also includes a list of national resources.
**Coming Perinatal Education Events in Saskatchewan**

www.usask.ca/nursing/cne/perinatal  or  www.usask.ca/cme/programs/perinatal

### 2010

**October 15 & 16**  
STABLE: Assessment & Stabilization Care of Sick Infants  
Regina

**October 23**  
Neonatal Resuscitation Provider Workshop (closed)  
Unity

**November 6**  
Neonatal Resuscitation Provider Workshop  
Regina

### 2011

**February 5**  
Neonatal Resuscitation (NRP) Program Renewal  
Saskatoon

**March 24 & 25**  
Women's & Children's Health Conference  
Saskatoon

**April 7 & 8**  
Neonatal Resuscitation Program New Instructor Course  
Regina

**April 7**  
Neonatal Resuscitation Program Instructor Update  
Regina

**April 9**  
Neonatal Resuscitation (NRP) Provider Course  
Regina

**May**  
Best Practices in Intrapartum Care  
Saskatoon

**May**  
Fetal Health Surveillance Course  
Saskatoon

**October**  
Perinatal Loss Seminar  
Regina

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**Pregnancy and Birth: Current Clinical Issues** will be held December 9 & 10, 2010 in Toronto  
Inquiries: (416)323-6501 mailbox 3781 or Email: cmicr@sunnybrook.ca

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Thank you to the following who contributed to this edition of the Perinatal Education Program Newsletter: A. Bowen, RN, PhD; L. Bruce; Dr. G. Carson; Dr. D. Lehotay; Dr. M-J. Martel; D. Mpofu, RM; Dr. K. Mytopher; Dr. K. Sankaran and M. Snell, RN, NNP.

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**Farewell**

*I wish to extend best wishes and a fond farewell to all my contacts in Obstetric and Neonatal Care as I look toward Retirement and a new phase in my life in the Fall. I have thoroughly enjoyed my 36 year career in Nursing and Continuing Education (32 years in Perinatal Care and 21 years as the Perinatal Outreach Education Coordinator for RQHR and southern Saskatchewan). It’s hard to believe all the changes we’ve seen… I welcome Jaclyn Pukas as the new Perinatal Outreach Education Coordinator, and encourage you to contact her with your questions and needs in the future.*

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