Perinatal Newsletter

Newfoundland and Labrador
Provincial Perinatal Program

Spring, 2006

"How much alcohol do you drink?"

Fetal Alcohol Spectrum Disorder (FASD) is an umbrella term that describes the range of disabilities associated with prenatal exposure to alcohol and is the leading non genetic cause of birth defects and developmental disabilities among Canadian children.[1]

The effects of alcohol consumption during pregnancy vary depending on factors such as the quantity of alcohol consumed, stage(s) of pregnancy when consumption took place, mother's ability to metabolize alcohol, as well as the genetic characteristics of the fetus.[2]

As a result, the current recommendation states: **there is no safe amount of alcohol to drink during pregnancy, nor is there a safe time to drink alcohol during pregnancy**.[3]

It is likely that maternal alcohol use is frequently underreported. Many women may not disclose prenatal use because they feel guilty about alcohol use, fear being judged or fear loosing their baby or other children.[4] Furthermore, studies have shown that health care providers do not routinely ask women about their use of alcohol.[5] Many physicians do not feel prepared to deal with patients on the subject of alcohol use and need training and referral resources.[6]

The Best Start: Ontario's Maternal, Newborn and Early Child Development Resource Centre has worked collaboratively with other partners, such as Motherisk and Health Canada, to produce *The Participant Handbook: Supporting Change, Preventing And Addressing Alcohol Use in Pregnancy*. This guide, designed as part of a training module, informs physicians about alcohol use and abuse in pregnancy, and provides tools and resources to support physicians in appropriate screening and assessment of their pregnant patients.

The following, "**How to ASK about alcohol use and pregnancy**", is an excerpt from *The Participant's Handbook*.

> *Introduce your discussion about alcohol by explaining that you will be asking a standard series of health questions that are directed to all patients in order to improve health. Avoid questions that suggest that you want a negative response. Once the patient responds negatively, it is difficult to explore the issue further.*[7]
>
> *Negative: You don't drink, do you?*
> *Positive: How much alcohol do you drink?*
>
> *Start by asking how much alcohol the patient drinks. If the patient denies drinking alcohol, reinforce that it is safest not to drink alcohol prior to and during pregnancy. If the patient discloses that they use alcohol, ask about frequency and quantity of use. Follow up with the 4 questions in the T-ACE screening tool (on back of the provincial prenatal record). The scoring from the T-ACE questionnaire will indicate if the patient is "at-risk" or "high-risk". In addition, watch for signs and symptoms of alcohol use.*

It is important to screen all women for alcohol use and not to make assumptions based on income or appearance. Women of low and high socio-economic status are at risk of drinking during pregnancy.

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When asking about alcohol use, consider the following:

- *Be non-judgemental*
- *Listen attentively to her concerns*
- *Refrain from negative comments or reactions*
- *Focus on the mother as well as the baby*
- *Be sensitive to broader issues such as poverty and abuse*
- *Make positive comments about the fact that the woman is seeking prenatal care*

Key times to assess alcohol use are:

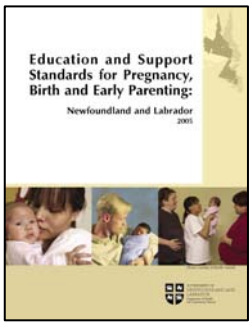
- *Initial visit*
- *Annual gynaecological visit*
- *Preconception visit*
- *Visits for confirmation of pregnancy*
- *Mid pregnancy (24-28 weeks)*
- *Exit visit (32-36 weeks gestation)*

All care providers are encouraged to download this document from:

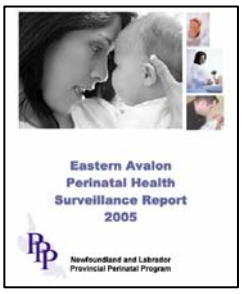
http://www.beststart.org/resources/alc_reduction/index.html

1. Health Canada. (2003). Fetal Alcohol Spectrum Disorder (FASD): A framework for action. Ottawa: Minister of Public Works and Government Services Canada. Cat. No.: H39-4/20-2003
2. Public Health Agency of Canada. (2002). Alcohol and pregnancy. Maternal and Infant Health Section. www.phac-aspc.gc.ca/rhs-ssg/factshts/alcprg_e.html.
3. Public Health Agency of Canada. (2005). Fetal Alcohol Spectrum Disorder (FASD). Cat. No.: H124-4/2004
4. Best Start, (2005). Participant Handbook: Supporting Change: Preventing and Addressing Alcohol Use in Pregnancy. http://www.beststart.org/resources/alc_reduction/pdf/participant_hndbk_june05.pdf
5. Nevin, A.C., Parshuram, C.C., Nulman, I.I., Koren, G.G., Einarson, A.A. (2002). A survey of physicians knowledge regarding awareness of maternal alcohol use and the diagnosis of FAS. BioMed Central Family Practice, 3 (2).
6. Nanson, J.L., Bolaria, R., Snyder, R.E., Morse, B.A., Weiner, L. (1995). Physician awareness of Fetal Alcohol Syndrome: A survey of pediatricians and general practitioners. Canadian Medical Association Journal, 152(7): 1071-1076.
7. Weiner, L., Rosett, H., Mason, E. (1985). Training professionals to identify and treat pregnant women who drink heavily. Alcohol Health and Research World, 3, 33-35.

Recent Reports



The NLPPP and the Department of Health and Community Services present the new ***Education and Support Standards for Pregnancy, Birth and Early Parenting*** for Newfoundland and Labrador. While acknowledging there are variations in how programs and services are implemented in each region, these standards will promote provincial consistency in the goals, indicators and targets for pregnancy, birth and early parenting education and support programs.



As part of the NLPPP's mandate to develop a province wide surveillance program, the ***Eastern Avalon Perinatal Health Surveillance Report 2005*** was recently released. This report, a review of perinatal health for pregnant women and their newborns, is an important reference document as it can help identify perinatal risk factors, determine effective interventions, educate health care providers and the public, and recommend appropriate allocation of resources.

Both documents can be found at **www.nlppp.ca**

Listeriosis

Listeriosis is an uncommon disease caused by *Listeria monocytogenes*, a type of bacterium found in soil, water and animals.[1] Pregnant women, the elderly, or those with a weakened immune system are most susceptible to this disease. **Pregnant women are about 20 times more likely than other healthy adults to develop listeriosis**, due to the hormonal changes that affect the mother's immune system. The development of listeriosis in pregnancy may cause miscarriage, premature delivery, fetal death and severe illness or death of a newborn from the infection.[2] In pregnant women, listeriosis may cause flu-like symptoms and sometimes diarrhea or nausea. In some instances, the infection has led to meningitis encephalitis and/or septicemia.[2,3]

Unlike most bacteria, Listeria can survive and sometimes grow on foods being stored in the refrigerator. Foods that are contaminated with Listeria look, smell and taste normal, but the bacteria can be killed by proper cooking procedures.[3]

To minimize the risk of contracting listeriosis, sanitize all surfaces and utensils after handling foods (especially meat and fish), thoroughly clean fruits and vegetables before consumption, refrigerate or freeze foods within two hours, never defrost food at room temperature, keep leftovers for a maximum of four days, check that the temperature of the refrigerator is 4^0C or below, and frequently wash and disinfect the refrigerator.[3]

Foods to Avoid:	Safer alternatives:
Hot dogs, especially straight from the package without further heating. The fluid within hot dog packages may contain more *Listeria* than the hot dogs. Avoid spreading fluid from packages onto other foods, cutting boards, utensils, dishes and food preparation surfaces. Wash your hands after handling hot dogs.	Hot dogs reheated until steaming hot
Non-dried deli-meats	Dried and salted deli-meats such as salami and pepperoni, as they generally do not support the growth of *Listeria*. Reduce your risk by reheating deli-meats until steaming hot.
Soft and semi-soft cheeses such as feta, Brie, Camembert and blue-veined cheese if they are made from unpasteurized milk	Pasteurized milk and milk products including cheeses made from pasteurized milk
Refrigerated pâté and meat spreads	Canned or shelf-stable pâté and meat spreads
Refrigerated smoked seafood and fish	Cooked refrigerated smoked seafood and fish. Canned or shelf-stable smoked seafood and fish.
Raw or undercooked meat, poultry and fish	Thoroughly cooked meat, poultry and fish

Source: Health Canada, 2005

1. Government of Newfoundland and Labrador. (2004). Listeriosis-Food borne Illness. http://www.health.gov.nl.ca/health/publications/ehp/pdf/Listeriosis.pdf
2. USDA. (2001). Foodborne Illness and Disease. Listeriosis and Pregnancy: What is your risk? http://www.fsis.usda.gov/Fact_Sheets/Listeriosis_and_Pregnancy_What_is_Your_Risk/index.asp
3. Health Canada (2005). It's Your Health. Listeria and Food Safety. http://www.hc-sc.gc.ca/iyh-vsv/food-aliment/listeria_e.html

High Risk Follow-Up Clinic

Since 1979, the follow-up clinic has been a major part of the NLPPP. This referral program provides developmental screening and assessment of neonates perceived to be at high risk for developmental delay. The goal of the clinic is to identify areas of concern so as to provide early intervention in hopes of improving developmental outcomes.

The clinic's admission criteria helps determine which infants are at high risk for adverse developmental outcomes that include cerebral palsy (CP), developmental delay (DD), impaired vision, and/or impaired hearing.

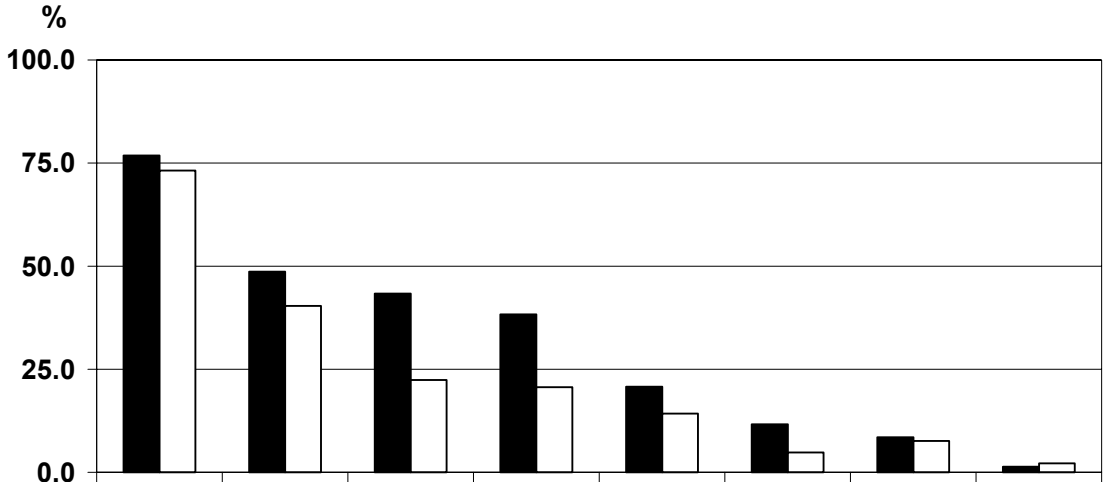
This information has been captured in a database since 1994 on the basis of a concern or diagnosis indicated on their health record. Below is an example of the information available.

Admission Criteria (revised 2005)

1. Birth weight less than or equal to 1500 grams
2. Seizures occurring in the first 28 days of life
3. Ventilated for 48 hours or more
4. Meningitis in the first 28 days of life
5. Apgar score of ≤ 3 for ≥ 5 minutes plus cord blood pH < 7.0 and base deficit > 16mmol/L (In the event there is no documented cord blood gas at delivery, babies will be followed solely for Apgar score ≤ 3 for ≥ 5 minutes)
6. Intraventricular hemorrhage, grade 3 or greater
7. Periventricular leukomalacia (PVL)
8. Complex surgery: Cardiac, Thoracic, GI, GU
9. Received extracorporeal membrane oxygenation (ECMO)
10. Antenatal substance use
11. Specific physician request

For children in our clinic who have a concern or diagnosis of CP or DD, the largest proportion (76.8% and 73.2% respectively) were ventilated at birth.

Proportion of High Risk Clinic Clients with a Concern or Diagnosis of Cerebral Palsy or Developmental Delay with a particular admission criteria[1] (1994-2003)



	Ventilated	Birth Weight ≤ 1500 g	Seizure	IVH	5 min Apgar < 5	PVL	Abnormal Cord Gas	Meningitis
■ Cerebral Palsy	76.8	48.7	43.4	38.3	20.8	11.6	8.5	1.4
□ Developmental Delay	73.2	40.4	22.4	20.6	14.3	4.8	7.6	2.2

Source: High Risk Follow-Up Clinic Database, NLPPP, 1994-2003

[1] Reflects clinic admission criteria prior to March 2005.

Health Canada Recommendations for Gestational Weight Gain

In 1998, Health Canada published recommendations to assist care providers in counseling women on appropriate weight gain during pregnancy. These recommendations for weight gain are based on a pre-pregnancy Body Mass Index (BMI).[1]

Body Mass Index (kg/m^2)		
< 20	20- 27	> 27
12.5 –18.0 kg (28 – 40 lb)	11.5 – 16.0 kg (25 – 35 lb)	7.0 – 11.5 kg (15 – 25 lb)

Low weight gain during pregnancy is associated with an increased risk of delivering a low birth weight baby (< 2500 grams), while excessive weight gain increases the risk of induced labour, emergency caesarean section, high birth weight (≥ 4000 grams) and post partum obesity.[2-4]

Lifestyle and biological factors such as diet, exercise, placental function and genetics can influence gestational weight gain.[5]

Amount of weight gain during pregnancy is also influenced by health care provider advice.[5] Anecdotally, many physicians admit to not calculating the pre-pregnancy BMI during early antenatal visits and the Provincial Perinatal Surveillance Program has documented pre-pregnancy BMI is missing in over 50% of health records from 2001/02 to 2004/05.[6] This practice does not comply with Health Canada's recommendations for gestational weight gain that incorporates knowledge of pre-pregnancy BMI.

Recently a small pilot study was conducted by Nicole Edwards, a graduate student of MUN's Division of Community Health, Faculty of Medicine to: assess the attitudes and practices of physicians counseling pregnant women about healthy birth weight; to determine the degree to which physician practices are in accordance with practice guidelines; and to identify areas for improved delivery of prenatal care to pregnant women with respect to healthy birth weight.

Just over half (55%) of physicians felt that it was very important to counsel pregnant women about weight gain in pregnancy. Only a small proportion (15.8%) of physicians thought the calculation of BMI was very useful in monitoring weight gain in pregnancy, even though 80% of respondents indicated they had an available tool for easy calculation of BMI. Almost half (45%) of physicians felt enrolment in prenatal classes would best enhance the counseling of pregnant women about gestational weight gain.

1. Health Canada. (1999). Nutrition for a healthy pregnancy: National guidelines for the childbearing years. Ottawa: Minister of Public Works and Government Services, Canada
2. Pugh, C. (2001). Nutrition in pregnancy. The Canadian Journal of Continuing Medical Education, April, 154-163.
3. Ekblad, U. & Grenman, S. (1992). Maternal weight, weight gain during pregnancy and pregnancy outcome. International Journal of Gynecology and Obstetrics, 39, 277-283.
4. Gunderson, E.P., & Abrams, B. (1999). Epidemiology of gestational weight gain and body weight changes after pregnancy. Epidemiology Review, 21, 261-275.
5. Stotland, N.E., Haas, J.S., Brawarsky, P., Jackson, R.A., Fuentes-Afflick, E. & Escobar, G.J. (2005). Body mass index, provider advice, and target gestational weight gain. Obstetrics & Gynecology, 105 (3), 633-638.
6. NLPPP. (2005). Eastern Avalon Perinatal Health Surveillance Report.

SOGC has released a policy statement on Maternal Transport. To view, go to Clinical Practice Guidelines on the SOGC website at http://www.sogc.org/guidelines

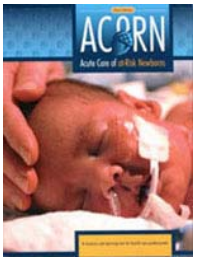
This document is also available on our website: http://www.nlppp.ca/education.htm

New edition of Neonatal Resuscitation Program (NRP) available soon

Guideline changes for resuscitation programs occur every 5 years, based on evidence review and consensus reflected in the Consensus of Science and Treatment Recommendations (CoSTR) document which is developed through work with the International Liaison Committee on Resuscitation (ILCOR).

This document was utilized in the revision of the 5th edition of the Textbook of Neonatal Resuscitation, scheduled to be available by late summer 2006. Information on guideline recommendations can be obtained from the American Academy of Pediatrics NRP web page: **www.aap.org/nrp/nrpmain.html** A provincial NRP Instructor workshop to facilitative provincial implementation will be held after the textbook release.

Acute Care of At-Risk Newborn (ACoRN)



Additional steps after immediate resuscitation of the newborn may involve post resuscitation stabilization management for the newborn who is sick or compromised. A group of Canadian clinicians has developed an educational program that promotes an organized and comprehensive assessment and management approach that can be utilized in all centers delivering newborn care.

The ACoRN program was launched in Canada in October 2005 at an Instructor Workshop in PEI. Five participants from Newfoundland and Labrador attended, and will work as a team towards implementing ACoRN in the province in 2006. More information on ACoRN can be obtained from the Perinatal Program.

Advanced Life Support in Obstetrics (ALSO)

The course is offered once or twice a year in various provincial locations. Course registration and general inquires can be made by contacting: Debbie Rideout, Newfoundland and Labrador Chapter, College of Family Physicians of Canada. Phone: (709) 744 - 3434 Email: cfpc@nl.rogers.com

Upcoming 2006 Conferences

CPS – June 13-17 – St. John's, NL
83rd Annual Conference
www.cps.ca

SOGC - June 22-27 – Vancouver, BC
"From the Bench to the Bedside and Back"
62nd Annual Clinical Meeting
www.sogc.org

AWHONN CANADA – October 19-21 – Calgary, AB
"Promoting the Health of Women and Newborns"
17th National Conference
www.awhonn.org

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For more information about the Program and Staff contacts, please check out our updated website.